

## AGENDA

### Wallowa Falls Hydroelectric Project – FERC Project No. 308 Stakeholder Relicensing Study Plan Meeting

August 31, 2011 - 8 a.m. – 5 p.m.  
U.S.F.S. Offices – Pendleton, Oregon

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Welcome and Introduction	8:00-8:10
Geology and Soils Study Plan	8:10-8:30
Water Resources Study Plan	8:30-9:30
<ul style="list-style-type: none"><li>• Hydrology and Gaging Study Plan</li><li>• Water Quality Study Plan</li></ul>	
Instream Flow and Habitat Study Plan	9:30-10:00
Break	20 minutes
Fish and Aquatic Resources Study Plan	10:20-11:20
<ul style="list-style-type: none"><li>• Relative Abundance, Composition, and Spatial and Temporal Distribution of Fish Species Residing in Waters Influenced by the Project Study Plan</li><li>• Evaluation of Bull Trout Use of Tailrace Channel and Bypassed East Fork Wallowa River Study Plan</li></ul>	
Terrestrial Resources	
<ul style="list-style-type: none"><li>• Special Status Plants Study Plan</li><li>• Noxious Weeds Study Plan</li></ul>	11:20–11:40 11:40-12:00

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**BREAK FOR LUNCH (on your own) 12:00-1:00**

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Terrestrial Resources Continued:

<ul style="list-style-type: none"><li>• Riparian and Wetlands Study Plan</li><li>• Vegetation Cover Typing Study Plan</li><li>• Wildlife Study Plan</li></ul>	1:00-1:30 1:30-2:00 2:00-2:30
Recreation Study Plan	2:30-3:00
Break	20 minutes

Land Use Study Plan	3:20-3:40
Aesthetics and Visual Resources Study Plan	3:40-4:00
Cultural Resources Study Plan	4:00-4:30
Wrap Up and Next Steps	4:30-5:00
<b>ADJOURN</b>	<b>5:00 PM</b>

## SIGN IN SHEET

### Wallowa Falls Hydroelectric Project – FERC Project No. 308

#### Relicensing Study Plan Meeting

August 31, 2011 - 8 a.m. – 5 p.m.

U.S.F.S. Offices – Pendleton, Oregon

Name	Agency/Affiliation	Address	Phone No.	Email Address
Todd Olson ✓	PacifiCorp	825 NE Multnomah – Suite 1500 Portland, OR 97232	503-813-6657	todd.olson@pacificorp.com
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Jeremiah Doyle ✓	PacifiCorp	105 Merwin Village Ct Ariel, WA. 98603	360-225-4448	jeremiah.doyle@pacificorp.com
Kaylea Foster ✓	PacifiCorp	925 South Grape St Medford, OR. 97501	541-858-3091	kaylea.foster@pacificorp.com
Ken Carlson ✓	CH2M Hill	2020 SW Fourth Avenue, 2nd Floor Portland, OR 97201	503-736-4286	ken.carlson@ch2m.com
Kirk Ranzetta ✓	Cardno-Entrix	111 SW Columbia Street, Suite 950, Portland, OR 97201	503-233-3608	kirk.ranzetta@cardno.com
Ken Homolka	ODFW	3406 Cherry Ave Salem 97303	503 947 6090	Ken.Homolka@state.or.us
Gretchen Sausen	USFWS	LaGrande Field Office 3502 Hwy 30, LaGrande, OR 97150	541 962-8695	gretchen-sausen@fws.gov

Name	Agency/Affiliation	Address	Phone No.	Email Address
Keri Hatley	FERC	Washington, D.C. 888 First St. NE		keri.hatley@ferc.gov
Matt Cutlip	FERC	805 SW Broadway, #550 Portland, OR	503.552.2762	Matt.cutlip@ferc.gov
Ken Wilcox	FERC	888 First St. NE WA. DC. 20424	202-502-6835	Ken.wilcox@ferc.gov
Mike Gendes	USFS	Called in		
Tim Hardin	ODFW	Called in		

**Wallowa Falls Proposed Study Plans Meeting**  
Umatilla Forest Service Building  
August 31, 2011

**Attendees:**

Ken Carlson, CH2M Hill  
Jeremiah Doyle, PacifiCorp Energy  
Kendel Emmerson, PacifiCorp Energy  
Russ Howison, PacifiCorp Energy  
Kaylea Foster, PacifiCorp Energy  
Sabrina Hickerson, PacifiCorp Energy  
Kirk Ranzetta, Cardno-Entrix  
Ken Homolka, ODFW  
Gretchen Sausen, USFWS  
Keri Hatley, FERC  
Matt Cutlip, FERC  
Ken Wilcox, FERC  
Mike Gerdes, USFS (Teleconference)  
Tim Hardin, ODFW (Teleconference)

**Action Item Summary**

<b>Item</b>	<b>Person Responsible</b>	<b>Status</b>
Modify objectives in Section 2.0 to include near- and long-term soil erosion.	Russ Howison	Pending
Homolka requests clarification of scope and study area for soils/geology study. How will sediment issues be addressed in the lower reach and W. Fork\Wallowa Lake?	Russ Howison	Pending
Before the revised Study Plan is filed, Homolka would like to discuss the study time frame for DO further.	Russ Howison	Pending
Cross-reference aesthetic resources in the Water Resources section of the Study Plan with the Aesthetic Resources section of the Study Plan.	Ken Carlson	Pending
Find habitat suitability curves for bull trout in Western Oregon and kokanee. Hardin and Homolka to check within ODFW, Foster to follow-up with Don Ratcliff at PGE.	Ken Homolka, Tim Hardin, Kaylea Foster	Pending Ken will check back in with Tim.
Follow up with ODEQ to identify possible effects of salt tracer studies on aquatic resources.	Ken Carlson	Pending
Howison will acquire Hardin's permission to distribute his comments. Gerdes will discuss	Russ Howison & Mike Gerdes	Complete

directly with Hardin regarding the surrogate portion of the PHABISM study to assess habitat for macroinvertebrates.		
PacifiCorp will consider USFS and ODFW request to add a representative sample of fish condition factor to the aquatic resource population and abundance study.	Jeremiah Doyle	Pending
PacifiCorp should be using the 1990 LRMP for agency goals because the new version is still in draft form and has not yet been finalized	Kendel Emmerson	Pending
Gerdes suggested that the district would likely have aerial photography of the Wallowa Falls project area and he would check into this.	Mike Gerdes	Pending
Add anecdotal references to the fish study plans per Homolka.	Jeremiah Doyle	Pending
Gerdes will discuss the proposed Area of Potential Effect and ARPA permit with the W-W Forest-Archaeologist and he will follow-up with Howison.	Mike Gerdes & Russ Howison	Pending
PacifiCorp will evaluate the possibility of a loop trail going over the dam in the recreation study.	Russ Howison	Pending
Gerdes suggested that an all stakeholder conference call be held to discuss final action items and statuses, sometime in late September or early October.	All	Pending-meeting tentatively scheduled for Oct 12.

Russ Howison (PacifiCorp Energy) called the meeting to order at 8:08 a.m. The meeting agenda was reviewed with no changes or comments.

Following review of the agenda were introductions. Ken Homolka (ODFW) advised that the Wallowa Fall Hydroelectric Project is normally handled out of ODFW's northeast office in La Grande but the position has been vacant. The position will be filled tomorrow, followed by a transition of work responsibilities.

Howison reviewed the near-term timeline for the relicensing process. In regards to the agency comments, the FERC process did not require a revised PAD, so PacifiCorp Energy will respond to comments in the study plan filed with FERC, in the technical reports that follow or in the upcoming Exhibit E.

There were no questions or comments.

**Geology & Soils – Russ Howison**

< 8:16 a.m. >

See PowerPoint Attachment A.

Mike Gerdes (USFS) asked for clarification regarding the desktop evaluation described in the Wallowa Falls Hydroelectric Project Proposed Study Plans (Study Plans) and what that entailed. Howison advised the intent is to review existing and available information regarding past failures (e.g. penstock), known soil conditions, and topographic maps. This background information will be used to focus the field effort. The field effort will involve spending a week or less determining what's actually happening on the ground. Gerdes was in concurrence with this.

Gerdes then asked about Section 2.0 "Study Description and Objectives." He asked if near-term and long-term soil erosion would be included and Howison agreed. **ACTION**: Modify objectives in Section 2.0 to include near- and long-term soil erosion.

Ken Carlson (CH2M Hill) asked what Gerdes meant by "near-term." Howison said he understood that to mean immediate issues such as the forebay access road that has an active slump in it. Gerdes agreed. Additionally, Howison pointed out that the tailrace channel entering West Fork is dynamic and very active.

Gerdes felt that it would be beneficial to identify resources impacted by the process of erosion. For example, the slumping of the access road could affect the riparian habitat and Royal Purple Creek itself. Howison agreed that the intent of the soils study is to determine effects of the project on the soil and geology of the area and how this could affect other resources

Homolka asked about the definition of the scope and what would be included. Howison advised that the intent will be to focus on the risk facilities within the project boundary pose to soils and erosion, and not larger system issues such as fluvial geomorphology. Homolka wanted to include impact of turbidity from soil erosion on eggs and spawning downstream of the project. Howison responded that the habitat survey would evaluate the current conditions of spawning beds and the water quality study would look at turbidity. The geology and soils study will be more focused on possible slope failure in and around the Project facilities. Homolka felt that he sees possible effects further than what is proposed in the Study Plan.

**ACTION**: Howison will follow up with Homolka regarding the scope of the soils and geology study.

Matt Cutlip (FERC) asked if the group could move on to discuss water quality and turbidity to see if this would address Homolka's concerns.

## **Water Resources – Ken Carlson**

< 8:28 a.m. >

See PowerPoint Attachment A.

The hydrology component of the water quality (WQ) study plan also includes water quantity in terms of flow availability and flow conditions for project operations.

The key WQ parameters being monitored are temperature, dissolved oxygen (DO), TDG, and turbidity. Carlson explained that although TDG monitoring is usually associated with hydro projects, it's usually the larger projects that have issues. PacifiCorp does not anticipate any issues with this project because it is so small and the sample is sized to verify that this is the case.

Turbidity analysis will only be associated with the flushing of the forebay.

Flow monitoring may be challenging due to the high gradient of the streams and the turbulence of the flows. Reconnaissance to determine sites indicates that it will be a demanding effort to get accurate data.

Cutlip asked about equipment to be used for flow monitoring. He expressed concern that this equipment has failed in the past. Carlson answered that PacifiCorp will be using pressure transducers. Kaylea Foster (PacifiCorp Energy) advised that she is in the process of evaluating different options. The previous failures were due less to the reliability of the pressure transducer themselves and more to do with the sites in which they were placed. They were chained in place and buried under rock and the amount of movement, logs, and other debris in the channel caused the staff gage and pressure transducers to get knocked loose more than once. Foster is leaning towards using perforated steel pipes as these should be more stable.

Homolka asked about DO and how this would be measured. Carlson advised that there will be several days in August and September to represent mid-summer and spawning season. This should be sufficient to respond to DEQ's standards of compliance. Homolka advised that, in order to coincide with spawning, PacifiCorp should consider doing monitoring between August and mid-September. Gretchen Sausen (USFWS) indicated that spawning in the Wallowa River has been as early as September 1<sup>st</sup> through October. However, with the higher elevation spawning would likely occur later rather than earlier. Jeremiah Doyle (PacifiCorp Energy) agreed. Homolka pointed out that ODFW developed a table that was included with his comments on the PAD that indicates September 1<sup>st</sup> to October. However, the Kokanee spawning timeframe indicated mid-August through December and he intended to find out why it was extended so long because this seemed odd.

Howison asked if Homolka would like the time frame for the study to be adjusted. Homolka said that there was a gap and asked if data would be needed for the entire period for WQ. Carlson said that PacifiCorp will be having conversations with DEQ in the near future regarding the Study Plan, including the time frame for study. DEQ plans to assign someone in La Grande to work on this project. The plan is to meet with DEQ in the next few weeks regarding the proposal to determine if it meets their needs. **ACTION:** Before the revised Study Plan is filed, Homolka would like to discuss the study time frame for DO further. Carlson pointed out that the temperature and DO criteria are based on bull trout requirements, and that data collected in this study will be sufficient to address these criteria

Sausen asked why turbidity monitoring was planned for August, and if there would be a collection done before the forebay flushing to determine a baseline.



< 8:47 a.m. Tim Hardin (ODFW) attended. >

Carlson said that the idea behind the turbidity sampling was to build it around the flushing of the forebay maintenance event. The plan was to go out before the event to establish a baseline, to monitor the event and then do sampling after the maintenance event concludes to capture the dissipation of turbidity. Doyle advised that the maintenance of the forebay usually happens in July. Howison advised that flushing of the forebay has not happened for the past two summers since the discovery of the presence of bull trout in the river. PacifiCorp will pursue a 404 permit for flushing in the future, which will impact how the maintenance is conducted in the future. If there is a flushing event, then monitoring will occur, but it depends on 404 permit requirements.

Cutlip asked when the in-water work period was. Howison said May through the end of August, with July and August being the peak. Sausen said that was originally based on the Kokanee spawning. With bull trout, the window was usually July 15<sup>th</sup> through August 15<sup>th</sup>.

Gerdes asked about Table 5.0-1 in the Study Plan. No sampling was planned for aesthetic resources, but the Plan has a section on aesthetic resource section. Should this be cross-referenced? Carlson agreed that it should. **ACTION:** Cross-reference aesthetic resources in the Water Resources section of the Study Plan with the Aesthetic Resources section of the Study Plan.

Gerdes stated that he did not fully understand the proposed estimated inflow method for Royal Purple Creek and asked if it is a reliable method? Carlson advised that based on field reconnaissance it may or may not be possible to accurately gage the creek. Because Royal Purple Creek is a small creek and a very small component of overall inflow to the Project, and there are neighboring gages to use, synthesizing the inflow from Royal Purple Creek is possible based on standard drainage area-comparison methodologies.

Gerdes wanted to know about the accretion flow that Royal Purple Creek contributes. Carlson advised that it is small compared to East Fork. Gerdes said that he still wanted to know the accretion. Carlson said that accretion information would be obtained from the gaging and flow estimation techniques as proposed in the Study Plan. Carlson also mentioned that PacifiCorp is planning to quantify accretion in the bypass reach by doing a series of flow measurements over the length of the bypass reach as a part of the Instream Flow Study, and that PacifiCorp was also looking into the possible use of tracers to quantify flow and flow accretion in the bypass reach. This would involve putting a salt-based solution at the head of the bypass reach and measure the dilution with instruments placed strategically on the way downstream.

Other than the above comments, Gerdes thought the Study Plan looked very good.

Carlson asked Homolka if ODFW had a policy about the use of tracers in streams, especially considering that tracer most likely to be used is a solution containing salt. Carlson said that the obvious intention was to use a salt concentration in the tracer that would not be harmful to aquatic organisms, but does ODFW have a policy or specifications for use of tracers, or would a permit be required? Homolka said he did not know of this ever being an issue in the past and he was not aware of any policies.

Carlson described how the tracer solution would work. Typically 50-gallons of solution is mixed with a set concentration. This is then injected in the stream by the dam and it quickly mixes with the stream. Downstream instruments measure conductivity and, based on the peak concentration compared to the original concentration released, the magnitude of flow can be calculated.

Sausen asked if this has been used in streams with listed fish before. Carlson said that use of tracers is a common technique in stream flow and mixing studies. Other options are dye tests and dye studies. Research information is available on these techniques.

Hardin asked if there was a plan to model potential water temperature impacts in the summer time. Carlson said that no modeling was planned to assess potential water temperature effects, but that effects would be assessed empirically on the basis of the actual water temperature data collected. There will be continuous water temperature monitors at seven locations and this will provide information about how temperature is changing with different flow rates, and that this information will be ample to assess project impacts. Hardin asked if there will be measurements in August and September to compare low and high flows and Carlson said yes.

### **Instream Flow and Habitat Study Plan – Kaylea Foster**

< 9:02 a.m. >

See PowerPoint Attachment A.

Study area indicated in the plan will pertain to areas that are accessible enough to establish transects. The habitat study will encompass the lower part of the bypass that extends to the falls.

ODFW asked why PacifiCorp has chosen to go with the USFS Region 6 guidelines for the habitat study and not the ODFW's methods. PacifiCorp responded by saying it has no stated preference and would use whichever methodology the agencies prefer.

Foster advised that she was not able to find habitat suitability curves for Kokanee in existing literature. She has established contact with USFWS, who possess bull trout data for Southeast Washington streams which may be useful for the study. She has not looked for rainbow trout curves, but is confident that applicable curves have been developed and are readily available for this species. She is concerned that Kokanee curves may just have to be developed through this study.

Foster also advised that the instream study area will not include the powerhouse tailrace, the reach upstream of the forebay, or the bypass above the falls because of accessibility. The habitat survey will extend from the confluence to the falls. She will be using PHABISM modeling, but that will only be for the  $\frac{3}{4}$  of a mile that she can safely access and establish transects. She advised that she will expand the study area if safely possible, but Howison pointed out that they have already been there three times and the grade is just too steep. As it is, Foster will be doing some of the work in the water.

Hardin provided written comments and is interested in seeing what can be done with the fast water. He suggested using a different meter in the areas with the steep gradient. Foster agrees, and there are other options. Some pros and cons of other meters were discussed, and Foster agreed to stay open to suggestions.

Hardin also commented that flow ranges should be tested along the entire range. High flows of 20 cfs would likely not be life threatening as Foster has measured at 16 cfs recently and had no difficulties.

Carlson asked about developing the habitat suitability curves for kokanee, and if existing literature cannot be found, would it be reasonable to use professional judgment to establish the curves?

< 9:14 a.m. Todd Olson (PacifiCorp Energy) arrived >

Foster recently spoke with a nearby land owner who reported that the stretch is thick with redds. She questioned how to develop a curve when the fish are capitalizing every available bit of space?

**ACTION:** Homolka said he would check to see if ODFW had any curves for bull trout in Western Oregon and what literature they might have on kokanee. Hardin agreed to do the same.

**ACTION:** Gerdes suggested that Don Ratcliff from PGE might have something on kokanee and Foster agreed to follow-up with him.

Gerdes would like to have a conversation on the method used for habitat inventory. He asked of Homolka had a preference. The intention was to identify a habitat relationship with bull trout, and the USFS methodology does cover that. Sausen advised that, based on her input into developing the USFS methodology, Level 3 would be the most appropriate because it covers the criteria (e.g. woody debris and pool riffle glide) that is important to the bull trout. Hardin appreciated the explanation, and believes that both ODFW and USFS provide appropriate analysis. He would be comfortable going in either direction.

Homolka said he was not certain what the ODFW methodology included. Foster and Sausen continued to list requirements for bull trout, including shade and temperature, gravel, and negative requirements such as bank erosion and fine sediment.

**ACTION:** Sausen expressed concerns about salt in the water (referring back to the previous discussion regarding the flow studies). She would like to see if there are any studies on the affects of salt on the macroinvertebrates that are critical to the bull trout.

Sausen also wanted to know how flows were affecting the bull trout, and what alternatives there might be depending on the answer. Carlson advised that, regardless, he did not know that there would be project alternatives. Sausen suggested creating a file of daily flows with “if” statements for alternatives. She pointed out that this is critical habitat for bull trout. Cutlip admitted that he did not capture that information in the scoping document.

## **Fish and Aquatic Resources – Jeremiah Doyle**

< 9:27 a.m. >

See PowerPoint (Attachment A).

Doyle discussed the methods for assessing relative abundance of the fish in the river. He advised that electrofishing would be done on a seasonal basis. The intent would be to capture, quantify, measure and then let the fish go. Triple depletion would be used to gather relative abundance based on catch per unit of effort.

The forebay is too deep for electrofishing (approximately five to six feet deep), so a seine would be used to capture fish in this area instead.

Based on the high energy of the stream and the wetted width of the West Fork, only the margins will be electrofished. This would only provide a snapshot of what inhabits the softer water. Doyle was also considering doing visual observations via snorkel surveys to see if that would provide more information in the West Fork Wallowa River.

Sausen pointed out that the seasonal basis of the electroshocking may not be very widely distributed throughout the year because winter lasts so long, and even spring may be too cold for the electrofishing to work.

Doyle advised that fish most likely have dispersed throughout the high gradient sections from Aneroid Lake, which lies upstream of the Project forebay, but that the area is almost inaccessible thus making it not conducive to depletion surveys with block-nets. He advised that the area between the forebay and in the lower penstock trestle will only be single-pass electrofished without the use of block-nets and only in areas that are safely accessed. Sausen agreed to not doing depletion surveys in the upper river for.

Homolka advised that Bill Knox expressed concern about electrofishing in October because of bull trout spawning. Doyle agreed, advising that the Study Plan mentions that care will be taken when doing surveys during the spawning season and around spawning fish.

Sausen expressed concern about snorkeling and how it may border on harassment of the fish, especially because the kokanee are so thick in the area, it would be difficult to not harass them.

Cutlip mentioned the ESA sampling permit, advising that others have had issues with the timing of this permit. Doyle said that PacifiCorp was recently issued a Section 10 permit from the USFWS that covers all associated take for the next five years. Homolka asked if that covered sampling and monitoring activities and Doyle advised that it did.

Olson asked for clarification about fall sampling. Sausen recommended doing the samples at the same time as the typical in-stream work window, which means avoiding September and October

because those are the spawning months. Carlson pointed out that leaves only spring and summer to do any sampling, and Sausen agreed.

Gerdes asked the group to consider looking at the condition and relative health of the fish in addition to monitoring and measuring them. Doyle asked if he wanted this done on every fish handled. Gerdes suggested that this would apply to all species collected in the bypass reach. It would be an easy way of evaluating how healthy the populations are. If the fish proved to not be healthy, it would indicate a limiting factor, such as the project, that needed to be assessed.

Doyle advised that most fish inhabiting the bypass reach are highly migratory, meaning that if fish in the bypass were found to have low K-factors, the cause of this may not even be from the bypass reach, but from elsewhere. Additionally, doing a K-factor analysis on every fish would be an onerous task. Cutlip agreed, and suggested that sub-sampling might be more reasonable.

Carlson questioned the relationship to the project. If the fish are not healthy, that would not necessarily mean the limiting factor is the project. Doyle agreed, pointing out that the sampling would only be from a  $\frac{3}{4}$  of a mile section of ideal habitat through which many of the fish are migrating through.

Gerdes suggested also doing an aquatic insect inventory. Between the K-factor and the aquatic insect inventory, it would be simple to determine if there was a limiting factor or not. He suggested a sub-sample of the bypass reach based on the geography.

Cutlip asked Gerdes what the appropriate action would be if there was a limiting factor found. How would the data inform the development of a license requirement? Gerdes stated that the Forest Service's goal is to avoid, minimize, or - at the very least - compensate for any impacts the project might have on the area. This information would inform what impacts are occurring on the aquatic species in the area.

Doyle again stated that a limiting factor for low perceived fish condition could be more than just availability/quantity of macroinvertebrates, including cold water limiting metabolic rates and habitation in persistent high flows. Gerdes agreed and stated that it would be necessary to identify other factors impacting the K-factor. Overall, he wants to know if the fish are healthy or not.

Cutlip brought up the PHABISM study, that this would cover the pertinent information related to the project. Beyond increasing flows, there is not much the project could do to improve the habitat.

Howison did not see the benefit of doing K-factor analysis and aquatic insect inventory. Olson said that though he understood the interest in characterizing the fish in the project area, he does not see how this information would implicitly define project affect or not. Therefore, it would not drive mitigation. **Instead, he suggested a more general data collection on the condition of the fish.**

**ACTION:** PacifiCorp will add a representative sample of fish condition factor be included in the aquatic resource population and abundance study.

Gerdes said that he would like to continue the conversation and disagrees with FERC's position. He reiterated that the Forest Service's position is to look at potential impacts of the project and that getting a fish condition factor is important for this.

< 9:56 a.m. Break. Hardin departed >

< 10:06 a.m. Reconvene >

The macroinvertebrate study was initially offered by PacifiCorp in the PAD, but withdrawn as not being relevant following the discussion on the issue presented in the FERC Scoping Document 2.

Cutlip stated that such studies are often done with peaking facilities that ramp the river up and down. This project does not do this as it is run-of-the-river. He feels that the PHABISM is sufficient.

Gerdes' standpoint is to determine project affects. He admitted he has not determined what would be the appropriate mitigation if an impact is found.

Homolka agreed that the macroinvertebrate study does relate to flows, and there is the issue of low flows in the summer time. He advised that such studies were required at Prospect and Albany, which are not peaking projects. At Prospect, the data was used to look at diverted reach versus non-diverted reach species composition, abundance, type, and water quality. However, this project did do white water releases mid-summer, so there was a fluctuation in the stream that this project does not have.

Howison advised that Hardin had sent some comments yesterday that the rest of the group has not seen that may address Gerdes' concerns. The suggestion was to consider macroinvertebrates in the IFIM. This would be a surrogate in the PHABISM modeling to look at the habitat for the macroinvertebrates, rather than the macroinvertebrates themselves.

FERC agreed with Hardin's comments, as did PacifiCorp. **ACTION:** Howison will acquire Hardin's permission to distribute his comments. Gerdes will discuss directly with Hardin and consider this option.

### **Bull Trout PIT Tag Study – Jeremiah Doyle**

< 10:18 a.m. >

See PowerPoint Attachment A.

Doyle expressed that success of this proposed study hinges on the ability to catch bull trout which may be problematic because their exact location within the project area is relatively

unknown. For this study PacifiCorp will be placing stream-width PIT tag detectors within relevant stream locations. PIT tag detectors rely on tagged fish to volitionally move past stationary antennas in order to receive interrogations.

The overall study plan schedule is dependent on catching fish first. Doyle is open to discussion in regards to fishing in Wallowa lake if need be, though right now the plan is to fish at the head of the lake as well as during electrofishing surveys in the bypass reach and tailrace. Once fish have been tagged, antenna sites can then be identified and the antennas constructed.

Doyle explained to the group how half-duplex (HDX) PIT tags work. There is a copper wire cable that is looped and will lie on the bottom of the stream which is where bull trout tend to be. The antenna motherboard can have up to four looped cables (detectors) running from it into the water. Each time a fish volitionally swims past a cable and is detected, the antenna records the PIT tag number, date, time, and cable number. Thus, based on which cable(s) the fish passes first, the direction in which the fish is heading can be determined. There is an abundance of literature indicating that this system does not interfere with spawning. Historical tagging on the Lewis River in Southwest Washington has shown zero tag loss in bull trout when tagged in the dorsal sinus area.

The antenna motherboard runs off 12 volt DC batteries, and three batteries run in parallel should last about a month. ODFW and USFS both offered to assist Doyle with changing out the batteries, and Gerdes volunteered to help in any way he could with any of the studies.

## **Terrestrial Resources – Special Status Plants – Kendel Emmerson**

< 10: 29 a.m. >

See PowerPoint Attachment A.

Kendel Emmerson (PacifiCorp Energy) introduced special status plants which are identified from the ORBIC (Oregon Biodiversity Information Center) list of Rare, Threatened and Endangered Species of Oregon and USFS Region 6 Special Status Plant Species. Some of these special status plants were previously identified in the Wallowa Falls project area in 1993. The study will be to determine if these plants are still present and identify if any additional special status plants exist within the project boundary.

Field study work will be completed in one season and will include spring-early summer survey and mid-late summer survey and will be scheduled based on seasonal conditions for that year.

Sausen advised that Spalding's Catchfly is a federally listed species and this was spotted last week on the east Moraine, on the south side of Wallowa Lake, which is closer to the project than originally recorded. She suggested that, since it is typically found in grassland habitat it may not be in the project area but would be worth checking out. Emmerson agreed and says the area around the campground seemed the most likely place for it to be. However, the campground may have been mown for the last several years.

**ACTION:** Gerdes had a question regarding the section on resource management goals. He advised that PacifiCorp should be using the 1990 LRMP because the new version is still in draft form and has not yet been finalized.

He also asked about the proposed area boundary. Emmerson advised that this is identified in the Appendix A of the PAD. It is a set distance of approximately 200 feet around the project features. Homolka asked how this was determined and Howison advised that there is not a firm CFR to delineate the boundary area. Cutlip stated that FERC's position is that the boundary is determined based on project purpose and need and is specific to each project. FERC recommendation is based on the specific project needs and this is what is ultimately considered in the order. Howison continued that the existing boundary did not include the tailrace and forebay and these have been proposed to be included in the new version. Cutlip said that FERC will look at the NEPA documents and pull into the boundary whatever supports the project's need and purpose.

### **Noxious Weeds – Kendel Emmerson**

<10:41 a.m. >

See PowerPoint Attachment A.

Emmerson advised that noxious weeds are becoming more and more of an issue and the study will be to determine what is already in the area and what the likely sources are. High potential for noxious weeds include the campground, trails, and parking area.

Sausen asked if PacifiCorp would be responsible for treatment of noxious weeds found. Emmerson advised that if it is within PacifiCorp's land ownership area, then yes.

Cutlip asked what the Utility does on other projects and if treatment is part of the implementation requirements. Olson confirmed that it is. Cutlip continued with asking if preventative measures would be considered and what that would lead into. Emmerson replied that prior to any soil disturbance, noxious weeds would be treated. Olson agreed, advising that PacifiCorp construction project include preventative measures to ensure that equipment is weed free and operations staff are trained to look for weeds and to coordinate with the USFS.

Gerdes agreed with the study plan.

### **Riparian & Wetlands – Kendel Emmerson**

< 10:49 a.m. >

See PowerPoint Attachment A.

This study plan would be establishing a baseline from which to work. PacifiCorp does not have any aerial imagery, and Emmerson asked if the USFS might have some that the Utility could use. Otherwise she would work from Google Earth.



The USFS agreed to the study based on the comment on the PAD, and recommended that all wetlands delineated under the proposed study be classified using the USFWS system. PacifiCorp agreed.

Homolka asked if the mapping would be topographical. Emmerson indicated that vegetation cover typing would be separate. Additionally, the condition of riparian habitat would be captured in the stream surveys. Due to the gradient, the interface of vegetation to water is really low.

Gerdes asked if Elizabeth Crow's riparian classification system would be used. Crow had provided the wetland and riparian classification for the Wallowa-Whitman National Forest. Emmerson advised that this would be included in the plant association group in the vegetation cover type mapping.

**ACTION:** Gerdes suggested that the district would likely have aerial photography and he would check into this.

### **Vegetation Cover Typing – Kendel Emmerson**

< 10:56 a.m. >

See PowerPoint Attachment A.

Emmerson is planning to get this done ahead of the other studies to use as a baseline. There were no comments.

### **Wildlife Study Plan – Kendel Emmerson**

< 10:59 a.m. >

See PowerPoint Attachment A.

Emmerson advised that anecdotal information will be recorded while conducting other studies and this study will focus on just observing and recording observations and/or signs of species. The focus will be on listed species and USFS Region 6 sensitive species and management indicator species lists. There will be no specific studies for amphibians those these will likely be captured with the fish studies.

Homolka asked if anecdotal references will be in the fish study plans and Howison advised that they would.

Emmerson pointed out that, due to the river's gradient, there are a large gaps between suitable amphibian habitats so aquatic amphibian use is expected to be low. Sausen said that the lower Wallowa River is spotted frog habitat, but agreed that the project area is more limited. She did ask that the forebay be checked for spotted frog egg masses and PacifiCorp agreed.

Gerdes asked that the key pieces of these stand alone studies be integrated and there be a discussion in the final report as to how these relate to each other. Emmerson advised that there is coordination amongst the team members at PacifiCorp and that such studies as the vegetation cover typing did indeed lay the groundwork for other studies to be conducted. Also, Exhibit E is intended to synthesize across the specific studies and resource areas regarding the project impacts. Cutlip said that this will integrate the study results, review project impacts, and allow for stakeholder comment that will be addressed as the application is finalized.

## Final Discussions

Howison said that, since there was time left, the group could go back over any discussions if there were questions or issues that had yet to be addressed.

Homolka asked if the group could return to the scope on geology and soils. He felt that the scope on the effects of erosion did not include the possibility of turbidity beyond the project boundary, such as down to the lake. Howison suggested that this could be discussed based on the type of specific event concerned.

Carlson asked if there was a history of soil erosion, and Homolka said there had been penstock failures in the past.

Cutlip asked how PacifiCorp intended to resolve Homolka's comment. He would like to identify the differences now and work to a resolution prior to the stakeholder comment period in November.

Olson advised that PacifiCorp is still considering this aspect of the study request and suggested that there will be follow-up in a few weeks. **ACTION**: Howison will follow up with Homolka in the next several weeks to clarify Homolka's concerns on the Soils Study scope and discuss a possible resolution.

The group discussed the best way to identify differences now between the parties & work toward resolution prior to stakeholder comment period in November. Cutlip agreed that there could be another study plan meeting or a subgroup meeting, and that would be sufficient as long as FERC was kept informed. This could be done in the form of a conference call. Olson continued with this thought identifying that discussion will continue and when the final comments come back they can reference these discussions. If agreement is not reached then the comments can be filed with the study plan and the issue can be left to FERC to determine resolution.

**ACTION**: Gerdes suggested that an all stakeholder conference call be held to discuss final action items and statuses, sometime in late September or early October.

< 11:25 a.m. Break >

< 11:34 a.m. Reconvene >

## Recreation – Russ Howison

< 11:34 a.m. >

See PowerPoint Attachment A.

Howison stated that the study area would include regional opportunities as per FERC's request. The recreation use and demand analysis will focus on the campground.

The NPS requested a specific trail feasibility study but PacifiCorp will not be proposing this as requested. Instead, PacifiCorp will consider the overall need for trails in the needs analysis. According to the USFS comments on the PAD and SD1, the trail opportunities in the area are adequate.

Gerdes states that the USFS had no additional comments and appreciated PacifiCorp's incorporation of the comments provided.

Wilcox asked if informal trails will be mapped and addressed and Howison advised that they would.

Wilcox also suggested making a loop trail going across the dam. Howison had not thought of this and was concerned what that might mean for public safety. **ACTION**: Olson said PacifiCorp would incorporate the possibility of a loop trail going over the dam into the study.

Wilcox asked the USFS what it meant for the new Forest Plan to be in the works and how the finalization of this plan would impact the work already being done. Gerdes said that the final plan cannot be considered for the purposes of any studies right now because it hasn't been finalized. The current plan must be used until the new final plan is complete. In terms of timing, he expects the new Forest Plan to be issued in the next few years, possibly before the license application is filed. The Forest Plan is guided by USFS overarching policies, congressional acts, and executive orders. It will not change any laws or policies that are already in effect, and as long as the current work stays within those then there should not be any major changes once the new Forest Plan becomes effective.

The USFS indicated in their original comments that basic recreation opportunities in the area are adequate.

### **Land Use – Russ Howison**

< 11:47 a.m. >

See PowerPoint Attachment A.

ODFW wanted to look at PacifiCorp owned land, which would be a GIS exercise to produce a map that will illustrate land ownership, usage, and zones.

No additional comments.

## **Aesthetics & Visual – Russ Howison**

< 11:49 a.m. >

See PowerPoint Attachment A.

PacifiCorp is still considering how to address sound from the powerhouse and how to determine if that is an issue for the campers or now. The Utility has proposed to survey the campers and will assess their feedback.

The main issue is the management goals of the USFS and County for aesthetic resources, and how the project fits into those, as compared to the USFS' comments on the aesthetics and visual resources of the area.

## **Cultural Resources – Kirk Ranzetta**

< 11:52 a.m. >

See PowerPoint Attachment A.

Ranzetta advised that the first step will be to obtain an ARPA permit from the USFS in order to conduct the field study.

Howison has already initiated contact with the Tribes to determine their participation in the process in addition to the State Historic Preservation Office (SHPO).

In previous investigations in the 1980s, the powerhouse and related hydroelectric facilities were determined not eligible for the National Register of Historic Places (NRHP) by PacifiCorp/FERC in consultation with the Oregon SHPO and since there have been alterations since that time, it is not likely that these facilities would be eligible for the NRHP.

Architectural field studies are scheduled for between September and November, but can be deferred based on stakeholder feedback. Archaeological fieldwork is currently planned for April-July 2012. It is important, however, to identify and evaluate resources early to prevent possible disturbance down the road as other operations and studies ensue.

**ACTION:** Gerdes stated that he needed to have a conversation with the Forest Service's archaeologist regarding Area of Proposed Effect and he will get back to Howison right away about this. Howison advised that he was referred to Sarah Crump.

Howison asked if some sort of permit was needed for the field inventory of architectural features on the USFS land. Gerdes advised that PacifiCorp will need a Special Use Permit/Authorization for field investigations. Mary Ellen Emerick was the key contact for this. Howison asked about turnaround and Gerdes advised that this is rather basic and he would assist.

Sausen suggested a local contact, Joe McCormick, to potentially assist with tribal consultation and historical research. He would be a good contact for the Nez Perce. He works out of the fisheries office.

**Wrap Up and Next Steps – Russ Howison**

< 12:05 p.m. >

Meeting was adjourned at 12:07 p.m.