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

**Date & Time:** Wednesday, October 10, 2018  
9:00 a.m. – 11:30 a.m.

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

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

<table>
<thead>
<tr>
<th>Time</th>
<th>Discussion Item</th>
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</thead>
<tbody>
<tr>
<td>9:00 a.m.</td>
<td>Welcome</td>
</tr>
<tr>
<td></td>
<td>Review Agenda &amp; 7/11/18 Meeting Notes</td>
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<tr>
<td></td>
<td>Review and Accept Agenda &amp; 7/11/18 Meeting Notes</td>
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<tr>
<td>9:15 a.m.</td>
<td>Land Acquisition Update <em>(Confidential)</em></td>
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<td>9:30 a.m.</td>
<td>Middle Earth 141701CC planting plan review</td>
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<tr>
<td>9:45 a.m.</td>
<td>Forestry Plan Review</td>
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<td><strong>10:15 a.m.</strong></td>
<td><strong>Break</strong></td>
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<tr>
<td>10:30 a.m.</td>
<td>Oak Site Tree Removal; WDFW email re orchards</td>
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<tr>
<td>11:00 a.m.</td>
<td>Study/Work Product Updates</td>
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<td>10.8.5.5 Impacts to Wildlife fund tracker</td>
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<td></td>
<td>Logging</td>
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<tr>
<td>11:15 a.m.</td>
<td>Next Meeting’s Agenda</td>
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<tr>
<td></td>
<td>Note: all meeting notes and the meeting schedule can be located at:</td>
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<tr>
<td><strong>11:30 a.m.</strong></td>
<td><strong>Adjourn</strong></td>
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Join by Phone  
+1 (503) 813-5252 [Portland, Ore.]  
+1 (855) 499-5252 [Toll Free]  
**Conference ID: 5847894**
TCC Representatives Present: (7)
Kendel Emmerson, PacifiCorp
Summer Peterman, PacifiCorp
Kim McCune, PacifiCorp
Peggy Miller, WDFW
Eric Holman, WDFW
Amanda Froberg, Cowlitz PUD
Erik White, Cowlitz Indian Tribe

Calendar:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>November 14, 2018</td>
<td>TCC Meeting</td>
<td>Merwin Hydro Control Center</td>
</tr>
<tr>
<td>December 12, 2018</td>
<td>TCC Meeting</td>
<td>CANCELLED</td>
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Assignments from October 12, 2018

<table>
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<tr>
<th>Assignment Description</th>
<th>Status</th>
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<tbody>
<tr>
<td>Emmerson: Create high-country model of big elk use areas and a 10-15 year plan for silviculture management for TCC review.</td>
<td>Complete</td>
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Parking Lot Items

| 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                                  |

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. No additions were requested.

The TCC reviewed the July 11, 2018 meeting notes and the meeting notes were approved without change at 9:10am.

Public Comment Opportunity:
None

Land Acquisition Update (CONFIDENTIAL)
Emmerson informed the TCC that the environmental review was completed, logging to be completed approximately June 2019 and the acquisition is on track for 2019. We are currently waiting for completion of the land value appraisal, which is anticipated by end of the month. Review of the subject property title is in process. A site visit for appraisals took place in early September 2018.
Additional detail around this topic is considered confidential and proprietary and not for public viewing.

**Unit 14 – Middle Earth 141701CC Planting Plan Review**
Emmerson reviewed the following planting plan to increase diversity and plant hardwoods with the TCC. She provided the estimate to plant the selective plants, including dogwood, which are not currently available but Emmerson will check to see if she can secure any paper birch or Oregon crabapple. The TCC also requested that the plantings be monitored and evaluated by the TCC in 2020.
Middle Earth (171401CC) Planting Plan

Timber harvest area is 23 acres timber harvest and the estimated planting area is 20 acres due to the meadow and leave areas. Acres below are estimated.

**Planting Area A (4 acres):** This area is low bench that is shaded by adjacent timber. This area was upland mix prior to harvest. It will be planted to 250 trees per acre (TPA) with mix of 70% western hemlock (175 TPA) and 30% western red cedar (75 TPA).

Total Trees = Western Hemlock 700, Western Red Cedar 300

**Planting Area B (5.5 acres):** This is area is the upper bench and north-facing slope and was comprised of upland mix prior to harvest. This area will be planted to conifer at 250 trees per acre and will consist of 70% Douglas-firs (175 TPA), 10% Western Red Cedars (25 TPA), and 20% Western Hemlocks (50 TPA).

Total Trees = Douglas-fir 963, Western Hemlock 275, Western Red Cedar 137

**Planting Area C (0.5 acre):** This area is south of the shrubland and was a mix of hardwoods and conifers prior to harvest. This area will be planted with deciduous at 250 TPA and will be primarily red alder and few scattered bigleaf maple.

Total Trees = Red Alder 125 and Bigleaf Maple 5

**Planting Area D (10 acres):** This is the eastern ½ of the harvest area and was comprised of young upland deciduous stand prior to the timber harvest. This will be planted with 250 TPA with primarily red alder (90%) with the remaining 10% comprised of scattered planting of black cottonwood, bigleaf maple, pacific dogwood, cascara, and bitter cherry.

Total Trees = Red Alder 2,250 planted throughout Planting Area D

- Bigleaf Maple 50 planted scattered throughout Planting Area D
- Black Cottonwood 50 planted in NE corner this area has moist soils
- Pacific Dogwood 50 planted in the partial shade of the leave tree areas or timber harvest boundary.
- Cascara 50 planted scattered throughout Planting Area D.
- Bitter Cherry 50 planted scattered throughout the Planting Area D.

Estimated cost for hardwoods $1799.35. Prices from WACD Plant Materials Center 2019 availability.

<table>
<thead>
<tr>
<th>Planting Type</th>
<th>Quantity</th>
<th>Price 1</th>
<th>Price 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Alder</td>
<td>2375</td>
<td>$0.64</td>
<td>$1520</td>
</tr>
<tr>
<td>Cascarra</td>
<td>50</td>
<td>$1.36</td>
<td>$68</td>
</tr>
<tr>
<td>Bigleaf Maple</td>
<td>55</td>
<td>$1.47</td>
<td>$80.85</td>
</tr>
<tr>
<td>Bitter Cherry</td>
<td>50</td>
<td>$1.36</td>
<td>$68</td>
</tr>
<tr>
<td>Black Cottonwood</td>
<td>50</td>
<td>$1.25</td>
<td>$62.50</td>
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*Note: Dogwood - TBD*

**Forestry Plan Review**


The memorandum provides detailed guidelines for scheduling reforestation, pre-commercial thinning, pruning, and harvesting for WHMP lands. To the extent possible, PacifiCorp tried to
closely follow existing WHMP language; however, some management actions are no longer feasible with our current acreage. As a result, schedules for reforestation, silviculture, and harvest were developed to more effectively meet WHMP goals and objectives and manage future budgets. These schedules are provided only for planning purposes, the actual scheduled management actions depends on each timber harvest area’s productivity, stocking, and competing vegetation needs.

The TCC reviewed accompanying maps to show how timber harvest areas are divided into either forestry (THA-F) or habitat (THA-H). The areas that THA-H are less than 40% slope and will be areas that may be managed for cover: forage in the future. As a result, these areas will have WHMP practices applied. Whereas the THA-F, are areas greater than 40% slope and will be areas that may remain as cover and with the potential to grow into mature timber. It was determined that there was some confusion in definitions for THA-H and THA-F so these were revised. THA-Habitat was changed to THA-Flat (THA-F) and THA-Forestry was changed to THA-Steep (THA-S).

Emmerson noted that the following is a WHMP guideline for determining replanting stocking levels:

<table>
<thead>
<tr>
<th>Site Conditions</th>
<th>Trees per Acre</th>
<th>Spacing</th>
</tr>
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<tbody>
<tr>
<td>Good - little to no mortality expected</td>
<td>302</td>
<td>12 x 12</td>
</tr>
<tr>
<td>Moderate - some mortality expected</td>
<td>360</td>
<td>11 x11</td>
</tr>
<tr>
<td>Low – significant mortality expected</td>
<td>435</td>
<td>10 x 10</td>
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In the past few years, the TCC has supported planting at 14 x 14 spacing or 222 trees per acre. Because we were using adaptive management to achieve our goal and objectives, it would be more appropriate to determine the tree stocking success to be no more than 15% mortality of the original planting.

She further addressed in the memo pre-commercial thinning and pruning criteria, reforestations inspections, commercial thinning and clear-cut timber harvest schedules for TCC consideration. **Comments are due from the TCC on or before close of business November 2, 2018.** Once approved by the TCC the memorandum will be posted to the Lewis River website as a final document.

<Break 10:55am>
<Reconvene 11:05am>

**Oak Site Tree Removal**
Summer Peterman (PacifiCorp) informed the TCC attendees that the Oak site 5-1 and 5-2 revealed the following count (counted trees 50’ away; trunk to trunk):

**Site 5-1**
39 conifers to be removed (15 large, 11 medium, 13 small). There was one large maple. The TCC decided not to cut the bigleaf maples to maintain tree diversity and to choose volunteer oaks to protect (treat with Plantskydd) in a location where the retention of the bigleaf would not affect the growth of the oaks. Peterman outlined the plan to include keeping two conifers as snags on the edge of Site 5-1.
Site 5-2
20 conifers to be removed (6 large, 5 medium, and 9 small). The plan will include keeping one
conifer as a snag on the edge of Site 5-2 and to limb 2 large conifers up 20 – 30 ft. to let light on the
ground where several volunteer oaks have sprouted.

Each area has had several volunteer oaks (6 and 11, respectively) flagged and will be treated with
Plantskydd two times (spring, fall) a year for 5 years starting in the fall of 2018 to prevent browsing
and promote growth to the next succession.

Removal of conifers in both sites will occur in 2019.

The Unique Management area budget for 2018 is $4,900. In order to complete both Site 5-1 & 5-2
the cost is $5,987 or $3,500 per unit for tree removal and Plantskydd treatment over the five year.

The TCC agreed to complete Site 5-1 and 5-2 only at this time in accordance with Peterman’s
suggestion and monitor for success. If successful, the TCC will consider implementing this type
of management on other oak sites.
10.8.5.5. Impacts to Wildlife Fund Tracker
McCune informed the TCC attendees that the current balance is $18,532.31. The TCC wished to hold on to these funds if needed for incidentals related to property acquisition or monitoring efforts of its WHMP lands.

Logging
Emmerson reported that PacifiCorp secured a new contract with Chilton logging as of August 1, 2018. There were three (3) timber harvest areas identified in Unit 34 (Bumble 183401CC, Yukon 183402CC, and Rudolf 183403CC) and two (Rudolf and Yukon) will be completed. Bumble will be deferred to 2019. Rudolf and Yukon will be scarified and grass seeded, however, the piles will be covered and burned in 2019. All three areas will be planted in 2020.

Other (CONFIDENTIAL)
TNC – Emmerson informed the TCC attendees that PacifiCorp is reviewing options with its property department for transfer of ownership of a particular parcel of property. PacifiCorp is investigating conservation agreement; how to address the desire perpetuity language and wrapping the parcel into the WHMP. The Lewis River license is only 50 years (end 2058) and perpetuity language is not possible but perhaps other options will be discussed with Cowlitz Indian Tribe.

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

Agenda items for November 14, 2018

- Review October 10, 2018 Meeting Notes
- Land Acquisition Update (Confidential)
- TNC Update (Confidential)
- Eagle Island Project Report
- Forestry Plan Review Memo; Approval
- Devil’s Backbone Update; budget and 2019 planning
- Study/Work Product Updates
- Site Visit – Unit 34 (tentative)

Next Scheduled Meeting

<table>
<thead>
<tr>
<th>November 14, 2018</th>
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<tbody>
<tr>
<td>Location: Merwin HCC</td>
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Attachments:
- October 10, 2018 Meeting Agenda

Adjourn 11:55am