

Wallowa Falls Hydroelectric Project (FERC No. 308)
COMMENT RESPONSE MATRIX – with Conf Call Input Summary
to Agency Comments on Resources (Note Cultural in Separate Report)

ATTENDEES: 10-12-2011 Conference Call with Stakeholders:

PCorp: R. Howison, L. Prendergast, K. Emerson, B. Weatherly, J. Doyle, K. Foster, C. Meyer

FERC: M. Cutlip

USFS: M. Gerdes

USFWS: G. Sausen

ODFW: K. Homolka, T. Hardin, E. Moats

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
1	Aquatic Resources	USFS and ODFW, Stakeholder Study Plan Meeting 08-31-11 Input and USFS call from Mike Gerdes (Sept 14, 2011).	Yes	ODFW and USFS request the “Relative Abundance Study” record condition factor in bypass reach fish.	PacifiCorp will record condition factor of the first 25 specimens collected per species. After 25 specimens are collected, PacifiCorp will record condition factor in a 10% subsample per species of the fish collected in the bypass reach.	ODFW asked for clarification on condition factor calculation in data analysis section; why only 10% sample? PCorp explained purpose of study is to collect a subsample (recording length & weight) for 25 plus every 10 th fish of each species collected.
2	Aquatic Resources	USFS, call from Mike Gerdes (Sept 14, 2011)	Yes	USFS would like to reiterate the importance of conducting a macro invertebrate study in the bypass reach. USFS does not agree with FERC’s position that the issue lacks a nexus to the Project. USFS requests a macro invertebrate study be conducted to assess current effects of the Project in the bypass reach.	PacifiCorp proposes to conduct a one-time Rapid Bio-assessment for macro invertebrates in September 2012. A representative riffle will be sampled in the following three locations of the East Fork Wallowa River: 1) above the forebay, 2) in the high gradient portion of the bypass reach above the lower penstock trestle, and 3) in the low gradient portion of the bypass reach below the lower penstock trestle.	USFS asked for definition of rapid bioassessment. PCorp explained 3 sections sampled; sent to lab for onetime assessment and id by Order. We will get genus ept, not really biomass. Kick net process will be used which is the “standard”. Relative abundance is a “moment in time”.

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
3	Aquatic Resources	USFS, call from Mike Gerdes (Sept 14, 2011)	N/A	USFS requests clarification on Page 9, Section 3.1.6 of the Relative Abundance Survey. What is meant by “a small 1 sq. cm tissue sample will be taken from each fish...”?	To clarify, the intent is to take a small fin clip, commensurate with the size of the specimen, from each bull trout collected for genetic analysis.	USFS was fine with Response.
4	Aquatic Resources	USFS, call from Mike Gerdes (Sept 14, 2011)	No	USFS requests we record the habitat type (per the USFS Habitat Mapping handbook) where fish were captured in the bypass reach. Identify feature type the fish were collected in.	Fish and other aquatic resources expected to be recorded during the relative abundance field survey are highly migratory. It is assumed that all species recorded utilize all habitat types. Therefore, this information would not be pertinent to the evaluation of Project effects in the bypass reach.	<p>USFS is fine with study and response.</p> <p>FERC suggests a “more robust proposal” with final Revised SP.</p> <p>ODFW questioned the seasonal sampling and statement “winter survey January 2012 if feasible” (pg 10 of SP). PCorp explained it was dependent on the weather; if too much snow may not be able to have access to the area. May then have to do it in late spring. ODFW requested to be notified if that change was made.</p> <p>ODFW asked what parameters the West Fork survey would be aiming for; how do you know adequate sample, etc.?</p> <p>PCorp indicated we would do the best we can with electrofishing as we are somewhat constrained. We are looking at what is present. Dip nets would be used.</p>

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
5	Geology and Soils	ODFW, Ken Homolka, Stakeholder Study Plan Meeting 08-31-11 Input, and call with ODFW of 09-29-11.	Yes	ODFW requests PacifiCorp clarify the scope and study area for the soils\geology study. How will sediment issues be addressed in the lower reach and Wallowa River from the East Fork confluence to Wallowa Lake?	PacifiCorp will revise the Study Plan to include a qualitative discussion of the following: an overview of systemic geomorphic processes from the Project forebay to Wallowa Lake, a discussion of the Project's potential sediment contribution in the context of the larger basin geomorphology, the potential for sedimentation to affect aquatic habitat in the lower East Fork Wallowa River and Wallowa River from the confluence of the East Fork and West Fork to Wallowa Lake, and seasonal changes in sediment transport capacity.	ODFW reconsidered and is fine with study and response.
6	Geology and Soils	USFW, Mike Gerdes, Stakeholder Study Plan Meeting 08-31-11 Input	Yes	Modify objectives in Section 2.0 to include near- and long-term soil erosion.	PacifiCorp will modify the objectives statement accordingly in the Revised Study Plan.	USFS is fine with clarification.

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
7	Instream Flow and Habitat	ODFW, Comments from Tim Hardin, (August 30, 2011) – Misc.	Yes	<p>PacifiCorp has recommended against specific studies to address invertebrate habitat as a function of flow. ODFW recommends two general methods that can be used to evaluate potential impacts to invertebrates.</p> <p>Wetted width vs. flow: On PHABSIM riffle transects, PacifiCorp should generate output on wetted width vs. flow. This output is readily available with standard PHABSIM modeling.</p>	The Revised Study Plan will reflect this recommendation.	ODFW believes it would be simple to do.

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
8	Instream Flow and Habitat	ODFW, Comments from Tim Hardin, (August 30, 2011) – Misc.	Yes	Indicators of Hydrologic Alteration (IHA): In preparation for PHABSIM interpretation, PacifiCorp will need to produce daily flow files for various project alternatives. These hydrological files can be easily incorporated into the IHA program. The output produced by IHA will be useful for making general comparisons among different project alternatives, including natural flows.	The Revised Study Plan will reflect this recommendation. Revision of 11/4/2011: Upon further consideration and discussion with ODFW staff on October 12 and (additional calls), PacifiCorp proposes to meet ODFW's interest in background basin hydrology by producing sufficient data to develop a synthesized Hydro Record including inflow above the project in lieu of committing to conduct the IHA analysis in the study plan.	PCorp questioned how ODFW would use the results of an IHA study employing daily flow files as it would be a huge amount of information to be reviewed. Lengthy discussion on this. ODFW suggested data reviewed quantitatively for anything popping out pre and post project and whether it meant anything or not. PCorp does not have any pre-project flow data. From 1930's – 1980's info from USGS gage only. Without generation data might be determined by just adding turbine flows back into inflow data. ODFW suggested that if PCorp did not want to do IHA, they would be happy to do the IHA analysis if we provide turbine flows, etc. PacifiCorp committed to produce sufficient data to develop a synthesized Hydro Record including inflow above the project in lieu of committing to conduct the IHA analysis in the study plan. This information will be used to characterize background conditions and not as decision making tool.

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
9	Instream Flow and Habitat	ODFW, Comments from Tim Hardin, (August 30, 2011) – Pg 1	Yes	Include redband trout in the study. They are on the ODFW sensitive species list. Project diversions will affect their habitat during most months.	Redband (rainbow) trout will be included in the study.	ODFW is fine with this inclusion.
10	Instream Flow and Habitat	ODFW, Comments from Tim Hardin, (August 30, 2011) – Pg 6	Yes	Habitat survey- Extend to the waterfall, making the total distance surveyed = 4700 ft. I don't think we should rule out transects in the 3200 ft downstream of the waterfall.	PacifiCorp plans to include the bypass reach from the confluence of the East Fork and West Fork Wallowa Rivers to the natural fish barrier waterfall (approximately 4,700 feet upstream).	ODFW is fine with this.
11	Instream Flow and Habitat	ODFW, Comments from Tim Hardin, (August 30, 2011) – Pg 6	Yes	Transect location: A single study reach may not be the best approach. It may be better to distribute transects in several locations to cover all the habitat types desired. This is especially true for any transects placed upstream of the 1500-ft lowest-gradient reach.	PacifiCorp is open to the possibility of distributing transects in several locations in the study reach as described above.	ODFW is fine with this.
12	Instream Flow and Habitat	ODFW, Comments from Tim Hardin, (August 30, 2011) – Pg 6	Yes	Turbulence and flow meters: The Flow-Tracker may have problems on higher-gradient transects. But this is not a reason to restrict the transect selection process. We can either test the Flow-Tracker in more turbulent areas, or just use a different meter in those areas.	PacifiCorp is open to the potential use of alternative technology to meter flow including the "mineral tracer method" as discussed in the Study Plan Meeting of August 31, 2011.	PCorp explained tracer method for evaluation of flows at gaging stations for water resources studies; it is not PacifiCorp's intent to use Mineral tracer for recording IFIM transect flows. We would use flow trackers or potentially other flow meter types for transect flows.

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
13	Instream Flow and Habitat	ODFW, Comments from Tim Hardin, (August 30, 2011) – Pg 6	Yes	Transect number: 12 transects seems like an adequate number. Transect selection, including any key spawning areas, should be guided by the habitat survey and fish sampling.	PacifiCorp proposes to sample approximately 12 transects for the study.	ODFW is OK with this.
14	Instream Flow and Habitat	ODFW, Comments from Tim Hardin, (August 30, 2011) – Pg 7	Yes	Flow: I suggest aiming for flow measurements at approximately 2, 8, and 20 cfs. This would allow simulation over the range 1 to 50 cfs, which would cover the ~no spill condition up to about a median June runoff flow.	The Revised Study Plan will reflect this recommendation.	ODFW is OK with this.
15	Instream Flow and Habitat	ODFW, Comments from Tim Hardin, (August 30, 2011) – Pg 8	Yes	Habitat duration curves are a good method of data interpretation. Ultimately, these rely on development of a time series of daily flows with various project operation alternatives. ODFW would like to be kept informed as PacifiCorp develops these time series.	The Revised Study Plan will reflect this recommendation.	ODFW is OK with this.

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
16	Instream Flow and Habitat	ODFW, Comments from Tim Hardin, (August 30, 2011) – Pg 8	See PacifiCorp response	Regarding habitat duration, ODFW advises caution in incorporating WUA results that show decreasing WUA at higher flows. Currently, prevailing practice is to flatten off the WUA curve at its peak (for example, if the peak value occurs at 20 cfs, this WUA value is extended to all flows above 20 cfs).	Comment noted; this will be an important consideration in the WUA curve selection process. PacifiCorp looks forward to additional discussion with stakeholders on the WUA curves available for species of concern, curve selection, and interpretation of model results.	PCorp indicated workshop to develop curves is a possibility.
17	Instream Flow and Habitat	USFS, call from Mike Gerdes (Sept 14, 2011)	Yes	USFS requests clarification of the hydraulic variable considered in the study. USFS suggests mean-column-velocity measurements be taken for the purposes of the study.	Mean Column Velocity is the hydraulic variable PacifiCorp intends to use in the Instream Flow Study. PacifiCorp will clarify this in the revised study plan.	USFS is satisfied with clarification
18	Instream Flow and Habitat Study	ODFW, Comments from Tim Hardin, (August 30, 2011) – Pg 7	Yes	Hydraulic variables: PacifiCorp should collect velocities at the Mid and High flows, assuming this can be done safely. This will allow much better simulation of the 10 to 50 cfs range. Velocity measurements at the low flow are useful but not critical. The 8 cfs velocities will probably do an adequate job for the low-flow simulations.	The Revised Study Plan will reflect this recommendation.	CH2M/PCorp indicated that study would consider velocity at midflow measurement to determine low flow level. Generally fine to simulate velocities downstream. Data sets done at high and mid; not full set at low. ODFW felt velocity data at low range useful; especially at low flows. PCorp may consider adding velocity data at low range if feasible.

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
19	Recreation Resources	FERC-WDC, Ken Wilcox, Stakeholder Study Plan Meeting 08-31-11 Input	Yes	Would PacifiCorp consider evaluating the possibility of a loop trail going over the dam in the recreation study?	PacifiCorp will evaluate the possibility of a loop trail going over the dam in the recreation study.	Further clarification.
20	Terrestrial Resources	USFS, call from Mike Gerdes (Sept 14, 2011)	Yes	USFS requests the study area be modified to include all lands within 100 meters of Project features (powerhouse, access road, campground, etc.). This would include areas upstream of the forebay including all wetlands created by the impoundment.	PacifiCorp will adjust the study area for terrestrial resources on USFS and PacifiCorp Lands to include all lands within 100 meters of Project facilities. This would include wetlands created by the forebay impoundment. The Study area will not include the private land parcels on the west side of the West Fork Wallowa River and north of the Project tailrace.	PCorp – explained response. .
21	Terrestrial Resources	USFS, Mike Gerdes, Stakeholder Study Plan Meeting 08-31-11 Input	Yes	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	PacifiCorp will refer to the goals in the 1990 Wallowa-Whitman Land and Resource Management Plan in the Revised Study Plan.	PCorp – will adopt current WW Plan. ODFW – wildlife surveys language vague; requested more specific surveys. PCorp – explained that more specific language used in Revised Proposed Wildlife Studies; change from the PAD; but again no specific species surveys. ODFW – statement may have been addressing the PAD; will review the Rev. SP further to feel comfortable. Will contact us if review brings issues forth; prior to filing comments with FERC.

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
22	Water Resources	ODFW, Ken Homolka Stakeholder Study Plan Meeting 08-31-11 Input, and call with ODFW of 09-29-11.	Yes	ODFW is concerned with Dissolved Oxygen (DO) concentrations in the bypass reach for the duration of the bull trout spawning period, and requests PacifiCorp consider additional DO sampling in October.	PacifiCorp open to the possibility of adding a third 72-hour monitoring period in October for a total of 3 samples (August, September, and October). Any final decision on sampling schedule will be made after consultation with ODEQ on the Proposed Study Plan.	<p>ODFW – questioned whether continuous or hourly readings.</p> <p>CH2M – Hourly data trace is intent – provides nice diurnal trend on DO for the day.</p> <p>ODFW – asked if there would be project operations info as well.</p> <p>CH2M – Sampling based on normal operations; not during forebay flushing or “not normal” conditions.</p> <p>PCorp – clarified for 404 DEQ would be expected to have DO levels modeling during flushing.</p> <p style="color: red;">Agreement at time of call was that a total of 3-72 hour periods (Aug, Sept, Oct) would be sufficient.</p>
23	Water Resources	USFS, call from Mike Gerdes (Sept 14, 2011)	Yes	USFS would prefer the company establish a gage just above the Royal Purple diversion but if this is not feasible, USFS agrees that the basin estimate method described in the Study Plan is an acceptable method. Mike also wanted to confirm that the company plans to establish a gage at East Fork Wallowa above the forebay.	PacifiCorp plans to establish a gage above the Royal Purple Creek diversion for the purpose of collecting flow data. If this method of data collection proves to be infeasible, PacifiCorp will use the basin estimate method as described in the study plan to estimate Royal Purple Creek flow. PacifiCorp does plan to establish a gage on the East Fork Wallowa River above the forebay.	PCorp – Clarification provided.

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes/No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
24	Water Resources and Aesthetic Resources	USFWS, Mike Gerdes, Stakeholder Study Plan Meeting 08-31-11 Input	Yes	The Forest Service suggests PacifiCorp cross-reference the Aesthetic Resources Study Plan in the Water Resources Study Plan discussion on turbidity.	PacifiCorp will cross-reference the Aesthetic Resources Study Plan in the Water Resources Study Plan discussion on turbidity.	PCorp will not evaluate WQ aesthetics as separate SP; aesthetics of Project a separate SP.
25	Water Resources and Instream Flow and Habitat	ODFW, Ken Homolka & USFWS, Gretchen Sausen Stakeholder Study Plan Meeting 08-31-11 Input	Yes	ODFW and USFWS suggest additional consultation with ODEQ is necessary to identify possible effects of salt tracer studies on aquatic resources.	PacifiCorp will consult with Oregon DEQ regarding the possible effects of salt tracer studies on aquatic resources. As of 9-30-11, PacifiCorp was in the process of finalizing an agreement with ODEQ and will consult with ODEQ on this issue once the contract is signed.	PCorp – will be discussing this with DEQ in near future and keep other agencies informed. Perhaps have a call including DEQ, mid-November, after 11/5/11 Stakeholder comments deadline. USFWS fine with that. ODFW may check in with DEQ before comments are due.
26	Permitting	USFS, call from Mike Gerdes (Sept 14, 2011)	Yes	Regarding permitting to conduct relicensing studies on Forest Service Lands, PacifiCorp should work directly with Mary Ellen Emeric at the district office to obtain an Investigative Permit to cover all studies that will be conducted on USFS Lands. Additionally, PacifiCorp will need to work with Sara Crump, the Forest Archaeologist to get an ARPA permit for the cultural resource surveys.	PacifiCorp will contact the appropriate Wallowa-Whitman National Forest Staff to obtain the required permits before studies are conducted.	USFS – shared Sara Crump returned call; clarified Tony will be contact on all things Cultural as far as permitting.

Wallowa Falls Hydroelectric Project (FERC No. 308)
 COMMENT RESPONSE MATRIX – with Conf Call Input Summary
 to Agency Comments on Resources (Note Cultural in Separate Report)

	Study Plan Resource Area	Commenter, Form, and Date of Comment	Comment Adopted Yes\No	Comment	PacifiCorp Response	Summary of Discussions in Stakeholder Conference Call 10-12-2011
27	Data Sharing	USFS, call from Mike Gerdes (Sept 14, 2011)	Yes	The Forest Service requests PacifiCorp share all raw data collected during the studies with USFS including GIS information. There are two reasons for this: 1) to update district records for resources and 2) to allow USFS to conduct independent analysis of resources.	PacifiCorp will provide data collected during the studies to the Forest Service in the form of quality controlled data spread-sheets; GIS shape files, and technical reports.	PCorp – will need to review Company process on sharing data but should be fine.