Habitat Work Group (HWG) Meeting
November 9, 2006
Lewis Conservation District Office

Lee Napier, Andy Olson, Brett DeMond, Chanele Holbrook, Bob Amrine, and Brian Peck, Chad Stussy were present.

**Strategy Update**
*Skookumchuck Subbasin Chapter*

Chad explained the formatting changes for the Skookumchuck chapter since the October meeting. Within each known limiting factor, he linked the symptom(s) to the cause(s) and the action(s).

Comments from the group included:

- Was there a shuffling between text listed as a symptom or cause? Not with this chapter.
- This format is easier to ready.
- Like the T1 and T2 correlation.
- Lots of restoration and mitigation in Hanaford basin (Trans Alta). Should we highlight this in the strategy? The group needs to discuss this in the future and determine the significance of the Hanaford basin in the watershed. From a SRFB perspective, we do not need to include the mitigation/Trans Alta work.
- Do we need to identify high priority areas for restoration? Did the older versions of the strategy highlight the areas? Yes, when possible. Some documents (Ralph et al) did identify areas. The earlier versions of the strategy contained standard language.
- Maybe call out separately the areas of high quality habitat for preservation. The group thought that was a good approach verses calling it out by limiting factor. They need to decide if it's by subbasin.
- Brian suggested a table for areas of preservation to describe the high quality habitat and describe the area. This would involve identifying the intact habitat.
- Do we have criteria to identify the high quality habitat? Areas that meet water quality standards and floodplain connectivity are examples.
- As a next step, can we use EDT as a tool to identify areas of preservation? Lee will ask Randy this question and see if a map can be generated.

The group discussed priority processes for the Skookumchuck chapter.

- Add Southern Thurston County to the location sentence, first line.
- Correct the blocked estimates of 50 and 905 percent. Should it be 90 or 95%.
- Add Fall Chinook to the list of fish stocks.
- Last month the group identified hydrologic regime, organic matter and light/heat input as general priority processes for all watershed.
- Add as a sediment symptom the dam reduces the transport of sediment/high fines or gravel. Does the FERC license require placement and/or input of gravel? ADD- Lack of gravel downstream of the dam.
- The cause #3 in sediment seems contradictory to the causes. Suggested wording from Brian "excess sediment load transported through the transport

reaches." Then delete second cause, it's already captured under the first symptom. Keep first cause and all three actions.

- In the LWD section move symptoms (3rd cell) to the causes column?
- The group suggested sediment, hydrologic regime, organic matter, light/heat input. Because of the lack of gravel due to the dam, lack of high fines, low summer flows, and lack of LWD (removal & dam). The group did not settle upon priorities.
- As a rule-riparian is included under organic matter, unless there is a temperature 303(d) listing, then use light/heat input.
- Andy support light/heat covers organic matter as a high priority because it recruits LWD. Which is more important? Wood into the system and log jams or riparian plants to reduce temperature.
- The group struggled with selecting priorities because all of the processes are important.
- Brian suggested drawing conclusions based on priority stock and life stages. For example: priority stocks are spring chinook, winter steelhead, and coho, then identify life stages and the process. For adult spring chinook he thought hydrologic regime, temperature and flow were priorities. Chad prioritized wood.
- The group discussed winter steelhead adults and juveniles. The priority process for juveniles would be temperature.
- After discussing this approach, the group want to continue this work, chapter by chapter, to prioritize stocks, life stages and watershed processes.
- Why did we list gross stream morphology as a process?
- A recommendation might be to better understand or gain more knowledge from dam operations (FERC licensing). Maybe we only worry about the habitat below the dam. Above the dam is Forest and Fish regulated. See attached e-mail response.

Chad asked for volunteers to serve on a barrier workgroup. They would review the assessment work of the Lewis and Mason CD and determine priorities. This group would develop criteria and then ask the crews to develop a list for the group to prioritize.

The next meeting will be Dec 8th at the regular time. The agenda will include:
Discuss priority stocks and how they relate to the processes. Discussion by subbasin. If we can get EDT to help with identification of the preservation areas, then include that on the agenda. Report out the barrier work group suggestion.

Here is the information Gary Sprague (WDFW Major Projects) was able to provide on the Skookumchuck dam.

>>> Gary Sprague 11/21/2006 9:38 AM >>>
Hello Chad,
I have never worked on Skookumchuck Dam issues, and with reductions in staff no one in Major Projects is currently tracking Skookumchuck. Here is what I have found. As is often the case these situations are a bit complex, and in my quick look in our files I may have overlooked some of the details.

1) Do you know who owns and operates the dam?
I believe that the dam is owned by the Centralia Steam Electric Generating Project (which is owned by a number of organizations). Game signed an agreement with them on August 31, 1967, for fish and wildlife studies. In March of 1979 we reached an agreement to address wildlife habitat impacts. This consisted of 966 acres to be know as the Skookumchuck Wildlife Enhancement Area. This agreement did not address fish issues. A January 9, 1974 agreement with Fisheries included two fish rearing ponds (including residence) at the Simpson Hatchery, rearing of 300,000 coho, funding for five years of studies, a weir to segregate spring chinook salmon spawning grounds, river flow regulation, operation procedures, contingencies, dispute resolution, and liability.

2) Is there a FERC license for the dam?
Yes. Issued to Pacific Power and Light Company (now PacifiCorp?) on July 20, 1982 (FERC No. P-4441). This is an exempt license. On May 29, 1998 an agreement was signed: Centralia Steam Electric Generating Project Fish and Wildlife Agreement. This included WDFW, the owners of the project, and PacifiCorp. This agreement references arrangements made with Game and Fisheries prior to 1993, the agreement with Fisheries dated January 9, 1974, and the wildlife agreement identified above (1967). It identifies that Skookumchuck steelhead were incubated and reared at the South Tacoma facility and Skookumchuck coho were incubated at the Bingham Creek (formerly Simpson) facility, and that starting in 1997 both Skookumchuck coho and steelhead were incubated and reared at the Bingham Creek facility.

The owners installed multiple-level gates at the dam to regulate water temperature, installed fish handling facilities, including a fish ladder, holding ponds, a flume, a fish hopper, fish protective facilities, an acclimation pond, and a fish barrier. The fish handling facilities are for the collection of steelhead for artificial propagation and for redistribution for natural spawning. The agreement is for the production and rearing of 300,000 coho smolts/year, up to 17,650 pounds. The agreement addresses minimum flows, reservoir levels, funding and responsibilities.

3) Are steelhead passed above the dam? other species?
I do not have much in the way of details regarding this issue. There is a letter in the files from Tim Flint (WDFW, R6 Fish Program Manager) to PacificCorp dated March 15, 2000, that documents some discussions. That letter states that at that time we were passing wild steelhead and some hatchery steelhead upstream. It identifies that in

previous years we had transferred some fish to MacIntosh Lake, that steelhead had been recycled, and some steelhead had gone to the Chehalis Tribe's elders program.

4) If there is a FERC license then what are the terms and conditions?
As an exempt license the FERC does not include many specific conditions (there are a number of general conditions). WDFW and other fish and wildlife agencies may have submitted conditions to the FERC. In a quick look I only found 17 conditions in a letter from the Game Department to PacifiCorp. These included conditions for water temperature, flows, reservoir levels, a tailrace rack, tailrace design, revegetation, gas supersaturation, HPA, erosion, inspections, reporting, use of herbicides, funding for construction monitoring, ramping rates, and transmission lines. This letter identified these issues for discussion purposes. I have not found letters to the FERC, they may be buried deeper in our files. They could be available at the FERC web site.

We have about half a file drawer of materials that appear to be related.

I hope this helps.
Gary