

Agenda

Wallowa Falls Relicensing

Instream Flow Study Transect and Curve Selection

Site Visit and Meeting

June 12-13, 2012

Tuesday, June 12

1. 8:30 AM: Meet at USFS trailhead adjacent to the Wallowa Falls Powerhouse. The powerhouse is at the southern terminus of the Wallowa Lake Highway (Powerhouse Road). We will do short introductions and have a safety tailboard discussion, and then tour proposed transects along study reach. We will do some off trail hiking to access the bypass reach so please dress accordingly. We should be done with the field tour by about noon.
2. 12:00 Lunch: On your own.
3. 1:00 PM: Meeting to discuss proposed habitat suitability criteria and curves for bull trout (all life stages), rainbow trout (all life stages) and kokanee (spawning). The meeting will be held at the Enterprise Best Western Conference Room, 1200 Highland Avenue, Enterprise, OR 97828 (North Side of State Hwy. 82).
4. 5:00 PM: Adjourn

Wednesday, June 13

1. 8:30 AM: Resume discussion of proposed habitat suitability criteria and curves as needed.
2. 11:30 AM: Wrap up and next steps.
3. 12:00: Adjourn

**Notes and Clarifications from Stakeholder Field Meeting for Wallowa Falls IFIM Study
Best Western Rama Inn & Suites - Enterprise, Oregon
June 12, 2012**

Attendees

Tim Hardin, ODFW; Elizabeth Moats, ODFW; Gretchen Sauzen, USFWS La Grande; Daniel Gonzalez, USFS Pacific NW; Matt Cutlip, FERC; Mark Mullins, CH2M Hill; Russ Howison, PacifiCorp Energy; Kaylea Foster, PacifiCorp Energy; and Frank Shrier, PacifiCorp Energy

Transects Selection

On June 12, PacifiCorp and the resource agencies reviewed in the field the 14 transects on the lower East Fork Wallowa River PacifiCorp proposes to use for the Wallowa Falls IFIM study. During the site visit the stakeholders agreed that the location and the number of transects were satisfactory. The following criteria were considered during transect site selection:

1. Sites appeared to facilitate the development of reasonably accurate stage-discharge relationships;
2. Sites represented meso-habitat diversity, to the extent practicable;
3. Sites had micro- or meso-habitat characteristics important to critical life stages (juvenile rearing, adult holding).

In the discussion following the transect proposals, ODFW remarked that for streams with steep slopes and relatively uniform macro-habitat types, such as the East Fork Wallowa River bypass (East Fork bypass), transects that capture a diversity of micro-habitat types is probably the best goal.

Substrate

Substrate in the East Fork bypass is composed primarily of large and small cobble, with isolated pockets of gravel and sand. Due to the relatively uniform distribution of substrate composition, and the general lack of specific areas of spawning gravel, PacifiCorp proposed running the PHABSIM model without substrate inputs. ODFW encouraged the collection of substrate measurements, but acknowledged that substrate need not be considered in model runs.

Cover

Cover for fish is rare in the East Fork bypass and generally consist of small, isolated areas of large woody debris, undercut banks, and small areas of overhanging vegetation. Most of the riparian habitat within the study area is characterized by residential lawns and banks stabilized with rip-rap and large boulders, resulting in channelized stream cross-sections for most of the study reach. USFWS remarked that cover is generally very important for bull trout habitat, but

agreed that within the study site cover is not abundant and would not be a particularly important driver in the model results for juvenile and adult lifestages. Therefore, the team agreed that the cover “curve” will have two parameters: “cover absent” will be assigned a suitability value of 0.8, and “cover present” will be assigned a suitability value of 1.

Transect Weighting

The team agreed to weight transects as follows:

- A. The five lowest transects occur within the full extent of kokanee spawning. These five transects will be assigned equal weights for kokanee habitat modeling. The remaining nine transects will not be considered for modeling kokanee spawning.
- B. All 14 transects will be used for all life stages of bull trout and rainbow trout. Transects will be equally weighted.

Lifestages to be modeled

The team agreed that the following lifestages for the following species would be included in the instream flow study modeling:

Kokanee – spawning only (lower 5 transects only due to fish passage issues).

Bull Trout – juvenile, adult, and spawning

Rainbow Trout - juvenile, adult, and spawning

It was agreed among the stakeholder group that fry habitat will not be modeled as kokanee fry would migrate to Wallowa Lake immediately after emergence and “typical” fry habit for the trout species occurred in isolated areas along the study reach and it was unlikely that the transects would adequately capture a representation of fry habitat presence.

Habitat Suitability Curves

Proposed suitability curves were provided to the stakeholders two weeks prior to the meeting for review. Table 1 summarizes the changes made to the proposed curves during the meeting. The spreadsheet attachment to these meeting notes includes all of the modifications that were made to the initially proposed curves by the project team during the post-field visit meeting. These represent the curves PacifiCorp intends to use in the modeling. The following is a brief description of these modifications.

Table 1. Summary of adjustments made to proposed HSC during stakeholder meeting

Life stage	Depth	Velocity
Bull trout spawning	No change	Adjusted left side of curve
Rainbow trout spawning	Adjusted right side for open-ended	No change
Kokanee spawning	Adjusted complete shape	Adjusted complete shape

Bull trout adult	Adjusted left side	Adjusted left side
Rainbow trout adult	No change	Adjusted complete shape
Bull trout juvenile	Adjusted left side	No change
Rainbow trout juvenile	Adjusted complete shape	Adjusted complete shape

Field Measurements

The study plan states that PacifiCorp would like to obtain measurements at flows of 2, 8, and 20 cfs. After observing site conditions and discussing the operational constraints of the system, the team understood that the 2 cfs target may be difficult to achieve. ODFW advised that perhaps a multi-flow model approach may allow PacifiCorp to model lower flows. ODFW suggested that low flow measurements taken at about about 4 cfs would allow PacifiCorp to accurately model down to 2 cfs. For higher flows, PacifiCorp stated that, the target of 20 cfs may also be unrealistic to obtain, given the flows that are expected during the field season. It is more reasonable to expect that the highest flows would be about 16 cfs. Based on the discussion, PacifiCorp has determined that flows of 4, 8, and 16 cfs are more practicable targets than 2, 8, and 20 cfs.

Water surface levels, a gage reading, and a discharge measurement will be collected at three flows; low flow (approximately 4 cfs), median flow (approximately 8 cfs) and high flow (approximately 16 cfs). The three sets of measured water surface levels will be used during both modeling sessions. Velocities will be measured at the three flows, but it is likely that only two velocity sets will provide accurate data for modeling. PacifiCorp will select the two sets of velocity readings that perform most realistically in PHABSIM, and will use the selected velocity sets in two separate modeling sessions: one for low flow and the second for high flow (either 8 cfs or 16 cfs), to be determined after obtaining preliminary results of model trial-runs.

Next Steps

The parties agreed that PacifiCorp would summarize the discussion in the form of meeting notes and route them for comment among the meeting participants. After comments are received, PacifiCorp will revise the notes and file them with FERC. Field measurements will be taken in July-September 2012 and preliminary results will be presented to stakeholders at the October 2012 Study Progress Meeting and subsequent report.