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

Date & Time:  Wednesday, May 13, 2015  
9:00 a.m. – 3:30 p.m.

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

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

<table>
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<th>Time</th>
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| 9:00 a.m.  | Welcome  
➢ Review Agenda & 2/11/15 Meeting Notes  
➢ Comment & accept Agenda & 2/11/15 Meeting Notes |
| 9:15 a.m.  | BPA transmission line status update                                               |
| 9:30 a.m.  | ➢ Next Meeting’s Agenda  
➢ Public Comment Opportunity  
Note: all meeting notes and the meeting schedule can be located at:  
http://www.pacificorp.com/es/hydro.html    |
| 9:45 a.m.  | Safety† orientation for tour of Units 5 and 10                                  |
| 10:00 a.m. | ➢ Depart for tour and plan to return to HCC by 3:00 p.m.  
   o Proposed Timber harvest in Unit 5  
   o Unit 10 Management from 2014          |
| 3:00 – 3:30 p.m. | **Return to HCC and Adjourn**                                                   |

† Please bring rain gear and sturdy walking shoes for hiking in the forest. PacificCorp will have 1 vehicle for transportation of up to 3 additional passengers.

There will be no conference call in for this meeting as we will only be in conference for 15 minutes or so before leaving for the field. There are no issues regarding the BPA proposed line; just a status update.

Please bring your lunch
TCC Participants Present: (10)
Ray Crosswell, RMEF
Bill Richardson, RMEF
Peggy Miller, WDFW
Eric Holman, WDFW
Kirk Naylor, PacifiCorp
Kendal Emmerson, PacifiCorp
Nathan Reynolds, Cowlitz Indian Tribe
Erik White, Cowlitz Indian Tribe
Daren Hauswald, WDFW (guest)
Nicholle Stephens, WDFW (guest)

Calendar:

| June 10, 2015 | TCC Meeting | HCC & Field Tour |

Assignments from February 11, 2015
Gritten-MacDonald: Mail a hard copy of the Cowlitz PUD WHMP to Bill Richardson (RMEF).
Status: Completed

Assignments from June 13, 2012
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 black-tail study and report back to the TCC.
Status: TBD

Review of Agenda and Finalize Meeting Notes
Kirk Naylor (PacifiCorp) called the meeting to order at 9:10 a.m. Naylor reviewed the agenda and asked the TCC if there were any changes/additions. Eric Holman (WDFW) was asked to provide an update on SW Washington Elk hoof disease volunteer effort.

Naylor reviewed the December 10, 2014 meeting notes and assignments. The meeting notes were approved at 9:25 a.m. without change.

Naylor identified that Kim McCune (PacifiCorp) was notably absent from the TCC meeting as she had been reassigned to another company project and would not be returning to her position as the Lewis River Project Coordinator. The contributions Kim made to the Team and her abilities will be sorely missed by all the members of the TCC. Beth Bendickson (PacifiCorp) will assume the responsibilities that were formerly Kim’s but is currently busy with multiple other projects and
couldn’t join everyone today. In the near term Kirk said that any communication to PacifiCorp should be addressed to him and he would handle it accordingly. Patience was requested in the transition for completing meeting notes and posting information to the company’s web site.

Kendel Emmerson (PacifiCorp) informed the TCC attendees that the spring 2015 bald eagle nest survey was completed on May 8. Of three new nest sites identified, one is located just east of the Merwin substation (likely an alternate nest site for the 2014 nest NW of Merwin Dam). This new nest site will potentially impact proposed plans associated with substation expansion and the BPA proposed transmission line. Emmerson is following up with accurate maps and evaluating the potential impacts of activities in the vicinity.

**Bacterial Hoof Disease in Southwest Washington Elk**

Holman provided an update on WDFW’s attempt to get volunteer involvement for conducting surveys (driving routes) designed to determine the extent of elk hoof disease in southwest Washington with hoof disease. There was a great amount of support for the effort from the public and over 170 driving routes were conducted over two months (March and April). The efforts have not been summarized as of yet. Results will be provided by WDFW at the following website: [http://wdfw.wa.gov/conservation/health/hoof_disease/](http://wdfw.wa.gov/conservation/health/hoof_disease/)

**BPA I-5 Transmission Line Status Update**

Naylor reviewed Bonneville Power Administration’s (BPA) I-5 Reinforcement Project status for completing the EIS (late 2015) and Record of Decision (2016). The line likely won’t be needed to provide additional capacity until early 2021 as BPA has conducted conservation measures and forecasted demand has lessened. PacifiCorp met with BPA in February and BPA shared their latest location information relevant to the transmission tower closest to the Arial Substation and Merwin Hatchery. A schematic drawing was shown to the TCC showing a realignment of the tower slightly to the east and therefore impacting a portion of PacifiCorp’s Lewis River boat access parking lot. There is no estimate at this time as to when additional work by the TCC would be necessary to formulate any mitigation assessments to WHMP lands.

**PacifiCorp Forestry Management Tour**

Following a safety briefing, the TCC departed HCC at 10 a.m. to tour forestry management projects.

*Management Unit 10* – The TCC visited three of four harvest sites at Management Unit 10 that were completed in 2014. The first stop was Timber Harvest Area (THA) 141009. The harvest area was described as approximately 21 acres with an approximate 4-acre meadow ( unplanted portion of the timber harvest) located in “the bowl” at the bottom of the unit. The grass/legume seed mix that was applied to the entire harvest area is fairly well established. There was no difference between planted grass/legume species used throughout the harvest area and the meadow. Several elk were viewed entering the area as the TCC looked on. The TCC acknowledged the fact that this newly established forage was a great accomplishment in an area devoid of forage. Naylor noted the lack of any other vegetation diversity within the harvest site was because of the previous density of the trees but pointed out that any Large Woody Debris (LWD) that existed was preserved and clumps of trees were retained to break the unit up and provide additional LWD, should they happen to blow down.
The second THA visited was 141008. This area was an approximately 9-acre clear-cut with an adjacent 4-acre commercial thin of the 300-foot buffer to the adjacent stream and wetland. It was noted that the location of the commercial thin was on a ridge and not immediately adjacent the water and as such didn’t provide actual riparian function as traditionally envisioned. The intent of the harvest was to introduce some light to the understory by removing approximately half of the 280 trees/acre of the previous stand and thereby allow shrubs to occupy the understory. The thinned area was seeded with the same seed mix as the adjacent clear-cut but was very lightly established; although tansy ragwort was very apparent as an invader. Some snags were developed to provide further diversity in the commercial thin and several trees that had blown down over the winter provide addition LWD for the future stand. Naylor noted that additional over-story tree removal would have improved the chances of better understory development but the live crown ratio of the residual trees (less than 25%) was indicative of the overcrowded stand and these trees are very subject to wind-throw. Further thinning would have left the stand too vulnerable to further blow-down. Future plans are to just monitor stand conditions and potentially hand pull the tansy before it goes to seed.

The final stop in Unit 10 was to view the 4-acre meadow that was developed as permanent forage. Grass was well established on this slightly south facing slope. Naylor noted that the slash piles that were burned probably reduce the effective foraging area by 10% as few grasses develop on these burned soils. Future plans for the site could include additional scarification to remove residual slash, enhance the soils and provide for a manageable meadow for future mowing but this is being deferred to see how well the meadow progresses. Only invasive weed management is anticipated in the future and as shrubs develop they would be retained.

**Management Unit 5** – The TCC walked through the majority of 25 acres that is proposed for a commercial thin in a 29 year old stand of conifer. Naylor described the stands history as being a clear-cut of alder with a few large cottonwood and occasional large Douglas-fir retained. Traditional forest practice rules were followed at the time that allowed removal of most of the red alder across the several seasonal and small perennial streams on site. Although the stand had been planted with a high density of conifer (approximately 500 trees per acre) numerous pre-commercial thins over the first 15 years of the stands development reduced the trees per acre to the current 205.

Naylor explained that the current tree density and careful management over the past 29 years has produced a reasonably diverse stand with shrubs scattered throughout the unit and especially well established along the margins of the perennial stream (although only a narrow band). While the overstory stand is starting to naturally differentiate, the stand would be expected to lose further light to the understory with a resulting loss of shrubs if left on its own. A commercial thin down to 100-140 trees per acre (TPA) will open the canopy and perhaps allow the understory diversity to greatly expand. No further entries into the stand would be planned for another 25-30 years other than to manage invasive plants. Following the commercial thin, grass seed would be applied to skid trails and landings.

The TCC acknowledged the area’s diversity and supported the proposed commercial thin. Post-harvest monitoring of the stand and ensuring the stands history was documented was discussed. The intent is to ensure that what the TCC perceives as a successful implementation of the WHMP’s forest/wildlife objectives can be traced and learned from to provide future insights to management (how has PacifiCorp retained stand history). Naylor explained his use of spreadsheets
that are annually developed based on surveys for each THA as the current method of documenting stand history. To understand an area's complete history requires looking at multiple spreadsheets, but with careful attention, PacifiCorp is attempting to maintain a record of management for the future. Monitoring of this stand following harvest will include the annual surveys for invasive species (and treatment) and the TCC requests that some photo documentation be included as well.

Figure 1. Proposed retention trees (orange) in commercial thin of Unit 5 (K. Naylor)
Figure 2. Elk having lunch in Unit 10 (Nathan Reynolds photo)

Figure 3. TCC viewing commercial thin in Unit 10 (Nathan Reynolds photo)
Figure 4. THA 141008 first green-up of planted elk forage (Nathan Reynolds photo)

Figure 5. THA 141009 showing forage development in first spring (Ray Croswell photo)
The TCC completed the tour and returned to HCC
<3:45 p.m. meeting adjourned>

Agenda items for June 10, 2015

- Review May 13, 2015 Meeting Notes
- Complete forestry tour of Unit 5 proposed clear-cut and review other forestry activities as time allows (Unit 20 and forage exclosure sites).
- Review snags to be removed in riparian area near Cresap Bay Boat Docks (TBD).

Next Scheduled Meetings

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<td>PacifiCorp forestry tour continued</td>
<td>TBD</td>
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<td>Merwin Hydro Control Center</td>
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<td>Ariel, WA</td>
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