

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

Date & Time: **Wednesday, June 13, 2018**
9:00 a.m. – 2:30 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 & 5/9/18 Meeting Notes ➤ Review and Accept Agenda & 5/9/18 Meeting Notes
9:15 a.m.	SA 10.3.3 Funds <ul style="list-style-type: none"> ➤ Eagle Island TCC Matching Funds, Daren Hauswald
9:30 a.m.	Land Acquisition Update (Confidential)
9:40 a.m.	Study/Work Product Updates <ul style="list-style-type: none"> ○ Relocating Yale Dam Orchard in Management Unit 11 ○ Kalama Line Tree Removal update in Management Unit 32 ○ Cougar Pit ash deposit Management Unit 19 ○ WDNR Road Use Permit off of 1630 road in Management Unit 16 ○ Progress on High Country Forestry plan Management Units 33-39
10:30 a.m.	Safety Orientation for Field Tour & Break
10:40 a.m.	¹Depart for Field Tour
11:00 a.m.	Tour of Oak Site 5-2 in Management Unit 5
11:45 a.m.	2017 timber harvest area 170775CC Fishrot (Management Unit 7)
12:30 p.m.	Lunch and review 2017 timber harvest area 170838CC Manitch, and 170776CC Hammrot (Management Unit 7 and 8)
1:30 p.m.	Review Osprey meadow progress following 2016 clearcut to meadow conversion in Management Unit 7
2:00 p.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
2:30 p.m.	Return to HCC

PLEASE BRING LUNCH

Join by Phone

+1 (503) 813-5252 [Portland, Ore.]

+1 (855) 499-5252 [Toll Free]

Conference ID: 5847894

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.

FINAL Meeting Notes
Lewis River License Implementation
Terrestrial Coordination Committee (TCC) Meeting
June 13, 2018
Merwin Hydro Control Center & Field Tour

TCC Representatives Present: (9)

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

Guest (1)

Daren Hauswald, WDFW

Calendar:

July 11, 2018	TCC Meeting & Field Tour	HCC
---------------	--------------------------	-----

Assignments from June 11, 2018	Status
Emmerson: Inquire with WDNR if they can use the existing road and lessen the length of road needed on PacifiCorp land. Provide rationale to the TCC at the July meeting.	Complete – 7/11/18

Assignments from March 14, 2018	Status
Emmerson: Create high-country model of big elk use areas and a 10-15 year plan for silviculture management for TCC review.	In Progress

Assignments from October 11, 2017	Status
Emmerson: To develop a hunting access map for PacifiCorp website that shows closed or restricted hunting areas, roads, and gates.	In progress

Parking Lot Items	Status
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).	WDFW to provide a progress report November 2018
Emmerson/McCune: Contact PacifiCorp's properties department to discuss further TNC detail and report to the TCC at the May meeting.	In progress
Reynolds/White: Schedule a conference call with appropriate parties specific to the TNC Conservation Easement.	Complete – 7/30/18

Kendel Emmerson (PacifiCorp) called the meeting to order at 9:05am. Emmerson reviewed the agenda and asked the TCC if there were any changes/additions. Erik White (Cowlitz Indian Tribe)

wishes to add discussion about Cascade Forest Conservancy Beaver reintroduction to the Lewis River basin.

The TCC reviewed the May 9, 2018 meeting notes and the meeting notes were approved with minor clarifying changes on page 9 at 9:20 a.m.

Public Comment Opportunity:

None

SA 10.3.3 Funds; Eagle Island TCC Matching Funds (Phase II), Daren Hauswald

Daren Hauswald (WDFW) provided the following update for TCC approval:

Purpose: Restoring the upland acreages of Eagle Island by controlling invasive scotch broom and other non-native weed species, in order to allow native and beneficial plant species to establish for the enhancement of wildlife habitat.

Timeline:

- June 2016- Aerial Spraying of 105 acres completed. Overall, the application was very successful in controlling scotch broom.
- August 2017- Scotch broom was not mowed as originally planned, due to staff vacancies and other priorities
- September 2017- Treated Japanese knotweed through the center section of the island.
- March 2018- Applied for Corps and DNR Permits. No permits are required from either agency.
- May 2018- Contacted Cowlitz County regarding a Shoreline Permit- does not appear to be required
- May 2018- Applied for WDFW HPA permit. Permit will be issued by mid-July. I have discussed the project with the local Habitat Biologist and there does not appear to be any concerns with issuing the permit.
- June 2018- Bids are being accepted to find a contractor to mow approximately 120 acres of scotch broom. **Bids are due June 25th, 2018**
- August 1st-15th, 2018- Scotch broom areas will be mowed by contractor
- September 2018- Treat Japanese knotweed on the island
- Spring 2019- May plant some test plots of trees to help determine which species may be more successful in a larger planting effort.

Funding Update

- WDFW has spent approximately \$14,000 so far on controlling scotch broom and other invasive species on the island in the past 2 years. An additional \$2,500 will be spent by the end of 2018 to meet the 1:1 match.
- PacifiCorp awarded \$16,500 in 10.3.3 Funds to WDFW in 2016. To date none of these funds has been spent.
- In July 2017, WDFW allotted \$15,000 from the State Migratory Bird Stamp Account to be used in removing scotch broom from the island to improve migratory bird and other wildlife habitat.

- WDFW would like to request \$15,000 of additional 10.3.3 funds from PacifiCorp to match the amount that was allotted from the State Migratory Bird Stamp Account. These additional funds will be used to hire a contractor to mow the scotch broom areas on the island.

In accordance with SA 10.3.3 the TCC agreed to \$15,000 in matching funds. The TCC further stated that if the estimates come in lower than \$15,000 they would like the funds applied to tree planting.



Aerial View of Eagle Island Project area. Dark brown areas are dead scotch broom and area needing mowing.

10.3.3 Contribution of Additional Matching Funds. In addition to the contributions made under Section 10.3.1, beginning 18 months after Issuance of the New License for the Yale Project or Swift No. 1 Project, whichever is earlier, PacifiCorp shall match the contributions of local, state, and federal agencies, and other persons or organizations, made for the purposes of this Section 10.3, in an amount not to exceed \$100,000 per year, and not to exceed \$500,000 in any ten consecutive years. Any Party may propose a source of matching funds under this subsection. If and only if a commitment of funds is made by a party other than PacifiCorp, for acquisitions of Interests in Land or for implementation of habitat enhancement projects approved by the TCC, PacifiCorp shall provide matching funds within the limits set forth above at closing of the real estate transaction; no fund will be created. The TCC will identify Interests in Land for acquisitions or identify habitat enhancement projects to be funded with matching funds, and PacifiCorp shall execute approved acquisitions and implement approved enhancement measures.

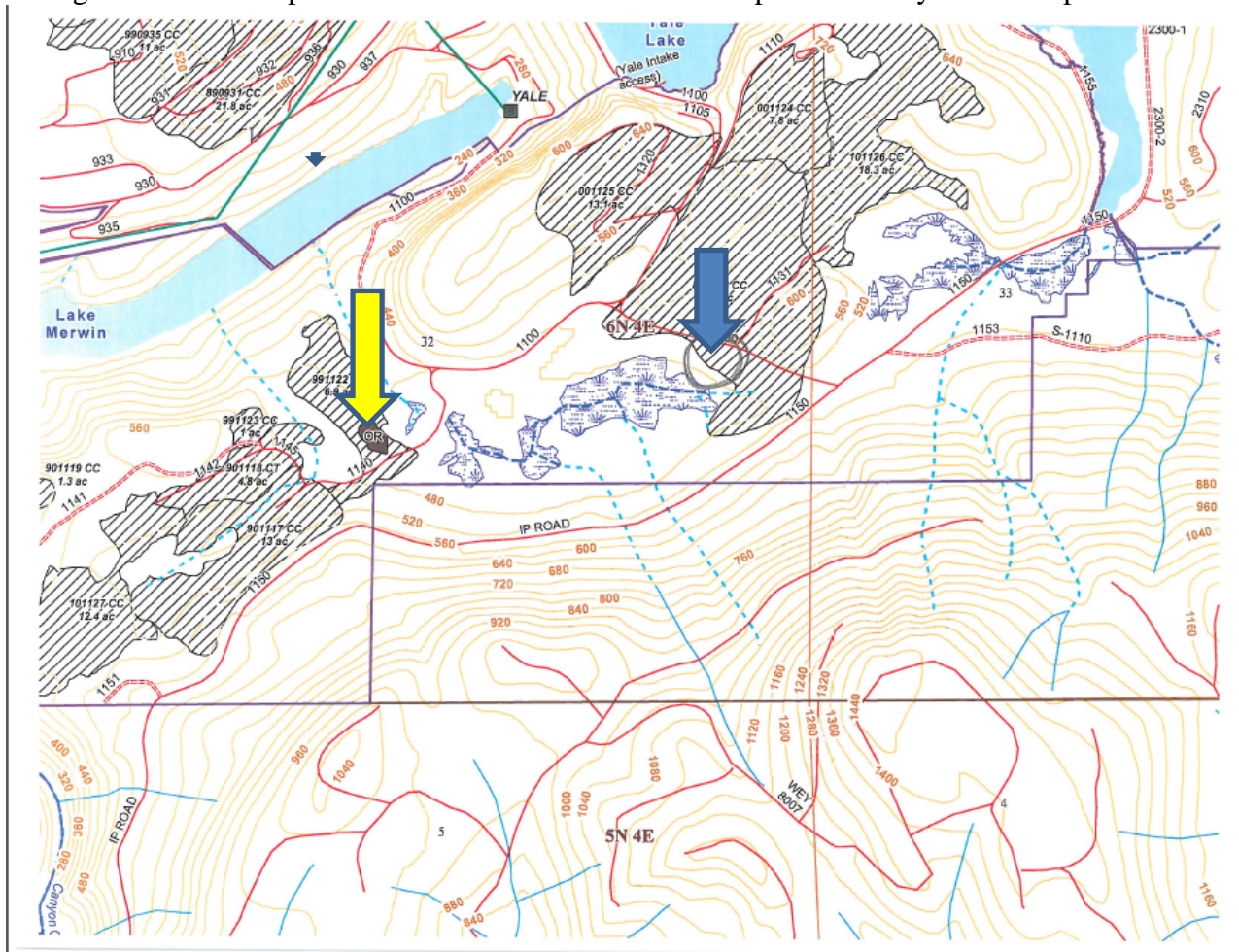
Land Acquisition Update (**CONFIDENTIAL**)

Scope of work executed by PacifiCorp and sent to the appraisers. Title ordered and a title memorandum will be prepared for PacifiCorp review. Phase I environmental will be ordered in the summer 2018.

Additional detail around this topic is considered confidential and proprietary and not for public viewing.

Study/Work Product Updates

Relocating Yale Dam Orchard in Management Unit 11 – Summer Peterman (PacifiCorp) provided the map below illustrating the location of the old .5 acre orchard location (yellow arrow) and the proposed new approximately .4acre new meadow location (blue arrow). Peterman informed the attendees that Unit 11 orchard trees are getting shaded out, trees are dying so PacifiCorp would like to move the orchard up on a berm that was 1986 timber harvest area (861103CC) and planted following the clearcut. PacifiCorp would need to remove 12 small trees that can be harvested next time PacifiCorp is in Unit 11 in the next 5-7 years. The existing orchard will be left as is; no management will take place in the old orchard location except address any invasive species.



The current orchard vegetation cover type polygon will move to the new location and the old orchard will be incorporated into the 991122CC timber harvest area and its associated vegetation cover type, which is pole conifer.

The TCC agrees with relocating the Yale Dam Orchard in Unit 11 as proposed by PacifiCorp.

Kalama Line Tree Removal Update in Management Unit 32

Emmerson provided a cursory review of the comments received from John Clapp, WDFW and the Forest Service relating to the May 24, 2018 memorandum titled, “Mitigation for additional impacts from Cowlitz PUD Interconnect Project to Merwin-Kalama-Cardwell Transmission Line” (**Attachment A**) and PacifiCorp’s responses. No objections from the TCC representatives were received. PacifiCorp will proceed in accordance with the memorandum and will add the mitigation funds in a tracking account in accordance with SA 10.8.5.5 - Mitigation for Impacts on Wildlife Habitat.

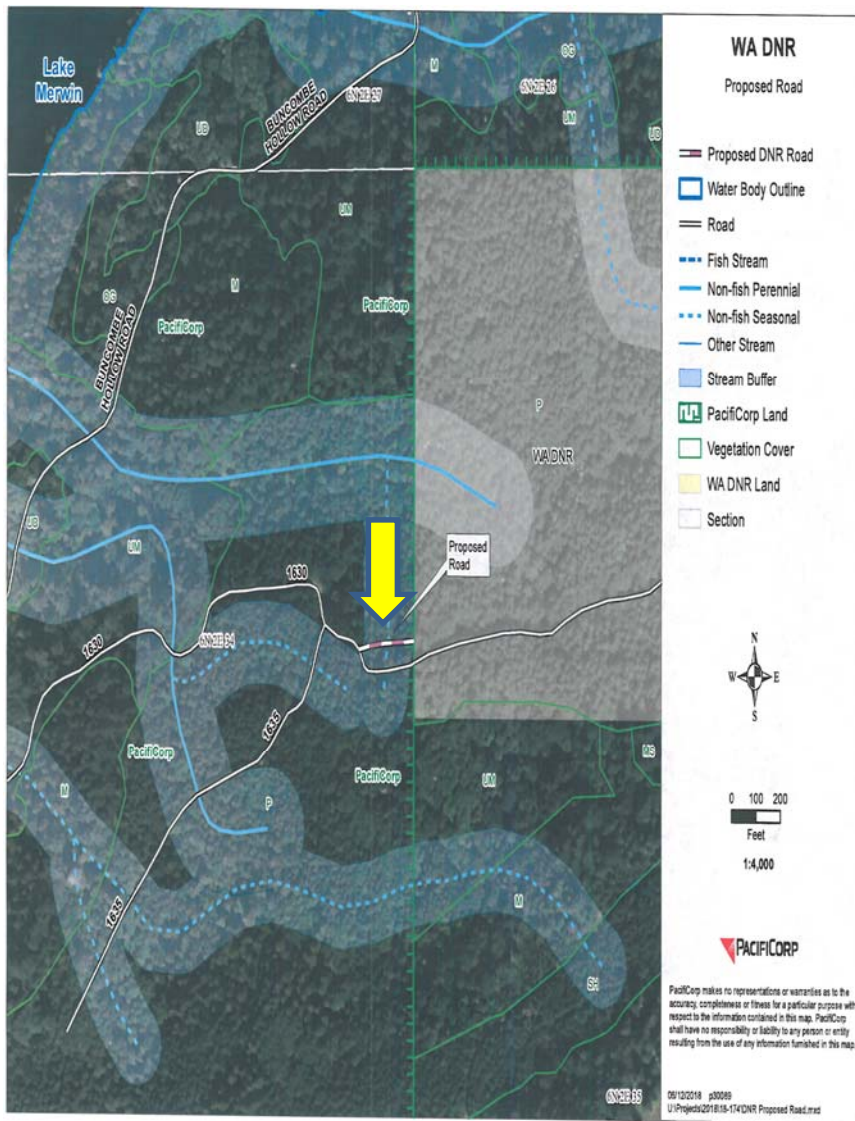
Cougar Pit Ash Deposit Management Unit 19

Emmerson informed the TCC that the Washington Department of Ecology (Carol Serdar) had no concerns and approves removal of the Swift Drift ash and depositing it at the Cougar quarry.

WDNR Road Use Permit off 1630 Road in Management Unit 16

Emmerson provided a map illustrating the location of the proposed road they need. WDNR will remove six (6) trees (the TCC will be compensated for the tree value for approximately \$600.00). Removal of the trees and building of the road will take place next year (2019). The proposed road will be a temporary road only and will be abandoned after its intended use is complete (approximately 2020). WDNR will plant back the road at their expense.

The TCC agreed to approve the WDNR temporary road plan as indicated in the map below, however, they want Emmerson to inquire with WDNR if they can use the existing road and lessen the length of road needed. The TCC asked Emmerson to get the rational from WDNR and present to the TCC at the July 2018 meeting.





Progress on High Country Forestry Plan Management Units 33-39

Emmerson informed the TCC that PacifiCorp continues to work a forestry plan and differentiating the timber harvest areas in MU 33-39 (High Country MUs) into either applying WHMP or standard forestry silviculture practices, such as Pre-commercial thinning and pruning. Also looking at where the potential future harvest areas will be so a mosaic of cover and forage can be achieved. She also noted that the Fruit Grower lands have a lot of variability of trees per acre and height within the harvest area and between harvest areas of the same year. This is because they may have had a lot of trees die and had to replant or interplant areas or delayed planting the harvest area for 3 years.

Cascade Forest Conservancy – Beaver Reintroduction to Lewis River

Erik White (Cowlitz Indian Tribe) informed the TCC attendees of Cascade Forest Conservancy (CFC) interest in reintroduction Beaver to the Lewis River basin. CFC is currently looking to ground truth some sites that were modeled as potentially viable. Approximately 700 sites have been identified thus far. Stream surveys will be conducted to avoid over seeding habitat. Most Beaver come from the lower Columbia River and the supply is ample. White will reengage with the ACC once specific low elevation sites have been identified to secure their approval as well.

PacifiCorp will work with White to provide the access needed on its lands to review sites.

Agenda items for July 11, 2018

- Review June 13, 2018 Meeting Notes
- Land Acquisition Update (**Confidential**)
- Study/Work Product Updates
- Tour Unit 34

Next Scheduled Meeting

July 11, 2018
Location: HCC & Field Tour

Attachments:

- June 13, 2018 Meeting Agenda
- **Attachment A** Mitigation for additional impacts from Cowlitz PUD Interconnect Project to Merwin-Kalama-Cardwell Transmission Line, May 24, 2018

Tour Safety Briefing

Emmerson informed the TCC tour attendees that we are headed to remote areas to tour Oak Management in Unit 5, Unit 7 and 8. Watch for tripping hazards, steep rock face, slippery surfaces, and biting insects.

Depart for Field Tour – 11:10am, pictures included at the end of these meeting notes



Oak Site 5-2 - Management Unit 5



Oak Site 5-2 - Management Unit 5

Oak sites on WHMP lands are surveyed every 3 years (Unit 5 is planned for this year). **The TCC agreed that we want to open up the sites as much as terrain and safety conditions allow by giving the nearest oak tree to the parameter a 50-100 foot clearing.**

Peterman will map and identify the oak trees and identify a prescription and check the available budget for TCC review.

The TCC decided that the Osprey oaks (and any new oaks that are planted) we want to use Plantskydd to keep the browsing down and give the seedlings a chance to grow or possibly protect them with tree protectors if this seems like a better / easier / cheaper solution on a case-by-case basis.

In addition, the TCC wants to use Plantskydd in the oak sites around the trees “planted by nature” to give them a chance to grow essentially favoring the “let nature do its thing” option. The rationale was twofold. First, it allows the dominant trees to continue to be just that and not get crowded or face competition from new trees and second it provides good food to deer and elk.

The TCC agreed:

- Let the bushes get browsed.
- Leave the sprouts around the trees to get browsed.
- Use Plantskydd on the new acorn growths (planted by nature) and let them establish and grow only if they are in a place where they won't grow to compete with existing oaks or occupy the space in a natural opening i.e. the rocky, bald grass/forb openings (we want to retain this rare habitat type).



2017 Timber Harvest Area 170775CC Fishrot – Management Unit 7

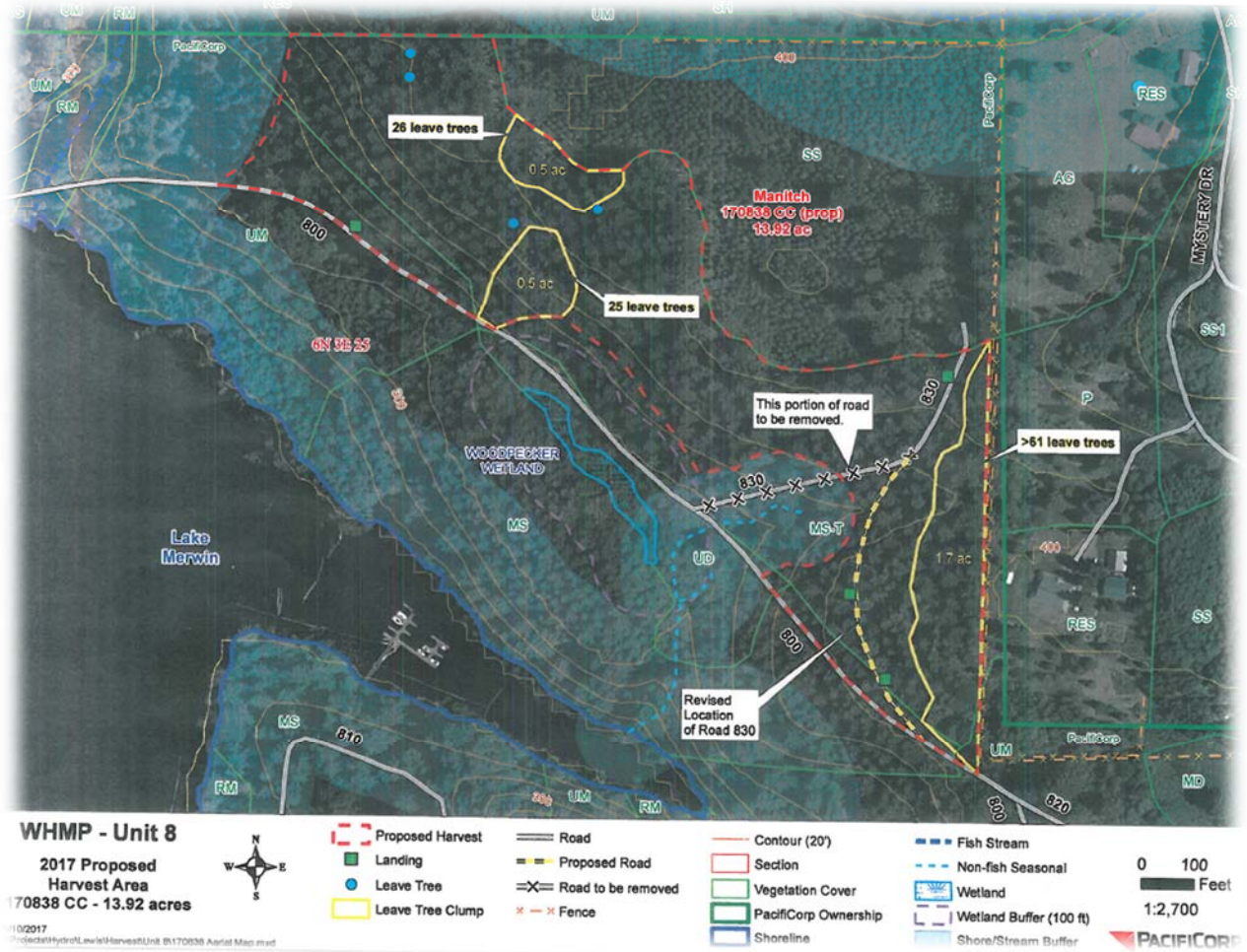
This clear cut is in upland mixed stand with most of the Douglas-fir trees infected diseased with laminated root-rot and were a serious hazard to adjacent homes and facilities. The harvest boundary was determined by transmission line 790 road, Speelyai Creek buffer and where the stand turns to primarily hardwoods.



2017 Timber Harvest Area 1700838CC Manitch – Management Unit 8

This 13.8-acre clearcut was previously commercially thinned in 1998 and as a result, it was a fairly homogenous stand of Douglas-fir. The leave trees were mainly left in groupings to break line of sight from the adjacent properties and within the harvest area or to buffer snags or other unique

features. Approximately 23 logs were placed within the timber harvest area using logs that had been stored along the 800 road and near Yale Dam.



<12:30pm Working Lunch>



2017 Timber Harvest Area 1700776CC Hammrot – Management Unit 7

This clear cut is in pole-conifer thinned stand that was an even-aged stand with relatively uniform structure and average stand diameter of 8 to 15 inches dbh. Many of the trees were infected with laminated root rot, therefore the harvest boundary was determined by removing all diseased trees and then extending to two healthy trees beyond the diseased tree. The area was planted with half red alder in western portion and the eastern portion was planted with western red cedar. Half of the western red cedars were planted in 60-inch protex tubes and other in vexar tubes. The progress of the trees will be monitored over time, but within 3 months, there is noticeable growth difference with protex tubes.



WHMP - Unit 7
 2017 Completed
 Harvest Area
 170776 CC
 Hammrot

- Harvest
- Leave Tree Area
- Gate
- Road
- Section
- Contour (20')
- Non-fish Seasonal Stream
Stream Buffer
- PacifiCorp Ownership



Review Osprey Meadow Progress following 2016 Clearcut to Meadow Conversion in Management Unit 7



Osprey Meadow – Management Unit 7

By recommendation of TCC during the March 2017 tour, twenty-four new oak trees were planted east of the newly made Osprey Meadow. Many of these did not make and will be replanted this fall. The area had a rock outcrop with a few oaks growing naturally. Future management of the area will include harvesting a couple conifers to the south to prevent shading.





Osprey Meadow – Management Unit 7



Adjourn and return to HCC – 2:30pm

McCune, Kimberly

From: McCune, Kimberly
Sent: Wednesday, June 06, 2018 9:55 AM
To: 'Amanda Froberg'; 'Amelia Johnson'; 'Bill Richardson'; 'Bob Nelson'; 'Chartier, Neil - FS'; Emmerson, Kendel; 'Eric Holman'; 'Erik White'; 'James H Malinowski'; 'John Clapp'; 'Mariah Stoll-Smith Reese'; 'Michelle Day'; 'Nathan Reynolds'; Olson, Todd; 'Patrick Lee'; 'Peggy Miller'; Peterman, Summer; 'Ray Crosswell'; 'Ruth Tracy'; 'Steve Manlow'; 'Tim Romanski'
Subject: APPROVED: Kalama Mitigation Strategy Memo
Attachments: Mitigation Strategy Memo_KalamaLine.pdf; 06062018 TCC Kalama Mitigation Comment Matrix.pdf

Attn: TCC Representatives

Please be advised that we received comment and questions from John Clapp, WDFW and the Forest Service which PacifiCorp has addressed in a comment matrix (attached). No objections from TCC representatives have been received.

Thank you for your prompt replies. We will proceed in accordance with the attached memorandum and have added the funds in a tracking account in accordance with SA 10.8.5.5 - Mitigation for Impacts on Wildlife Habitat.

Thank you.

Kimberly McCune
Sr. Business Administrator
PacifiCorp – Hydro Resources
825 NE Multnomah St., Suite 1500
Portland, OR 97232
Ph: (503) 813-6078

From: McCune, Kimberly
Sent: Thursday, May 24, 2018 3:41 PM
To: 'Amanda Froberg' <afroberg@cowlitzpud.org>; 'Amelia Johnson' <ajohnson@lcfrb.gen.wa.us>; 'Bill Richardson' <brichardson@RMEF.org>; 'Bob Nelson' <nelson338@aol.com>; 'Chartier, Neil - FS' <nchartier@fs.fed.us>; Emmerson, Kendel <Kendel.Emmerson@pacificorp.com>; 'Eric Holman' <holmaewh@dfw.wa.gov>; 'Erik White' <ewhite@cowlitz.org>; 'James H Malinowski' <jim.malinowski@icloud.com>; 'John Clapp' <jmcmacle@gmail.com>; 'Mariah Stoll-Smith Reese' <mariah@lelooska.org>; 'Michelle Day' <michelle.day@noaa.gov>; 'Nathan Reynolds' <nreynolds@cowlitz.org>; Olson, Todd <Todd.Olson@pacificorp.com>; 'Patrick Lee' <patrick.lee@clark.wa.gov>; 'Peggy Miller' <peggy.miller@dfw.wa.gov>; Peterman, Summer <Summer.Peterman@pacificorp.com>; 'Ray Crosswell' <shedhunt@aol.com>; 'Ruth Tracy' <rtracy@fs.fed.us>; 'Steve Manlow' <smanlow@lcfrb.gen.wa.us>; 'Tim Romanski' <tim_romanski@fws.gov>
Subject: TIME SENSITIVE: Kalama Mitigation Email to Send to the TCC
Importance: High

Attn: TCC Representatives

I was approached last week by the Cowlitz PUD interconnect Project manager about needing additional tree removal for installation of the new Kalama Line. Originally they thought they could build over the top of the existing poles and would not need to remove additional trees, however, due to soil conditions on the Clark County side they were unable to construct a pole tall enough to span the Lewis River to achieve this. Therefore, a 115 Kv single pole line south of the existing line will need to be constructed. This work is scheduled to occur during a previously scheduled outage June 11, 2018, thus why I need TCC consultation now.

Please review the attached mitigation strategy and send me your questions, comments and approval or disapproval by close of business, June 5, 2018. If I do not receive any notification, then I will assume that we have approval to move forward.

Kendel Emmerson, CWB®
503 813-6040 | 825 NE Multnomah Suite 1500 Portland, Oregon 97232





Pacific Power
Rocky Mountain Power
PacifiCorp Transmission

MEMORANDUM

DATE: May 24, 2018

TO: Bryce Foster, PacifiCorp Project Manager

FROM: Kendel Emmerson, PacifiCorp Certified Wildlife Biologist®

SUBJECT: Mitigation for additional impacts from Cowlitz PUD Interconnect Project to Merwin-Kalama-Cardwell Transmission Line.

To meet the increasing customer demand in southern Cowlitz County, the Public Utility District #1 of Cowlitz County (Cowlitz PUD) has proposed constructing an 8.5 mile long 115 kV transmission line that will connect their Lewis River substation to PacifiCorp's Merwin substation. This transmission line will be a double circuit line beginning at Merwin substation and extending 1.21 miles on PacifiCorp's Merwin-Kalama-Cardwell line (**Attachment A**). Trees and vegetation must be removed to allow for the construction of the new line. This work will occur south of the existing line and will impact Lewis River Wildlife Habitat Management Plan (WHMP) lands between the existing Merwin-Kalama-Cardwell Tower 5/1 west to the Ariel Substation or Tower 6/1 on Attachment A.



The November 30, 2004 Lewis River Settlement Agreement (SA) was signed by PacifiCorp, Cowlitz PUD, and 24 other Parties, including five federal agencies, two state agencies, eight county/local agencies, two tribes, two citizens-at-large, and five nongovernmental organizations. The SA Section 10.8 directs PacifiCorp, in Consultation with the Terrestrial Coordination Committee (TCC), to develop a Wildlife Habitat Management Plan (WHMP) for their respective lands designated in SA Exhibit A. The SA addresses mitigation requirements for impacts to WHMP lands under Section 10.8.5.5 Mitigation for Impacts on Wildlife Habitat:

“If PacifiCorp proposes to take action on its Interests in Land that are managed under its WHMP, other than those actions specifically prescribed under this Agreement, and that action makes those lands no longer available for wildlife habitat, PacifiCorp shall consult with the TCC to determine if any mitigation is necessary. If Cowlitz PUD proposes to take action on its Interests in Land managed under its WHMP, other than those actions specifically prescribed under this Agreement, and that action makes those lands no longer available for wildlife habitat, Cowlitz PUD shall consult with the TCC to determine if any mitigation is necessary. If the TCC determines that mitigation is necessary, then whichever Licensee is responsible in the specific case shall implement that mitigation. Mitigation shall not be required for land parcels specifically identified in the WHMPs as having wildlife habitat as the secondary use.”

WHMP Lands Impacts

The proposed tree removal Cowlitz PUD Interconnect Project will impact primary WHMP lands by the following actions:

- The Merwin-Kalama-Cardwell transmission line on WHMP lands will have additional line south of the existing line.
- All trees and vegetation will be removed within approximately 55 feet of the center line of the transmission line. This area is classified as Upland Mix habitat which is comprised of larger Douglas-fir trees with a mix of bigleaf maple and red alder trees. An estimated 34 trees will be removed, 2 Douglas-fir trees ranging from 10 to 24 inch in diameter at breast height (dbh), 15 bigleaf maples ranging from 6 to 20 inches in dbh, and 17 red alders ranging in 5 to 20 inches in dbh.
- This tree removal will occur within 300 feet of the Lewis River shoreline and therefore is within the WHMP Riparian buffer. The WHMP has the following goals and objectives for Riparian Habitat Management:

WHMP Riparian Habitat Management Goal is to “Protect, maintain, and/or enhance riparian areas to include a diversity of native plant species and vegetation structures to benefit wildlife species that use riparian habitats. “

WHMP Riparian Habitat Management Objective e is “As part of the implementation of the WHMP, identify riparian sites damaged by anthropogenic processes and prepare restoration plans within 5 years of the identification, if feasible. Restoration plans should

incorporate measures to meet applicable objectives for invasive species and public access management.”

WHMP Valuation

Joe Berry, Chilton Logging Inc. Forester conducted a valuation of the trees marked for removal to determine the current market value (**Attachment B**). The value of the trees was based on May market prices and on the market condition of the trees. These trees have an estimated value of \$2,731.23. The TCC is requesting the full value for these trees.

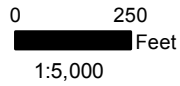
Mitigation Strategy

Following construction the areas on WHMP lands that had vegetation removed or ground disturbance will need monitoring and managed to insure that it meets WHMP goals and objectives. This will likely require grass seeding areas with ground disturbance, replanting the vegetation removal areas, and annual monitoring and management of invasive plant species for five (5) years. The estimated cost for this management is \$1,200 for the first year for monitoring, planting, and grass seeding, and \$500 for the following four (4) years for invasive plant species monitoring and management, totaling \$3,200.

Total compensatory mitigation will be $\$3,200 + \$2,731.23 = \$5,931.23$. These funds will be a lump sum payment and may be used by the TCC for land acquisition or management of WHMP lands. These funds will not accrue interest.

Cowlitz PUD Interconnect WHMP Lands

Expansion Area
- Primary: .285 acres
- Secondary: .396 acres



- Transmission Pole
- Transmission Line
- Proposed Substation Expansion
- Proposed Road
- Road
- ✦ Bald Eagle Nest
- Nest Buffer (330, 660 ft)
- WHMP Lands**
 - PRIMARY
 - SECONDARY
 - EXCLUSION



10/31/2016 U:\Projects\2016\16-348\Interconnect Overview.mxd





WHMP Lands Kalama Line

Narrative Cruise

Valuation of timber located on PacifiCorp land on approximately 0.3 acres
located in Parcel EH3304001 in Section 33, Township 6 North, Range 2
East, Cowlitz County, Washington.

Joe Berry, Forester
Chilton Logging Inc.

May 23, 2018



Summary

The purpose of this report is to estimate the current market value for timber located on approximately 0.3 acres located in parcel EH3304001 in Section 33, Township 6 North, Range 2 East, Cowlitz County, Washington, owned by Pacific Power and Light (PacifiCorp).

Estimated merchantable volume is 4.30 MBF (thousand board feet Scribner). The estimated gross value for the timber is \$3406.31. The estimated stumpage value is \$2731.23. This is an estimate of the cash an owner would receive if the timber was sold on a lump sum basis based on the price a mill would pay for the timber minus the logging and transportation costs.

Timber Description

The timber within the right of way consists primarily of moderately sized red alder with scattered bigleaf maple and minor Douglas-fir. Much of the hardwood is considered pulp as the trees lack a straight log of minimum length and include rot and broken tops. Defect includes: sweep, rot, broken tops and crooks. All species are of average quality.

Estimated Timber Value

The value of the hardwood sawlogs are based on current quoted prices from Northwood Hardwoods located in Longview, WA. The value of the Douglas-fir is based on current quoted prices from Weyerhaeuser export yard in Longview, WA and Interfor in Molalla, OR. Pulp was not valued based on negative net returns.

All trees associated with this cruise can be logged with ground based equipment such as a shovel or skidder. There would be no road building costs as part of this appraisal as the wood could be logged to the adjacent road. The Douglas-fir sawlogs would be hauled to Longview, WA and Molalla, OR, and the hardwood sawlogs would be hauled to Longview, WA.

This was a 100% cruise, with trees segmented into appropriate log lengths based on preferred log lengths for local mills. Location of defect was accounted for in each tree cruised resulting in a net based cruise. Log lengths were assigned based on a minimum scaling diameter of 5 inches.



The following is a summary of total estimated revenues and costs for May, 2018:

EXPECTED GROSS REVENUE

Species	Volume (MBF)	Average Price (MBF)	TOTAL
Red Alder	1.62	\$846	\$1370.52
Bigleaf Maple	1.13	\$493	\$557.09
Douglas-fir	1.55	\$954	\$1478.70
Gross Timber Value			\$3406.31

ESTIMATED HAUL COST

Species	Destination	Miles	Average Price (MBF)	TOTAL
Red Alder/Bigleaf Maple	Northwest Hardwoods*	30	\$65.05	\$178.89
Douglas-fir	Weyerhaeuser Export Yard*	35	\$55.29	\$81.28
Douglas-fir	Interfor	69	80.25	6.42
Total Haul Cost				\$266.58

*Destination is Longview, WA

**Destination is Mollalla, OR

Haul costs are calculated based on an average truckload of 3.4 MBF for the hardwoods, 4.8 MBF for the export quality Douglas-fir going to Weyerhaeuser and 4.2 MBF for Douglas-fir going to Interfor. Rates are 45% over the standard state haul rates given the current fuel surcharge.

ESTIMATED LOGGING COST

Volume (MBF)	Price (MBF)	TOTAL
4.30	\$95.00	\$408.50

TOTAL STUMPAGE VALUE: \$2731.23

Based on current log prices and the cost of logging and hauling the timber, the value of the trees to PacifiCorp is \$2731.23.

Please don't hesitate to contact me with any questions or concerns.

Sincerely,

Joe Berry
Forester, Chilton Logging Inc.

Responses to Comments Received on Kalama Mitigation Strategy Memorandum dated May 24, 2018

Commenter	Comment Number	Comment	Response
1 John Clapp, Citizens at-Large	1	My thoughts are that this is raptor habitat, both eagle, and osprey, so I relegate my vote to Kendal as she knows what we have in that area and how it will be affected. and how disturbance of any nesting should be minimized . there are trees in there that have been specifically altered to be used for raptors. john clapp	Comment noted.
2 Peggy Miller Washington Department of Fish and Wildlife	2	WDFW has read the Mitigation Strategy memo for additional impacts from Cowlitz PUD Interconnect Project to Merwin-Kalama-Cardwell Transmission Line. We approve of the removal of 34 trees, and proposed restoration. We request that any compensation be consistent with the mitigation for the tree removal at the Cowlitz PUD Lewis River sub-station near Merwin Dam. As an aside, were the Big Leaf Maple trees evaluated for quality wood that could be used for specialize projects such as musical instruments? I ask because tree poaching for that type of wood is prevalent and there may be a market. Thanks, Peggy	Hi Peggy Thanks for contributing on WDFW behalf. The bigleaf maple is not particular high quality wood. I am familiar with poaching for bigleaf maples, but my understanding they need really straight trunks. The bigleaf maples here are multi-stemmed and/or not straight. There is only 1 large diameter bigleaf maple and not sure we have enough straight trunk to take to a specialized mill.
3 Neil Chartier, US Forest Service	3	I'll preface this by saying I'm not familiar with the area in question, but I recommend delaying the clearing of trees until after ~7/15 to mitigate noise impacts and loss of nesting habitat during the Neotropical migratory bird breeding season. Thanks, Neil	Neil, Thank you for your response. Yes I agree if this was a WHMP action, it would be scheduled to occur after July 15, and if this action was anticipated in planning phase I would have requested tree removal occur after July 15. However, this action is part of a large project to construct several miles of transmission line and the June 11 date is because they will have scheduled an outage on the Kalama line, meaning that line will not transmit electricity for certain period. When outages are scheduled it takes significant coordination and it is an opportunity to schedule other work on the line at the same time, so requesting to postpone the date this late has significant impact on the construction schedule and other work occurring off of WHMP lands. Let me know if you have any further questions. Kendel Emmerson