LEWIS RIVER TERRESTRIAL COORDINATION COMMITTEE

Facilitator:	KENDEL EMMERSON
	503-813-6040; CELL 509-774-8102

Location: Online Teams Meeting

Date: Wednesday February 8, 2023

Time: 9:00 AM -11:00 AM

Agenda Items

9:00 a.m.	 Welcome, ➢ Review and Accept Agenda ➢ Review and Accept 12/14/2022 Meeting Notes
9:10 a.m.	Public Comment Period
9:15 a.m.	Cresap Campground Parking Area Mitigation Memo
9:30 a.m.	Saddle Mountain Trail Camera Update
9:45 a.m.	10.8.4 Habitat Evaluation Procedures HEP Datasheets
10:00 a.m.	2022 Budget Update
10:15 a.m.	Moss Cave Land Acquisition Update (Confidential)
10:30 a.m.	Project Updates ➤ 2023 Timber Harvest changes
10:45 a.m.	Next Meeting's Agenda
	Note: all meeting notes and the meeting schedule can be located at: <u>https://www.pacificorp.com/energy/hydro/lewis-river/acc-tcc.html</u>
11:00 a.m.	Meeting adjourns

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United States, Davenport Phone Conference ID: 337 646 7#

<u>Meeting Notes</u> Lewis River License Implementation Terrestrial Coordination Committee (TCC) Meeting February 8, 2023 Conference Call

TCC Representatives Present: (7)

Kendel Emmerson, PacifiCorp Summer Peterman, PacifiCorp Amanda Farrar, Cowlitz PUD Erik White, Cowlitz Tribe Peggy Miller, WDFW Eric Holman, WDFW Bill Richardson, Rocky Mountain Elk Foundation

Guests: (1)

Sarah Montgomery, Anchor QEA (note-taker for PacifiCorp)

Calendar:

February 8, 2023	TCC Meeting	Teams Call

Assignments for February 8, 2023	Status
Emmerson: Finalize and distribute the final Cresap Campground Mitigation	In progress
Memo.	
Peterman: Conduct additional public trail use observations near proposed	In progress
Saddle Dam (MU10) trail location before and after parks open in 2023 for	
comparison with early 2023 data.	

Assignments for December 14, 2022	Status
Emmerson: Update the tree tally information and finalize the Saddle Dam	In progress
Mitigation Memo.	
Emmerson: Send the Moss Cave appraisal to the TCC members by request.	In progress
Miller and Peterman: Coordinate on WDFW's oak specialist providing	In progress
feedback on the proposed plantings at Woodland Release Ponds site.	

Assignments for May 11, 2022	Status
Emmerson: Make a tracking sheet for 10.3.3 funding disbursements and	In progress
include it in the 2022 TCC Annual Report.	

Assignments for December 8, 2021	Status
Emmerson: Discuss potential WHMP disturbance impacts with permitting	In progress
staff for the Cougar Creek highway project.	

Assignments for January 13, 2021 Status

Emmerson: Provide a list of past timber harvest areas that have been within the WHMP buffer, associated TCC meeting notes, and reference to the	In Progress
WHMP language.	

Kendel Emmerson (PacifiCorp) called the meeting to order at 9:01 am. She added updates for the Cougar Creek Project, Yale Fish Passage, and Saddle Dam to the agenda. Emmerson reviewed the December 14, 2022 notes, and no comments were received.

The TCC approved the December 14, 2022 meeting notes.

Public Comment Period

None.

Cresap Campground

Emmerson said she received comments from Peggy Miller regarding the Cresap Campground mitigation values. One comment was about the mitigation rate. Because this land was initially included in the WHMP, the mitigation rate is either 2:1 or 1:1. Miller said she wanted to make sure the TCC agrees with the proposed mitigation rate, as the meadows will be replaced with pavers and grass at a 1:1 rate. Emmerson said this area is interesting because it is a meadow half of the time and considered recreational half of the time. Eric Holman recalled previous conversations on the topic and said this seems consistent because it compromises the need for recreation with the need for habitat. Bill Richardson asked if deer would walk on or use the mats. Emmerson said she thinks they would not bed on the mats, but would probably use the area. Some forage and deer scat have been observed. She said the pavers might get mossy because they cannot be reseeded.

Bill Richardson suggested that 1.5:1 might be a better compromise. Emmerson noted the impact is a conversion instead of a total loss, which informed the original proposed mitigation rates. Eric Holman said the adjacent forest lands also present a good opportunity to create better meadow habitat in the same management unit but further from disturbances. This could be an action separate from the proposed mitigation being discussed. Emmerson agreed and said the forest area behind the campground will be ready for harvest in 2024, so the TCC can discuss making a meadow there. She noted the area is close to the highway, which is a concern. A nearby area of forestry (still in Management Unit 8) has some expanding root rot mortality, which Peterman plans to observe and document with a drone.

Emmerson brought the discussion back to the proposed mitigation and asked if there is any objection to revising the mitigation rate to 1.5:1. TCC members agreed this is an appropriate mitigation rate.

Emmerson noted one other comment on the plan regarded the replacement value, which revising the mitigation rate would resolve. Other comments and edits received were minor revisions not requiring discussion. Emmerson said she will finalize the memo and provide a final version to the TCC.

TCC representatives present agreed a final version can be provided without needing to approve the revisions.

Saddle Mountain Trail Camera Update

Summer Peterman provided a summary of her trail camera observations of recreation at the Saddle Dam Trail and Map of Camera Locations. She said she placed a camera at the Fraser Creek crossing, at the intersection of Cedar Grove Pond, and one at the Saddle Dam Horse Trail. Another camera was placed in January, and she provided a summary of the findings:

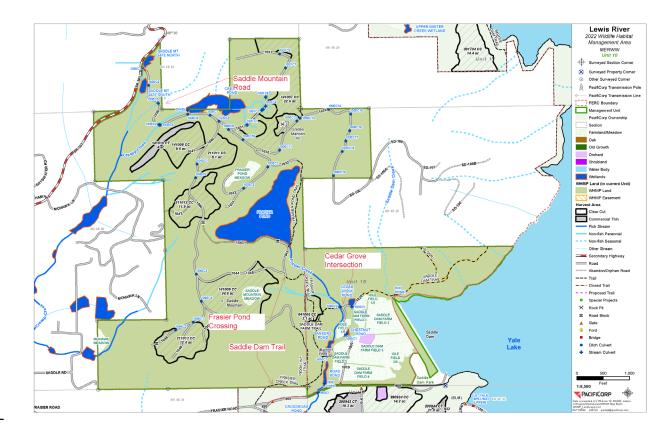
- Most of the use was at Cedar Grove, and many repeat detections occurred
- Many repeat detections also occurred at Saddle Mountain Road and some off leash dogs were observed
 - Hunters were also observed at Saddle Mountain Road, who were trapping for beaver over a four day period. It appears three beavers were removed.
 - Erik White asked what types of traps were used, and Peterman showed photos indicating the traps are big box traps.
- No ATVs were observed.
- Hikers did the loop from the fields towards the dam.
- No observations occurred in the middle of the night, but there were some pre-dawn and dusk users.
- Most users stay along Fraser Pond.
- Many users came from the fields at Cedar Grove intersection, and few came from the Saddle Dam trail.

Total For Area

Total detections
Hikers/Walkers/Runners
Repeat users
total w/ dogs
Dogs off leash
Horseback riders
Loop Users
Hunters

January 10 - February 6, 2023

Cedar Grove Intersection		Saddle Dam Trail		Frasier Pond Crossing	
Total Detections	124	Total Detections	6	Total Detections	3
Repeat Detections	76	Repeat Detections	3	Repeat Detections	2
Hikers/Runners/Walkers	113	Hikers/Runners/Walkers	3	Hikers/Runners/Walkers	0
Dog	61	Dog	2	Dog	0
Dog Off leash	47	Dog Off leash	2	Dog Off leash	0
Horseback Rider	7	Horseback Rider	1	Horseback Rider	0
Hunters	2	Hunters	0	Hunters	1
Wildlife	2	Wildlife	2	Wildlife	0
Detections using west	18				
Detections heading or coming W	11				
Saddle Mountain Road					
January 10- 21					
Total Detections	84				
Repeat Detections	N/A				
Hikers/Runners/Walkers	41				
Dog	16				
Dog Off leash	4				
Horseback Rider	2				
Hunters	12				
Wildlife	18				
Vehicles	11				



The overall purpose of this project was curiosity from the TCC on users of the area; there will be no official report. The trail project will include cleaning up trails that do not make sense as long-term use trails and making the trail system more sustainable.

Eric Holman said the findings support his concern that there are a lot of people using the trail system, and there could be even more after the trail work is complete. He suggested some strategic screening plantings or debris piles to deter users from accessing the old trails and to provide a visual and disturbance buffer for wildlife. Emmerson agreed. She noted that horse riders like loop trails, so building this loop trail and keeping them in the forested buffer will be good for wildlife.

Holman asked if off-leash dogs are allowed. Emmerson said the leash policy applies in campgrounds and recreation areas. There is not a policy on WHMP lands and even if there were, it would be hard to enforce. She said most of the dogs she has seen are well behaved and stay on the road. Holman asked if any additional monitoring is planned. Peterman said she left the cameras up and wanted the TCC's feedback on next steps before taking them down. She suggested maybe repeating the monitoring one month before the parks open then again once the parks are open. Holman agreed those would be useful periods for comparison with these data.

10.8.4 Habitat Evaluation Procedures (HEP) Datasheets

Emmerson shared an update on the HEP process. Emmerson and Peterman reviewed the datasheets and conducted some preliminary (test) field surveys to understand how the data are collected. She reviewed some of the aspects of the datasheets and technical reports and appendices, including transect types, target species (e.g., savannah sparrow, black-capped chickadee), variables like tree

height, and the status of each model (some of which were last updated in the 1970s). All of the models and datasheets have been added to the HEP section of the PacifiCorp website.

Eric Holman noted that vesper sparrows are more of a conservation concern than savannah sparrows. He suggested checking the literature for vesper sparrow models in case there is some newer or useful information for modeling purposes. Emmerson said savannah sparrows nest in open ground, and she is not convinced some of the clear cuts identified as habitat truly meet their requirements for long-term open habitat areas. She will check for more recent information, however.

Holman compared the sparrows to streaked horned lark, which nest in wide open nearly unvegetated areas like sand bars. Emmerson noted the preferred forage in these open areas is tall grass, too, so the likelihood of the meadows being suitable for savannah sparrow is further diminished. She noted that some of the HEP models used by USFWS were never finalized and might never be finalized because USFWS is starting to move away from using HEP models.

2022 Budget Updates

Emmerson shared an update on the 2022 WHMP budget. She said 78% of the budget was spent and most categories stayed under budget. The Transmission work category went over budget due to a lot of noxious weed work this year. The Monitoring category also included a lot of fencing and seeding shrubland and grass plots in the high country. Areas of invasive plant removal included Swift Dam, MU28 by Eagle Cliff, and Beaver Bay. Peterman noted that pollinator work was classified under the Transmission category, so that budget will be adjusted for 2023 to reflect the additional pollinator work.

Holman asked if this means the unspent budget will be available in 2023 for extra or special projects. Emmerson said the tracking spreadsheet of projects has been really helpful to allocate funds correctly and consistently manage and evaluate budgets throughout the year. As unexpected projects and needs arise throughout the year, it is easier to approve them with the extra funding available. Emmerson also noted that 5-year inspections will be needed for orchards in 2023 and right-of-way in 2024, so these costs will be covered by the additional funding available. Emmerson said she is also increasing the Monitoring budget for 2023 so that more tasks can be taken on, like turning over some meadows. Holman agreed with this approach and said it would be great to do more enhanced habitat work in some locations. Other ideas include interplanting cedar, fertilize or reseed meadows, planting a new oak stand, or creating more snags. Emmerson agreed and said she and Peterman have been discussing some of the meadows that can be improved. Peterman will be taking some soil samples to determine appropriate amendments. Emmerson said it will be helpful if the TCC representatives continue brainstorming ways to use these additional available funds, and she can provide a more detailed 2023 budget in March.

Moss Cave

Moss Cave Acquisition – Due to confidential information details of this portion of the meeting have been omitted from these meeting notes.

Project Updates

2023 Timber Harvest Activities

Emmerson said the WHMP 2022 Annual Plan described two potential harvests. There was one planned near the Northwoods community which will not occur in 2023 because it is undesirable to attract elk to that area.

Emmerson said harvest activities are planned in MU 18 in 2023 will not happen. Emmerson said this is a good area with a lot of elk, so would be a desirable location to complete some timber harvest and introduce openings. However, it is hard to access. Holman asked if there is a way to use an ATV to access the area for a smaller scale enhancement, like cutting and leaving some trees. Emmerson said a small action may be feasible but bringing heavy equipment in is not. She agreed there are areas in MU18 that would be good to open up. She noted there is a skid trail that crosses DNR land where PacifiCorp does not have an easement and a culvert on that road was removed. To bring equipment into the area, a fish passable culvert would need to be added. Emmerson said only smaller actions could be considered in this area, and she and Chilton Logging will continue to evaluate potential options with input from the TCC.

In MU20, there is a commercial thin planned to the west of Cougar as well as two small clear cuts on the east side. One of the clearcut was removed from 2023 and the other clearcut was slightly enlarged.

Emmerson said she will share maps that show the revised timber harvest plans in the WHMP Annual Plan.

Cougar Creek Culvert Project

Emmerson said she still has not seen any permits submitted or received for this project. Permits should be submitted and approved by the end of March, then PacifiCorp will need to review them, with work planned to start in June. Due to WSDOT policy, monetary mitigation cannot be provided, but there is some in-kind mitigation being discussed (likely Himalayan blackberry control and planting of a relic campsite). The main impacts from the project are walking equipment in the creek and shoreline armoring. Peggy Miller noted the Yakama Nation had suggested adding wood in the river upstream from the project location. She asked if this is different from the mitigation for impacts to WHMP lands. Emmerson confirmed this is different and not part of the current design. It may be incorporated in a future project, as there is potential for a bridge to be built as a long-term solution.

Saddle Dam

Emmerson said permits for the Saddle Dam Remediation Project have been submitted. Many public comments were received regarding wildlife, elk habitat, and mitigation. Articles in the news have also brought up mitigation. Emmerson said the exact numbers in the mitigation memo have not been finalized, but she intends to finalize this soon so that it can be shared with the public. She said Holman recently provided a good suggestion to plant some of the mitigation trees in higher densities where trail screening would be beneficial. The current mitigation value is around \$250,000 and construction is still planned for September 2023.

Yale Fish Passage

Emmerson provided an update on fish passage at Yale Dam. She said the ACC and FPS has been working on reviewing 30% design drawings. The current plan for the fish passage facility is similar to the Swift Floating Surface Collector. It would be constructed in Saddle Dam Park, which is excluded WHMP lands. Downstream in Yale Reservoir, there is potential that construction impacts could affect WHMP lands. She noted some of the impacts would be to public land instead of PacifiCorp land. Eric Holman asked what the mitigation process is for impacts to DNR land, and whether this relates to their Habitat Conservation Plan. Miller said she has been reviewing these plans and is not certain that impacts would be on DNR land yet. Amanda Farrar said at the 30% design stage, impacts are restricted to Cowlitz PUD and PacifiCorp lands, and if DNR land were impacted, mitigation could be discussed. Emmerson said on other lease agreements, DNR usually prefers compensation to mitigation, because they are more interested in the forestry value than the habitat value. Holman said mitigation might be discussed if the habitat type were totally changed. He asked if there are impacts to Cowlitz PUD lands, are those areas similarly excluded from habitat management purposes? Farrar said yes, those areas are designated for project works.

Farrar also mentioned that she was contacted by a consultant who is doing some forestry on land owned by A&E Forestry adjacent to Cowlitz PUD lands in order to coordinate boundaries for the upcoming work. Cowlitz PUD's consultant forester met the A&E Forestry forester on site to review the boundaries. The boundary was sufficient so another survey will not be needed. Cowlitz PUD did however make a request to leave any unmerchantable timber within 50 to 100 feet that might provide a wind buffer to a narrow strip of mature timber nearby, which A&E Forestry's forester will discuss internally. Farrar said Cowlitz PUD also requested an update on schedule in case they want to be present for any of the activities. She also noted that the current owner may be interested in selling or auctioning off timberland, which she wanted to pass along to PacifiCorp and the TCC in case there was any interest or funds available. Emmerson said probably not due to cost but she will continue evaluating future timberland purchases. She also noted that when A&E Forestry logs adjacent to PacifiCorp land, they usually do a cost-share for a survey of the boundary.

Administrative

Amanda Farrar noted her recent name change from Froberg to Farrar, and her email address has also changed: afarrar@cowlitzpud.org.

Agenda items for March 8, 2023

- Review February 8, 2023, Meeting Notes
- ➢ WHMP Annual Report − Draft
- WHMP Annual Plan Draft
- > 2023 Budget Update
- Saddle Dam Mitigation Memo Finalize
- Study/Work Product Updates

Next Scheduled Meeting

March 8, 2023	
Merwin Hydro	
Control/Teams	

Attachments:

- February 8, 2023, Meeting Agenda
- Cresap Creek Parking Expansion WHMP Mitigation Memo
- [See HEP Materials on PacifiCorp website]

Adjourn Meeting 10:43 a.m.



Memorandum

To:	Eric Hansen, Cresap Bay Park Parking Expansion, Project Manager, PacifiCorp
From:	Kendel Emmerson, Principal Scientist, PacifiCorp
CC:	Terrestrial Coordination Committee, Jessica Kimmick, and Todd Olson, PacifiCorp
Date:	2/8/2023
Re:	Terrestrial Coordination Committee (TCC) decision on mitigation for Lewis River Wildlife Habitat Management Plan lands for the proposed Cresap Bay Park Parking Expansion.

Proposed Project

The Cresap Bay Park and Campground was built on Merwin Reservoir in 1992. Under the Merwin Wildlife Habitat Plan, Washington Department of Fish and Wildlife (WDFW) and PacifiCorp developed a plan to provide additional parking area that provided a big game forage in the off-season and additional parking during the recreation season. This was accomplished by using geo-pavers that allows for seeding in the open spaces of the pavers. The area is mowed during the recreation season, which allows parking for cars. Following the recreation season, the grass is allowed to grow and provide big game forage.

PacifiCorp is proposing to expand parking at Cresap Bay Park. This is due to the increase in use that often has the parking at capacity and to offset the loss of the temporary closure of Saddle Dam Park during the Saddle Dam Rehabilitation project. PacifiCorp has planned an additional parking lot that would be located on the Lewis River Wildlife Habitat Management Plan (WHMP) lands. Lewis River Settlement Agreement (SA) Section 10.8.5.5 Mitigation for Impacts on Wildlife Habitat addresses mitigation requirements for impacts to WHMP lands:

"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 proposes to take action 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."



Terrestrial Coordination Committee and Lewis River WHMP Lands

The SA Section 10.8 created the Terrestrial Coordination Committee (TCC) to oversee the implementation of the terrestrial measures in the SA; including coordinating and consulting on the development and implementation of plans, implementation of measures, and preparation of reports; reviewing information; and in specific cases, making decisions and granting approvals (Section 14.1). The primary purpose of the TCC is to provide a forum for coordinating between the Licensees and the other Parties on implementation of the protection, mitigation, and enhancement measures for terrestrial resources included in Section 10 of the SA.

The SA Section 10.8 directs PacifiCorp, in Consultation with the TCC, to develop a WHMP for their respective lands designated in SA Exhibit A. The Lewis River SA Section 10.8 provides the following definition on the WHMP:

"The purpose of the WHMPs shall be to benefit a broad range of fish, wildlife, and native plant species, including, but not limited to, large and small game, amphibians, bats, forest raptors, neo-tropical birds, and culturally significant native plants."

The TCC has authority to approve actions on WHMP lands and under SA Section 10.8.5.5 may require mitigation for the permanent loss of WHMP lands and temporary impacts to wildlife.

Terrestrial Coordination Committee Consultation

The TCC reviewed the Cresap Park parking expansion project at the April 14, 2021, meeting. The TCC representatives agreed to the parking expansion if the following conditions are met:

- A plastic geo-paver method similar to the other additional parking area be used for the new parking area.
- The area be seeded to provide forage for big game outside of the recreation season.
- The loss of habitat and temporary impacts to wildlife be compensated.

WHMP Land Impacts

The access to the proposed parking area will be through a former road grade. The proposed parking area will occur in an existing opening that is a small meadow surrounded by forested habitat. The meadow area was created for wildlife. It was formerly used for volleyball and was mowed during the recreation season. This area will be leveled, graded, and have plastic geopavers installed. This will create additional 31 parking spots for vehicles.

Note that although the proposed new parking area is currently a grassy meadow, the area is vegetation cover typed as Mid-successional Conifer because the meadow is less than 1.0 acre in size. However, for the purposes of determining WHMP impacts it will be assumed that there will



be a degradation from meadow habitat to recreational habitat.

Cresap Bay Park and Campground are closed to public access outside of the recreation season (Friday before Memorial Day to September 30) to minimize disturbance to wildlife. The construction will occur during the off season in the spring, which is the critical season for wildlife reproduction. Therefore, it is assumed that wildlife will be displaced during the construction for at least 6 months.

To determine the effects of construction noise on wildlife. It is assumed that the ambient noise conditions for the area on an average day in the off-season are similar to normal background levels in a forested habitat and are 35 decibels (dB) (USFWS 2020).

The United States Fish and Wildlife (USFWS) has completed extensive research and analysis on construction noise and disturbance to Northern Spotted Owls and Marbled Murrelet. The USFWS has defined the Above-Existing threshold as (USFWS 2020):

"the species may react to elevated sounds in relation to all existing sound sources. We determined this elevated decibel difference to be a 25 decibel difference between all existing noise (i.e., natural background ambient, line and point sound sources) and only the action-generated sound."

This is the dB level that is considered to cause disturbance to northern spotted owls and marbled murrelets. For the purposes of this document, it is assumed that same threshold applies to all wildlife. Therefore, any noise level that is above 60 dB (Ambient conditions + above-existing threshold) will cause disturbance.

The USFWS has provided some common construction scenarios in forested habitat with recommended auditory disturbance distances. These scenarios are applicable to the proposed parking lot construction (USFWS 2020):

Scenario 3: Moderate action-generated sounds in species habitat otherwise unaffected by human sound-generating activity.

This scenario would be applicable to the construction of parking area and is estimated to have a sound level of 89 dB which within the range of moderate action-generated sounds. This would produce an auditory disturbance distance of 300 m (984 ft).



Mitigation Strategy

In 2011 the TCC developed a mitigation strategy that identified replacement values for each vegetation cover type on WHMP lands (table below). The values were based on the definitions and habitat types in the Oregon Department of Fish and Wildlife Fish and Wildlife Habitat Mitigation Policy (OAR 635-415-0000).

Habitat Type	Definitions	Replacement Value (Replacement Acres per acre impacted)
Irreplaceable	Unable to replace or recreate, essential or primary habitat for species, and locally rare (e.g., forested wetlands, old-growth)	3:1
Essential	Difficult to replace or recreate, essential or primary habitat for species, and locally uncommon (e.g., mature conifer forests, oak woodland)	2.5:1
Limited	Able to recreate or replace, primary habitat for species, and locally uncommon (e.g., shrubland, meadows). Habitat is actively or has been actively managed in the last 5 years (e.g., Pole thinned). Habitat is a Priority Habitat and Species (PHS) habitat.	2:1
Important	Able to recreate or replace, primary habitat for species, and locally common (e.g., mid- successional forests, pastures)	1.5:1
Potential Able to restore or natural succession will provide habitat (e.g., clear cut forest)		1:1
Potential	1:1	

WHMP Land Valuation

The best valuation available for the proposed parking area is the Saddle Mountain property purchased in 2010 with funds under SA Section 10.1 Yale Land Acquisition and Habitat Protection Fund. The 2010 land acquisition includes 490 acres on 5 parcels. The 2010 purchase price was for \$5,000,000 (\$10,204.08 per acre), the appraised value.

In August 2021 PacifiCorp received a broker opinion for the Saddle Mountain property . The opinion provided a value range of \$250,000 - \$275,000 for 24.8 acres that included a broker



opinion low value, broker opinion high value, and original price. To determine a per acre price for the proposed parking area all three values (broker opinion low value, broker opinion high value, and original price) were averaged:

\$10,204.08+\$10,080.65+\$11,088.71=\$31,373.44/3=\$10,457.81 per acre valuation

It is assumed that the per acre valuation is applicable to other WHMP land acres. Every acre of WHMP lands has been assigned a vegetation cover type (VCT) and each VCT has been assigned a replacement value or ratio. The table below shows the VCT that are within the project footprint and will be degraded from habitat vegetation cover type to a disturbed/modified habitat type. The lands will remain within the WHMP, therefore there is no permanent loss to WHMP total acreage. As result the replacement value is the split the difference between current VCT to proposed VCT modified following construction. In this scenario the Meadow (2:1) will be converted to Recreation (Potential at 1:1), so the replacement value is 1.5:1

Vegetation Cover Type	Total WHMP Acres Impacted	Replacement Value	Total Cost for Modification to WHMP
Dry Meadow/Grassland (MD) Less than 10% forested canopy coverage and ground consists of greater than 50% grass species.	0.51	1.5:1	(0.51 acres x 1.5 replacement value)= 0.77 acres x \$10,457.81 = \$8,052.51
Total	0.51		\$8,052.51

Due to the construction noise creating temporary disturbance, it is assumed the surrounding WHMP lands within 300 m from the construction site will be avoided by wildlife. To determine compensatory mitigation for the temporary disturbance the average purchase price per acre for all WHMP lands that have been acquired since 2008 was determined (see table below). This value along with the life of the license will be used to determine the value associated with the duration the area of disturbance will not be used by wildlife.



Purchase Name	Purchase Price	Total Acres	Price Per Acre
Swift 1 Fruit Growers Supply	\$4,817,747	2,111	\$2,282.21
Swift Creek Longview	\$625,000	480	\$1,302.08
Swift 2 Fruit Growers Supply	\$3,210,000	1,881	\$1,706.54
Jackman Property	\$486,142	52	\$9,348.88
Saddle Mountain	\$5,000,000	490	\$10,204.08
Ane Forest	\$2,100,000	640	\$3,281.25
Average Price per \$4,687.51			

WHMP lands currently are 15,789 acres and are a 50-year license term. To determine the annual rate of impact per acre would be as follows:

(\$4687.51 price per acre x 15,789 acres) / 50 years for license = \$1,480,220.86 per year all WHMP acres. To determine the cost of impacts per acre for 1 year =1,480,220.86 /15,789 acres = \$93.75 per acre per year for impact. Since temporary impacts are for 6 months the rate will be \$93.75/2=\$46.88 per acre.

This mitigation strategy for the temporary loss of land available for wildlife use was applied to each of the vegetation cover type within the 300-m buffer, an area of approximately 50 acres in size with the exception of reservoir or excluded acres:

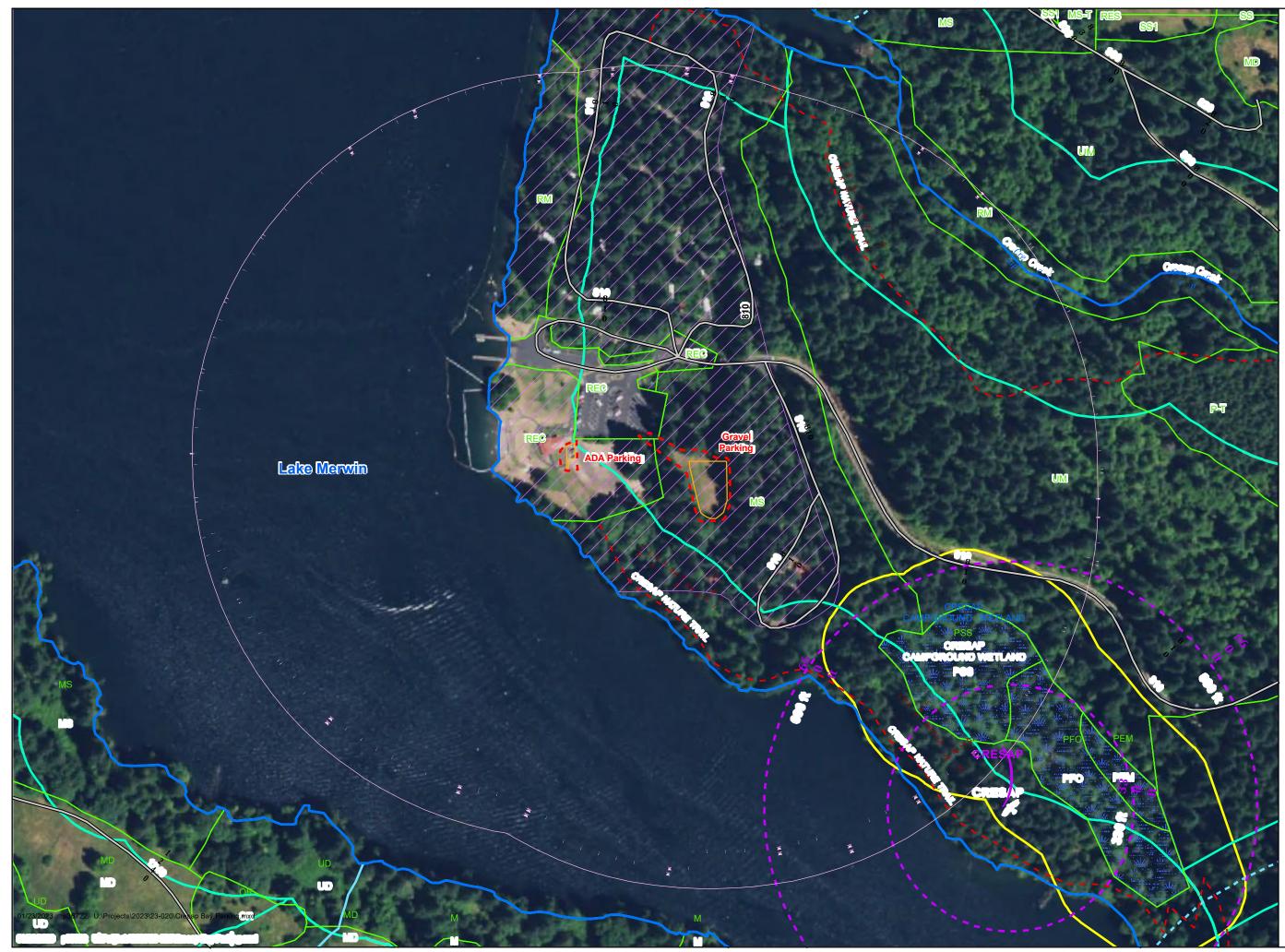


VCT acres within 300-m Disturbance Distance from Parking Construction Buffer and Replacement Value

Vegetation Cover Type and Code	Acres	Replacement Value	Annual Cost for temporary impacts (acres x replacement value x price per acre per ½ year)
Mid- Successional Conifer (MS)	22.74	1.5:1	22.74 x 1.5 x \$46.88 = \$1,598.94
Palustrine Forested Wetland (PFO)	0.35	3:1	0.35 x 3 x \$46.88 = \$49.27
Palustrine Scrub- Shrub Wetland (PSS)	2.20	2.5:1	$2.20 \times 2.5 \times \$46.88 = \258.28
Recreation (REC)	3.25	1:1	3.26 x 1 x \$46.88 = \$152.68
Riparian Mixed (RM)	3.56	2:1	3.56 x 2 x \$46.88 = \$333.80
Upland Mixed Conifer/ Deciduous Forest (UM)	18.40	2:1	18.39 x 2 x \$46.88 = \$1,724.41

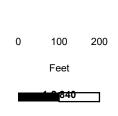
 Total Acres
 50.50
 Total Cost
 \$4,117.37

Total compensatory mitigation will be \\$8,052.51+\\$4,117.37 = \\$12,169.88. These funds will be a lump sum payment and may be used as approved by the TCC for WHMP habitat management or land acquisition or management of WHMP lands. These funds will not accrue interest.



Cresap Bay Campground Parking Extension

Construction Limits Construction Buffer 300m Future Parking Area ð Eagle Nest Nest Buffer = Road **-** - · Trail Fish Stream Non-fish Perennial Non-fish Seasonal - -Vegetation Cover Shoreline Wetland Wetland Buffer Stream/Shore Buffer WHMP Seasonal Area



PacifiCorp make Dependence of the accuracy, completeness or fitness for a particular purpose with respect to the information contained in this map. PacifiCorp shall have no responsibility or liability to any person or entity resulting from the use of any information furnished in this map.