

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

Date & Time: Wednesday, April 12, 2017
9:00 a.m. – 3:00 p.m.

Place: Merwin Hydro Control Center & Field Tour
105 Merwin Village Court
Ariel, WA 98603

Contacts: Kendel Emmerson (503) 813-6040; cell 503-703-7734

Time	Discussion Item
9:00 a.m.	Welcome <ul style="list-style-type: none"> ➤ Review Agenda & 3/8/17 Meeting Notes ➤ Comment & accept Agenda & 3/8/17 Meeting Notes
9:15 a.m.	<ul style="list-style-type: none"> ➤ Project Updates ➤ WDFW LWD and Gravel Storage
9:45 a.m.	Land acquisition update (CONFIDENTIAL)
10:00 a.m.	Safety ¹ orientation for Field Tour
10:10 a.m.	Break
10:20 a.m.	Depart for Field Tour <ul style="list-style-type: none"> ➤ Unit 1 - 2017 Timber Harvests ➤ Unit 19 - 2016 Timber Harvests
2:45 a.m.	Next Meeting's Agenda <ul style="list-style-type: none"> ➤ Note: all meeting notes and the meeting schedule can be located at: http://www.pacificorp.com/es/hydro.html
3:00 p.m.	<i>Meeting adjourn</i>

¹ Please bring rain gear and sturdy walking shoes for hiking in the forest. PacifiCorp will have 2 vehicles for transportation of up to 4 additional passengers.

Join by Phone

+1 (503) 813-5252 [Portland, Ore.]
+1 (801) 220-5252 [Salt Lake City, Utah]
+1 (855) 499-5252 [Toll Free]

Conference ID: 20999027

PLEASE BRING LUNCH

FINAL Meeting Notes
Lewis River License Implementation
Terrestrial Coordination Committee (TCC) Meeting
April 12, 2017
Merwin Hydro Control Center & Field Tour
Ariel, WA

TCC Participants Present: (10)

Bill Richardson, RMEF
 Kendel Emmerson, PacifiCorp
 Summer Peterman, PacifiCorp
 Kim McCune, PacifiCorp
 Eric Holman, WDFW
 Peggy Miller, WDFW
 Aaron Roberts, WDFW
 Amanda Froberg, Cowlitz PUD
 Erik White, Cowlitz Indian Tribe
 Nathan Reynolds, Cowlitz Indian Tribe

Guests (1)

Randi Shaw, The Nature Conservancy

Calendar:

May 10, 2017	TCC Meeting	HCC
--------------	-------------	-----

Assignments from April 12, 2017	Status
Emmerson/McCune: Contact PacifiCorp's properties department to discuss further TNC detail and report to the TCC at the May meeting.	
McCune: Invite Pat Frazier (WDFW) to May TCC meeting to discuss LWD and gravel storage request.	Complete – 4/12/17
Miller: Get more detail of where the WDFW gravel and log material currently is and where it will be used and report to the TCC.	Complete – 5/1/17
Peterman – Apply for RMEF grant monies relative to the newly acquired 1,800 acres for seeding, road closure(s) and possibly exclosures.	Pending

Assignments from July 13, 2016	Status
Emmerson: Report back to the TCC regarding status of the Property Encroachment Permit and Shoreline Permit Application.	Pending

Assignments from March 9, 2016	Status
McCune: Add the Fisher CCAA conservation measures in in 2016 WHMP Annual Report and in year 17 re-write (incorporate into Best Management Practices).	Pending
WDFW: In regards to 10.3.3, Matching Funds Eagle Island Project the TCC would like a 1-2-page progress report of project status with photos after the grant term expires (12-31-2017).	Provided status update as of 3/8/17

Kendel Emmerson (PacifiCorp) called the meeting to order at 9:10am. Emmerson reviewed the agenda and asked the TCC if there were any changes/additions. The following topics were added to the agenda:

- Cowlitz PUD – Bird Mortalities
- WSDOT 503 Road Closure/Land Slide

Emmerson noted that due to the 503 road closure/slide we will not be touring Unit 19 this month but will schedule a tour of Unit 19 2016 Timber Harvests at the June TCC meeting. May meeting will visit the Unit 14 timber harvest.

The TCC reviewed the March 8, 2017 meeting notes and no changes were requested. The notes were approved at 9:13am.

Public Comment Opportunity:

None

Cowlitz PUD Bird Mortalities

Amanda Froberg (Cowlitz PUD) provided detailed aerial maps for TCC review identifying the location of the PUD distribution poles and the mortality locations. Froberg informed the TCC that an inspector found a sub-adult bald eagle below a distribution line. USFWS provided permission via email to collect and transport the bird. Confirmation was received that it was a collision-electrocution with their distribution line. The PUD will implement mitigation measures to add a perch pole and bird flight diverters with florescent and glow in the dark properties. The PUD will inform the FERC and request approval for the perch pole. In addition, the proposed plan is to also add perch discouragers to the three distribution poles closest to Swift 1 Powerhouse. After planning and job writing is complete, the lead-time to receive the diverters is approximately one month.

Froberg also informed the TCC that a second sub-adult bald eagle was discovered by PacifiCorp and reported to Cowlitz PUD. USFWS provided permission via email to collect and transport the bird, which Froberg collected Saturday, April 8, 2017. Both the PUD and PacifiCorp subject matter experts believed the cause of death was collision only and not electrocution. Confirmation was received from USFWS that it was a collision. Since the cause of death was only confirmed this morning, the PUD needs to determine and plan mitigation measures and will provide updates to the TCC.

Once complete, Cowlitz PUD will submit a final report describing the mitigation measures to USFWS. The target is to complete the mitigation measures within 2-3 months. The Cowlitz Tribe and WDFW suggested the PUD add additional perch poles, if possible.

Project Updates

- **WSDOT 503 Road Closure/Land Slide/Rock Blasting** - Emmerson informed the TCC that closure of the 503 road remains in place for an extended period while WSDOT addresses the needed maintenance, the rock blasting and public safety needs.
- PacifiCorp has assisted with public safety by closing Speelyai Park (near the blasting site) and opened Cresap Park to address recreation needs of the general public.

- **DNR Easement (Upper Hanley Curry)** - PacifiCorp properties department confirmed that DNR does not have an access easement to their land through Upper Hanley Curry meadow. PacifiCorp will have further discussion with the DNR forester to help understand their harvest plans/operations to determine the access easement needed. PacifiCorp will plant screens only in 2017 and restore Upper Hanley Curry until 2019 likely.
- **Kings Landing** – During PacifiCorp’s annual noxious weeds and hazard tree surveys this year at Kings landing it was discovered that the residents are dumping yard debris outside the property boundaries thus creating the need for considerable noxious weed (bamboo, ivy) treatments. PacifiCorp staked the boundaries again with carsonite posts to clearly identify boundaries and to replace those posts that had been removed or moved by residents. The intent was to plant trees but some of the carsonite posts are too near the cabins and in some cases at a cabin door.
- **WDFW Gravel and Log Storage Area** – WDFW requested an area on WHMP lands whereby they could store gravel and logs for approximately one year. PacifiCorp provided a map to the TCC (**Attachment A**) suggested an area with locked electric gate access. When the gravel and logs are needed there will be a ground disturbance issue and will require around 1 acre for 1 year, so it requires TCC approval for this to occur on WHMP lands. The TCC would like to discuss this in further detail and will have questions for Pat Frazier (WDFW) at the May 10, 2017 TCC Meeting. Peggy Miller (WDFW) said she would get more detail of where the material currently is and where it will be used.

Break 10:30am

Reconvene 10:35am

The Nature Conservancy (TNC)

This topic is considered confidential and proprietary and not for public viewing. **The TCC agreed with the Cowlitz Indian Tribe and TNC approach for potential of incorporating additional conservation easement lands into the WHMP.**

Emmerson will contact PacifiCorp’s properties department to discuss further detail and report to the TCC at the May meeting.

Tour Safety Briefing

Emmerson informed the TCC tour attendees that cell service is available, keep eyes open for downed trees, tripping and overhead hazards.

Note: Please also see maps provided as Attachments to these meeting notes.

Unit 1 2017 Timber Harvests and ATV Encroachment

The TCC attendees reviewed a number of areas in Unit 1 with considerable habitat damage due to illegal ATV use even though the areas are clearly posted for no motorized vehicles. Considerable changes will be implemented to address the trespass.



Unit 1 - ATV Trespass

There are three 2017 timber harvest planned in Unit 1, as more fully detailed in **Attachment B aerial map**. Two clear cuts and one commercial thin. There are no northern spotted owl circles within the boundaries of Unit 1. The northern and western property lines were surveyed and marked prior to the start of the timber harvests.

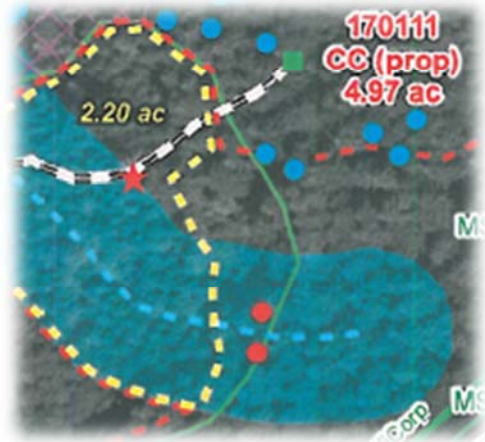
Management Unit 1 consists of 132 acres and is on the north side of Merwin Reservoir. The current Cover:Forage ratio is 58:42 and the WHMP recommended ratio is 50:50 therefore the current management is not meeting objectives.

170107CT (Proposed 5.8 acre commercial thin)

This is a commercial thin in 1984 timber harvest area that is currently vegetation cover typed as Pole Conifer [i.e., even aged stand that has an average stand diameter of 8 to 15 inches diameter at breast height(dbh)]. This timber harvest cut boundary will be similar to 1984 cut boundary. The canopy should be reduced to a minimum 50% canopy. The TCC recommended that a variable density thinning be implemented that ranges from 30 to 50% with an average of 40% canopy cover.



Unit 1 2017 Timber Harvest – 170107CT



Large snag to be removed (see red star) and two replacement snags approved by the TCC (see red dots).

170111CC (Proposed 4.04 acre clear cut)

This clear cut is in mid-successional conifer stand (i.e., even-aged stand with relatively uniform structure and average stand diameter of 16 to 20 inches dbh). Some of the trees along the northwest corner of the harvest area have laminated root rot. A tree was marked to the eastern extent of the laminated root rot, so everything west of that tree will be planted with trees species not affected by laminated root rot (e.g. pine, hardwoods, and cedar).

Access to the harvest area will require a road crossing over a stream that was classified as seasonal non-fish stream. It was discovered that the drainage has no connectivity to the reservoir or other tributary. In addition, the drainage at the time of the site visit and through most of the winter has been dry. The TCC agreed that this drainage does not meet definition of a non-fish seasonal stream and does not require any buffering. The harvest area within this drainage area will only remove the conifer trees not marked and the hardwoods will be kept to provide a screen to the harvest area.

The proposed road is immediately adjacent to a dangerous and very tall snag. The snag was created as part of the Merwin Standard Operation Procedures for the 1984 timber harvest (840107CC THA). This is the only feasible road option due to ownership and topography, so this snag will need to be removed prior to constructing the road. The snag will be felled and if possible left as down wood 170107CT. Three trees were selected along or beyond the southern edge of 170107CT to be topped and created into snags to replace the removal of this snag. These snags will be created after timber harvest is completed in 2017.



Absent Creek

This clearcut is within the Marble Creek 1 osprey nest buffer and it is unclear if the nest has line of sight to the harvest area. If this nest is occupied it will be monitored for disturbance by a biologist while trees are being harvested within the buffer. This should be less than one day of disturbance.



Unit 1 2017 Timber Harvest - 170111CC

170112CC (Proposed 24.5 acres clear cut)

This clear cut will harvest about 11 acres of mid-successional conifer thinned (i.e., even-aged stand with relatively uniform structure and average stand diameter of 16 to 20 inches dbh that has been commercially thinned since the 1980's) and 13.5 acres of mid-successional conifer. The stands has nice options for wildlife reserve trees and ability to work with slope to break up the line-of-sight. Slash will be piled along the property line from the ROW to the topographic break to block ATV trespass from RSG lands.



Unit 1 2017 Timber Harvest - 170112CC

<2:00pm Meeting Adjourned>

Agenda items for May 10, 2017

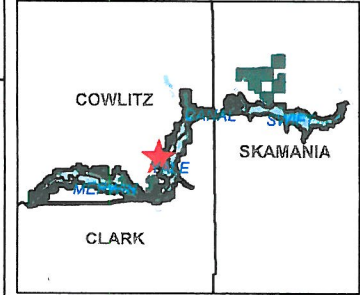
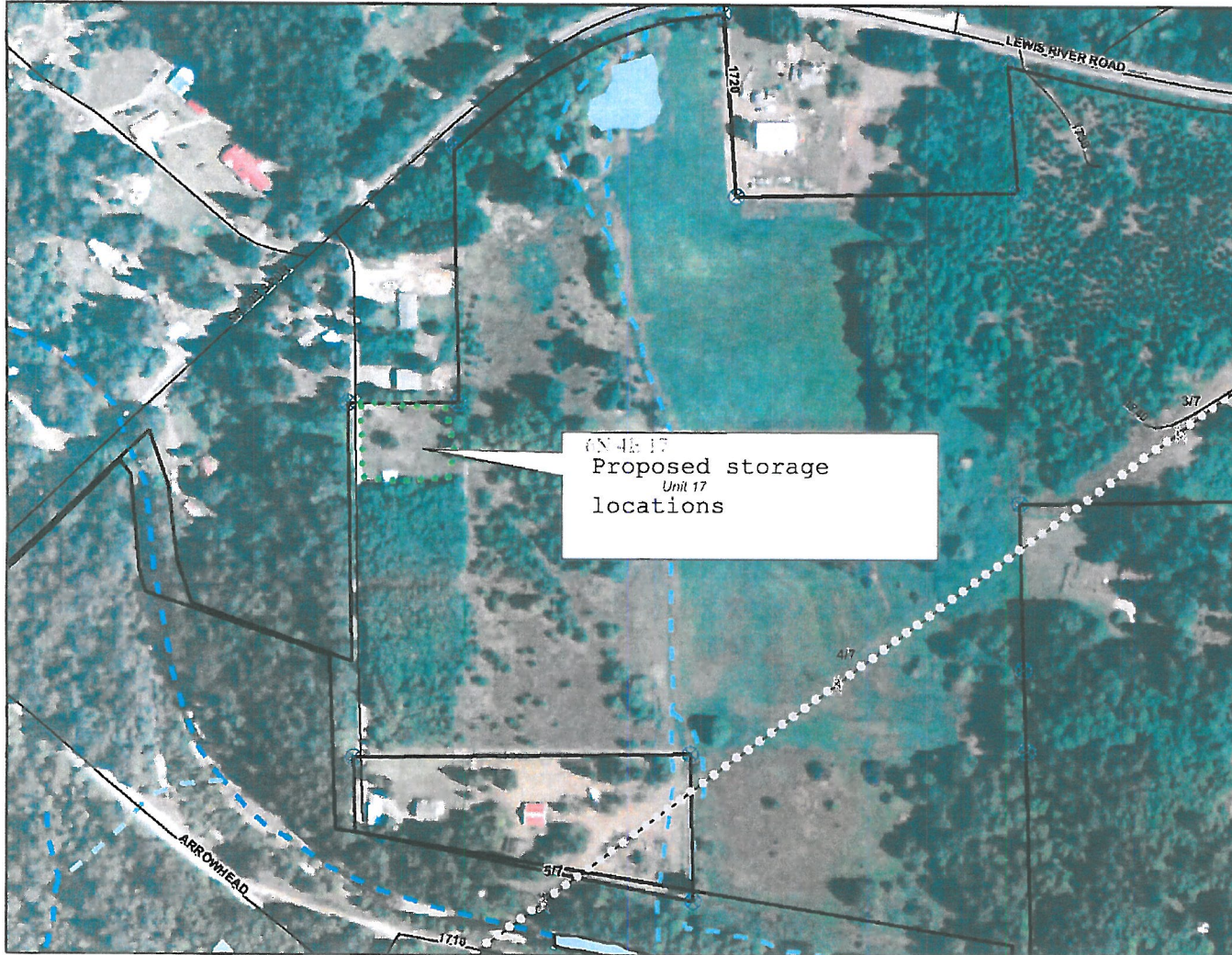
- Review April 12, 2017 Meeting Notes
- Field Tour – Unit 14
- Project Updates
- Land Acquisition Update (**CONFIDENTIAL**)

Next Scheduled Meeting

May 10, 2017
Location: HCC & Field Tour

Attachments:

- April 12, 2017 Meeting Agenda
- **Attachment A** – Map of WHMP Gravel and Log Storage Area
- **Attachment B** – Map of Unit 1 – 2017 Harvest Areas



Legend

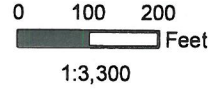
- Generation Facilities**
 - Hydro
 - Geothermal
 - Thermal
 - Wind
 - Biomass
- Surveyed Corner**
 - ⊕ Surveyed Section Corner
 - ⊗ Surveyed Property Corner
 - ⊙ Other Surveyed Corner
- Wetland (Point)
- ⊙ PacifiCorp Transmission Pole
- Road
- PacifiCorp Transmission Line
- FERC Boundary
- ▭ Management Unit
- ▭ Section
- ▭ Wetland (Polygon)
- Stream**
 - Fish Stream
 - Non-Fish Perennial
 - Non-Fish Seasonal
 - Other



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.

WHMP - Unit 1

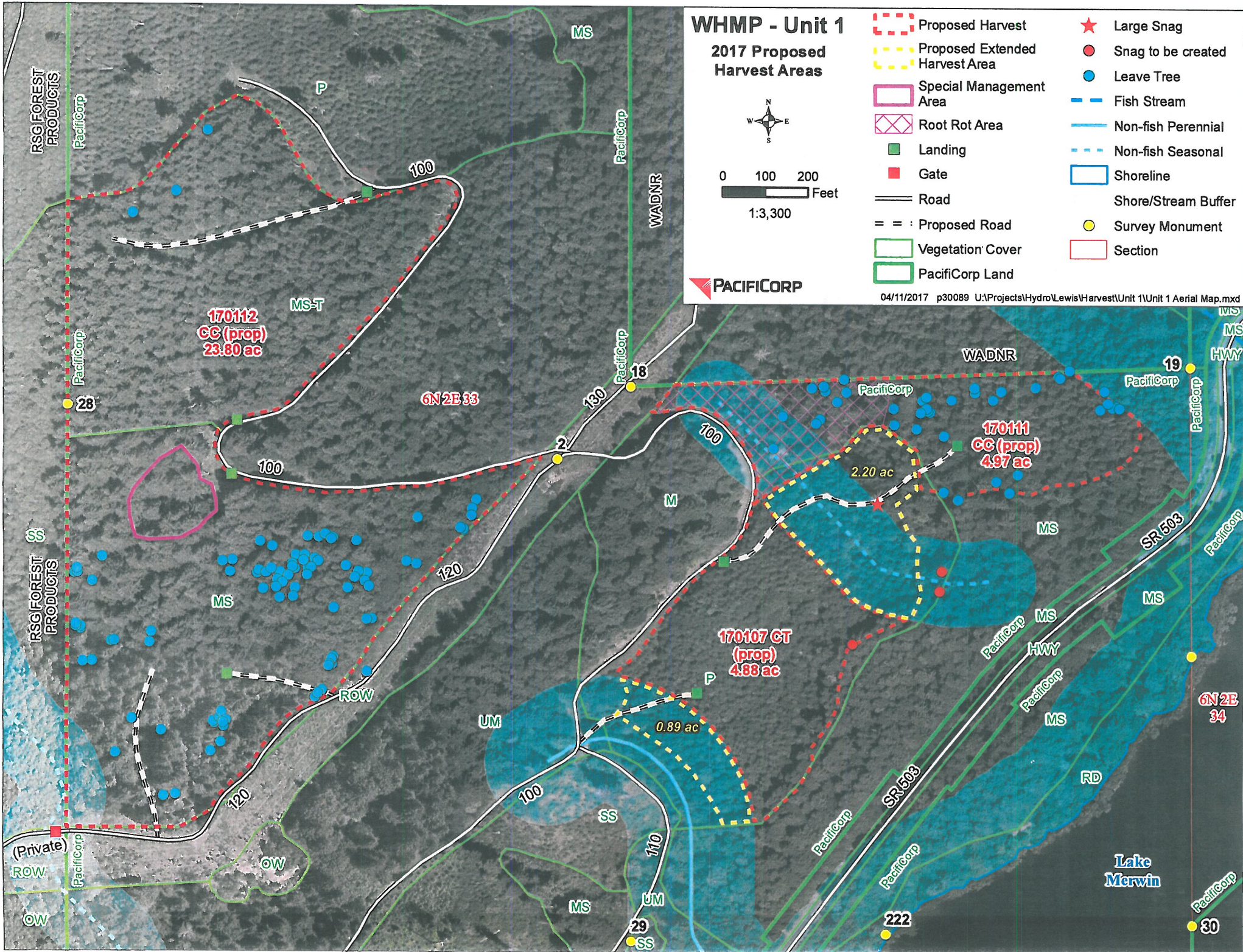
2017 Proposed Harvest Areas



- Proposed Harvest (Red dashed line)
- Proposed Extended Harvest Area (Yellow dashed line)
- Special Management Area (Pink outline)
- Root Rot Area (Cross-hatched pattern)
- Landing (Green square)
- Gate (Red square)
- Road (Solid black line)
- Proposed Road (Dashed black line)
- Vegetation Cover (Green shaded area)
- PacifiCorp Land (Green outline)
- Large Snag (Red star)
- Snag to be created (Red circle)
- Leave Tree (Blue circle)
- Fish Stream (Blue line)
- Non-fish Perennial (Light blue line)
- Non-fish Seasonal (Dashed light blue line)
- Shoreline (Blue outline)
- Shore/Stream Buffer (Light blue shaded area)
- Survey Monument (Yellow circle)
- Section (Red outline)

PACIFICORP

04/11/2017 p30089 U:\Projects\Hydro\Lewis\Harvest\Unit 1\Unit 1 Aerial Map.mxd



Cover vs. Forage	Vegetation Cover Types	Unit 1			
		2017			
		Pre-Harvest acres	% of Management Unit	Post-Harvest Acres	% of Management Unit
Cover	Old-growth Conifer	0	0.00%	0	0.00%
	Mature Conifer	3.61	2.75%	3.61	2.75%
	Mature Conifer - Thinned	0	0.00%	0	0.00%
	Mid-Successional Conifer	41.24	31.44%	23.76	18.11%
	Upland Mixed	21.38	16.30%	20.33	15.50%
	Pole Conifer	22.31	17.01%	16.55	12.62%
	Total Cover Acres	88.54	67.50%	64.25	48.98%
Forage	Mid-Successional Conifer –thinned	0	0.00%	10.34	7.88%
	Young Upland Deciduous	0	0.00%	0	0.00%
	Upland Mixed – thinned	0	0.00%	0	0.00%
	Young Upland Mixed	20.33	15.50%	0	0.00%
	Lodgepole Pine	0	0.00%	0	0.00%
	Riparian Mixed	0	0.00%	0	0.00%
	Pole Conifer – thinned	0	0.00%	5.77	4.40%
	Riparian Deciduous Shrub	0	0.00%	0	0.00%
	Riparian Deciduous	5.47	4.17%	5.47	4.17%
	Upland Deciduous	0.69	0.53%	0.69	0.53%
	Oak Woodland ²	0.59	0.45%	0.59	0.45%
	Transmission Line ROW ²	5.54	4.22%	5.54	4.22%
	Recreational (vegetated areas)	0	0.00%	0	0.00%
	Dry Meadow/Grassland ²	0	0.00%	0	0.00%
	Shrubland ²	0	0.00%	0	0.00%
	Orchard ²	0	0.00%	0	0.00%
	Agriculture ²	0	0.00%	0	0.00%
	Seedling/Sapling Conifer	10.02	7.64%	10.02	7.64%
New Clearcut	0	0.00%	28.51	21.73%	
Palustrine Wetlands ^{1,2}	0	0.00%	0	0.00%	
Total Acres of Forage	42.64	32.50%	66.93	51.02%	
Neither	Lacustrine Unconsolidated Bottom	0	0.00%	0	0.00%
	Riverine Unconsolidated Shore	0	0.00%	0	0.00%
	Palustrine Aquatic Bed	0	0.00%	0	0.00%
	Palustrine Unconsolidated Bottom	0	0.00%	0	0.00%
	Highway right-of-way	0	0.00%	0	0.00%
	Residential	0	0.00%	0	0.00%
	Sparse veg.; Disturbed; Developed or PacifiCorp Facility	0	0.00%	0	0.00%
	Rock Outcropping and Talus	0	0.00%	0	0.00%
Total Acres of Neither	0	0.00%	0	0.00%	
Total Management Unit Acres		131.18	100.00%	131.18	100.00%
WHMP Proposed Cover:Forage Ratio		50:50 (+/- 5%) with 5% permanent forage			
Cover:Forage Ratio		68:30		49:51	
Percent of Permanent Forage		9.30%		9.30%	