FINAL Meeting Notes
Lewis River License Implementation
Terrestrial Coordination Committee (TCC) Meeting
March 10, 2010
Ariel, WA

TCC Participants Present: (13)

Susan Cierebiej, WDFW
Ray Croswell, RMEF
Kendel Emmerson, PacifiCorp Energy
Diana Gritten-MacDonald, Cowlitz PUD
Eric Holman, WDFW
LouEllyn Jones, USFWS (via conference)
Curt Leigh, WDFW
Kimberly McCune, PacifiCorp Energy
Kirk Naylor, PacifiCorp Energy
Bob Nelson, RMEF
Bill Richardson, RMEF
Mariah Stoll-Smith Reese, Lewis River Community Council
Mitch Wainwright, USDA Forest Service

Calendar:

April 14, 2010	TCC Meeting	Merwin Hydro Control Center
May 12, 2010	TCC Meeting	Merwin Hydro Control Center

Assignments from March 10, 2010 Meeting:	**Status**
McCune: Add Susan Cierebiej to the Lewis River TCC Land Acquisition Subgroup email distribution list.	**Complete – 3/10/10**
McCune: Add missing data in electronic version of PacifiCorp WHMP Appendices B & C; update Lewis River website and notify the TCC.	**Complete – 3/10/10**
Gritten-MacDonald: Review WHMP 2010 Annual Plan forestry alternatives with her forestry consultant and submit revisions to TCC.	**Complete – 3/17/10**

Assignments from February 24, 2010 Meeting:	**Status**
None	

Assignments from January 13, 2010 Meeting:	**Status**
Kearney: Coordinate with McCune to convene a land acquisition subgroup meeting as early as mid February 2010.	**Complete – 3/22/10; Meeting date scheduled on 4/06/10**
McCune/Naylor: Coordinate with creating a land acquisition spreadsheet to include type designations for the TCC review and approval.	**Pending**

Parking lot items from February 10, 2006 Meeting:	Status
Conservation Agreement – what is wanted?	**Ongoing – 4/28/06**

Review of Agenda and Finalize Meeting Notes

Kirk Naylor (PacifiCorp Energy) called the meeting to order at 9:05am. Naylor asked if the TCC attendees had any additions or changes to the agenda. No additions were requested.

Naylor reviewed the TCC Draft 2/24/2010 meeting notes and asked for any comments and/or additional changes. The meeting notes were approved at 9:15am with no additional changes.

Curt Leigh (WDFW) and Susan Cierebiej (WDFW) joined

Naylor requested a round table introduction for the benefit of a new TCC participant. Curt Leigh (WDFW) announced his retirement from WDFW as of March 17, 2010. Susan Cierebiej (WDFW) will represent WDFW for all TCC activities going forward. Leigh requested Cierebiej added to the Lewis River TCC Land Acquisition Subgroup email distribution list.

Yale and Swift Lands Update

Naylor provided a lands update relating to certain Swift and Yale parcels which is considered confidential and proprietary and not for public viewing.

Ray Croswell (RMEF) and Bill Richardson (RMEF) joined

Croswell and Richardson also provided an update of certain lands of interest whereby the seller has expressed serious interest. All detailed land acquisition discussion is considered confidential and proprietary and not for public viewing.

LouEllyn Jones (USFWS) departed

The TCC attendees approved RMEF to proceed with an option agreement with the seller.

Distribute PacifiCorp Wildlife Habitat Management Plan (WHMP) 2010 Annual Plan and brief review

Kimberly McCune (PacifiCorp Energy) distributed hard copies of *PacifiCorp's Lewis River WHMP Annual Plan for Operation Phase 2010,* dated March 8, 2010 for the ACC's 30-day review and comment period.

Kendel Emmerson (PacifiCorp Energy) provided a cursory review of PacifiCorp's WHMP 2010 Annual Plan, of which the document can be viewed in detail at the following link: http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Hydro/Hydro_Licensing/Lewis_River/2010_WHMP_Annual_Prog_Report_Oper_Phase_ACC_Draft.pdf

Emmerson reviewed sections 5.0 Old-growth Habitat Management inspections be completed in 2010, 9.0 Farmland, Idle Areas, and Meadows Habitat Management (a spring and fall mowing at

2010 at the Hamm meadows), 10.0 Orchard Management the management actions are being completed , and 12.0 Unique Area / Habitat Management (thinning oak trees).

Naylor quickly reviewed Section 13.0 Forestland Habitat Management to include Unit 11 clear cutting within the Spotted Owl Emphasis Area (SOSEA) 2.0-mile buffer. He also reviewed the evaluation forms for Unit 18 and discussed the proposed 2011 forest harvest in Unit 22 and the proposed road realignment in Unit 6 due to a land slide area threatening the existing road. Emmerson explained that the Unit 6 road realignment would not have Northern Goshawk surveys because the area is fairly small (less than 0.4 ac), would not require many trees to be removed, and the work would be conducted outside of the nesting season.

Emmerson briefly reviewed 14.0 Invasive Plant Species Management and 16.0 Public Access Management.

Emmerson pointed out that certain data was missing in Appendices B & C so McCune will update the electronic version, publish the revision to the Lewis River website and notify the TCC.

The TCC was asked to **provide comments on or before Monday, April 12, 2010**.

<Break 10:30am>
<Reconvene 10:40am>

Mariah Stoll-Smith Reese (Lewis River Community Council) departed

Wildlife Habitat Management Plan (WHMP) 2010 (Year 2) Annual Plan for Swift No. 2 – TCC Questions/Comments

Diana Gritten-MacDonald (Cowlitz PUD) provided a cursory review of two implementation plans proposed for 2010 to include the Shrub Enhancement Implementation Plan and the Patch Cut Implementation Plan (full detail of each is included in **Attachment A**). The proposed work will be performed by the Washington Conservation Corps (WCC).

PWMU-PUB Worthington's Wetland: Shrub Enhancement Implementation Plan
General discussion took place regarding protection of the willow plants from elk. Leigh suggested Gritten-MacDonald contact Mike Kohn at the Lewis Public Utilities District to discuss his ideas relative to protection methods. PacifiCorp commented that without protection the planting investment would be lost to elk. Richardson suggested soaking the willows in cool water for ten days for optimum survival.

Naylor communicated that exclosures are best for protecting new plantings and could be developed with the use of treated or cedar corner posts and then enclosing the area with woven wire at least six feet high. These closures can be expensive depending on materials and size of exclosure. Perhaps the WCC can provide labor to offset some of the costs.

A suggestion was also made to eliminate the black cottonwood in the Worthington Wetland Implementation Plan because of the long term safety of cottonwood trees so close to the maintenance road.

The TCC suggested building exclosures in 2010 and planting in 2011; staging the implementation plan to coincide with the PUDs budget.

DBMU-3 Patch Cut Implementation Plan

Gritten-MacDonald reviewed the patch cut implementation plan and asked for TCC input, suggestions and ideas. Eric Holman (WDFW) communicated that increasing the patch size would be preferred, if possible.

The TCC considered a number of options to include decreasing the number of trees treated (every other tree) in a larger patch size, commercial thinning, conifer control around existing wetland, stewardship contracting, more expansive thinning over time, or save money until a more meaningful treatment can be implemented and focus the dollars on the wetland (Worthington) project. Gritten-MacDonald said she would review the forestry alternatives with her forestry consultant.

Holman suggested the Cowlitz PUD massage the wetland budget to include all exclosures and revisit the thinning options for units 2 and 3. Gritten-MacDonald will email the revisions to the TCC when available.

New Topics/Issues
None

Next Meeting's Agenda

- Review of 3/10/10 Meeting Notes
- Columbia Land Trust Update
- PacifiCorp WHMP 2010 Annual Plan Discussion
- Cowlitz PUD WHMP 2010 Annual Plan Discussion

Public Comment Opportunity
No public comment was provided.

Next Scheduled Meetings

April 14, 2010	May 12, 2010
Merwin Hydro Control Center	Merwin Hydro Control Center
Ariel, WA	Ariel, WA
9:00am – 3:00pm	9:00am – 3:00pm

Meeting adjourned at 11:30 am

Handouts
- Agenda
- Draft meeting notes from 2/24/10
- PacifiCorp's Lewis River WHMP Annual Plan for Operation Phase 2010, dated March 8, 2010

- **Attachment A** – PWMU-PUB Worthington's Wetland: Shrub Enhancement Implementation Plan and DBMU-2 and DBMU-3 Patch Cut Implementation Plan

Attachment A

PWMU-PUB Worthington's Wetland: Shrub Enhancement Implementation Plan

WHMP Management Goal	Protect, maintain, and/or enhance wetlands to provide a diversity of habitat types for native amphibians, waterfowl, and other wildlife species.
Objectives	Plant shrubs to increase species and structural diversity of habitat around PWMU-PUB; improve HSIs for yellow warbler with establishment of hydrophytic vegetation.
Estimated area to be planted	2,000 square feet
Species to be planted	Mix of Scouler willow, Sitka willow, Pacific willow, black cottonwood, as available.
Stock to be planted	Cuttings
Potential sources of plant material	http://www.soundnativeplants.com http://www.windyridgetreefarm.com.
Soil preparation	None
Spacing	Variable 1-2-foot centers
Number of cuttings	450
Labor cost	$667 assuming ½ day, 6-person crew
Material cost	$535 shrubs
Schedule	October 30-November 30
Documentation	WHMP Exhibit 5.2-1, Wetland Initial Inspection Form
Monitoring	WHMP Exhibit 5.2-1, Wetland Annual Inspection Form
Maintenance	Replace lost or damaged plants in 2011 as budget allows
Task Description	Below

Plant a mix of Scouler willow (*Salix scouleranai*), Sitka willow (*Salix sitchensis*), Pacific willow (*Salix lasiandra*) and black cottonwood (*Populus trichocarpa*) cuttings, as available, on variable spacing at 1-2-foot centers in a 6-8-foot-wide band around PWMU-PUB, as measured from the wetland margin.

Cuttings should be from 4 to 5 feet in length with a basal end of 0.5 to 1.5 inches in diameter. The top ends should be blunt; butt ends should be angled at 45 degrees.

For optimal survival, live cuttings should have been harvested while the plants are dormant and taken from wood that is 3 years old or less. Cuttings should be installed as soon after harvest as possible. If cuttings are collected more than 12 hours prior to planting, they must be stored in cool, dark, moist (not wet) conditions and protected from exposure to wind and direct sunlight at all times, including during transport, and held at temperatures less than 50 degrees F (ideally, between 35 and 40 degrees).

If cuttings appear desiccated or damaged, basal ends should be re-cut immediately prior to planting, using a very sharp knife, rather than pruners or saws.

Cuttings should be planted with a shovel, rock bar or hand dibble. At least half the cutting should be installed below ground, leaving at least three buds above the ground. Air pockets should be eliminated by firming soil around the cutting after planting.

DBMU-2 and DBMU-3. Patch Cut Implementation Plan

WHMP Management Goal	Promote forestland species composition and structures that benefit wildlife and provide an appropriate mosaic of big game hiding cover and forage.
Objectives	Girdle small patches of trees to increase species and structural diversity in single-age stands over time by opening the canopy to improve shrub and groundcover; improve HSIs for elk over time.
Silvicultural treatment	Girdle all tree stems within 4-6 patches ranging in size from 0.1 to 0.25 acres.
Species to be treated	Primarily Douglas-fir, some western hemlock.
Patch size	Variable, 0.1 to 0.25-acre areas
Number of patches	4 – 6 (total area 0.4 to 1.5 acres)
Labor cost	Forester x 2 days = $2,800 WCC crew x 2 days = $2,700
Material cost	Mileage RT x 2 trips = $750
Schedule	Girdling is most effective in spring and summer, but can be conducted at any time of year the site is accessible and there are safe working conditions.
Documentation	Silvicultural treatment prescription prior to treatment (WHMP Section 5.7; Exhibit 5.7-1); forester to identify and map patches and mark trees for girdling in advance of the crew work.
Monitoring	Verify that treatment was completed as prescribed immediately following treatment. After at least one full growing season following treatment, verify that treatment was effective at killing all trees within each patch.
Maintenance	None. Re-treat any live trees within each patch, as budget allows.
Task Description	Below.

Girdling is the patch cut method proposed at this time, because it can be implemented at low cost by crews with no experience in felling trees.

Based on an initial site inspection, the forester will write a silvicultural prescription to document the location and size of each patch cut, the number of trees to be girdled by size and species, and the anticipated benefits to understory development, habitat diversity, and site goals and objectives. The forester will mark all trees to be removed in each patch with an "S" in orange tree paint in advance of the crew conducting the treatment, and will orient the crew on their first day in the field.

The treatment will consist of girdling all tree stems within 4-6 predefined patches of no greater than 0.25 acres each. The dominant overstory species in DBMU-2 and 3 is Douglas-fir, with some western hemlock. Treatment patches will be located in areas that are predominantly Douglas-fir, with smaller amounts of hemlock, alder and big-leaf maple. If present, big-leaf maple, western redcedar, and black cottonwood will be

retained.

Girdling is the process of removing the bark and cambium layer around the entire circumference of the tree for a short vertical distance on the tree stem. The cambium layer contains the xylem and phloem conducting cells. The xylem conducts water, and the phloem conducts sugars and other nutrients between the roots and the foliage. Severing the cambium layer prevents the flow of these resources, and over time, kills the tree from lack of water and nutrients. Spring and summer are the best time to girdle trees. After initial spring growth, resources are depleted and the tree is most vulnerable. Girdling can be performed with a chainsaw and hand tools such as an axe.

When using a chainsaw, place two saw kerfs completely encircling the tree stem several inches apart from each other, below the lowest tree branches, and deep enough to sever the cambium layer. Then remove the bark and cambium layers between the two kerfs using an axe.

This treatment is not a ground disturbing activity, and trees are not being felled; however, follow applicable BMPs listed in Section 5.7 of the WHMP when preparing and conducting the treatment.

The long-term objective of killing all trees within each patch is to eventually produce an opening in the overstory canopy that will allow greater light to the forest floor for understory development. Girdled trees will die, yet initially remain standing as part of the overstory canopy. Over time the trees will lose needles, then successively larger branches, provide snag habitat for birds and small mammals, and eventually fall to the forest floor and function as coarse woody debris habitat. This treatment will mimic the natural conditions that occur when a root rot causes a pocket of tree mortality in a forest stand and creates a canopy gap in an otherwise closed canopy forest.