

# CHEHALIS AQUATIC SPECIES RESTORATION PLAN: CONCEPTUAL MODEL AND REVISED PROCESS FOR DEVELOPING RESTORATION STRATEGIES

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**Group/Committee:** Restoration Experts, WDFW, Anchor QEA consultants

**Date:** January 21, 2016

**Time:** 1:00-4:00

**Location:** Lacey Community Center (6729 Pacific Avenue SE, Olympia, WA)

## Meeting Purpose:

Development of an aquatic species restoration plan is moving forward with leadership from the Washington State Department of Fish and Wildlife and others. This workshop was scheduled to provide an update on the process and solicit input into the next steps. In October a panel of habitat restoration experts was convened and they emphasized the need for the restoration plan to address watershed processes that are key to habitat condition and function that will lead to long-term, successful restoration measures. The strategy for the ASRP will reflect the increased emphasis on watershed processes. At the January 21st workshop, the revised strategy development process was presented using the Newaukum sub-basin to illustrate what we know and don't know about watershed processes, and how this influences the restoration strategy approach within that sub-basin. The collective input of all of the local stakeholders will help us make sure we have the latest knowledge, and ensure that the development of restoration strategies make sense and have a high likelihood of success.

## Meeting Summary and Discussion Points

WDFW, Anchor QEA, and ICF walked through the three parts of the presentation—Part I: Setting the Stage for Effective Habitat Restoration and Protection, Part II: Development of Restoration Strategies, and Part III: Next Steps for the ASRP and Developing Restoration Strategies. In addition Tim Beechie walked through a summary presentation of the Watershed Assessment being conducted by NOAA. The following questions and discussion points were raised during the meeting.

### **Part I: Setting the Stage for Effective Habitat Restoration:**

There were no comments or question made on this portion of the presentation.

### **Part II: Development of Restoration Strategies:**

#### **Role of Ecosystem Diagnosis and Treatment (EDT)**

1. A question was asked about whether or not the EDT model considers the fact that lower reaches impact upper reaches in the basin. Chip McConnaha (ICF) stated that yes, the model considers this point.

2. A comment was made that the EDT model was missing the estuary and surge plain. Chip McConnaha (ICF) stated that the surge plain is included in the model, but the model does not include every slough in Gray's Harbor estuary, but that the majority of the estuary is captured.
3. Chip McConnaha (ICF) noted that the historical condition used in the EDT model is being updated now by NOAA (Tim Beechie) and that model results will change as the updated historical condition is incorporated into the EDT model. For example, the historical presence of off-channel habitat is missing from the existing historical condition and once that is added, Chip expects that changes to model output for coho salmon will also change.
4. There was a question asked about how the EDT model reaches were defined. Chip McConnaha (ICF) stated that the reaches were generally defined geomorphically or by other conveniences.
5. There was a question asked about how well do the model predictions compare to actual fish counts. Chip McConnaha stated that he has looked at this and that the model predictions compare well to the actual fish counts and that this is discussed in more detail in the 2014 Aquatic Species Enhancement Plan.

**Newaukum River Case Study:**

1. It was stated that peak flows are getting higher and higher in the Newaukum River through time and that this fact should be considered when determining restoration strategies.
2. It was stated that restoration strategies should consider that managed forests do not allow trees to get very large since they are on a 35-year harvest rotation and that there is no large wood left in the system.
3. It was stated that the restoration strategy for large wood should include a managed forest component to address the previous discussion item; and it was recognized that there will be limitations for effective the Chehalis restoration efforts will be in modifying state-wide forest management practices.
4. It was also suggested that the restoration strategy for large wood needs to address the fact that humans remove large wood from the system.
5. A suggestion was made for the restoration strategy for large wood to consider the placement of large wood into the stream in the short-term to provide improvements to habitat while the impacted processes recover.
6. It was suggested that the high water temperature restoration strategies should consider that increased sediment loads and increasing flows lead to a widening of the channel with less shade.
7. A question was asked about how the restoration strategies would be presented to the landowners. Jim Kramer responded that there is a separate work group that is tasked with landowner outreach.

**Part III: Next Steps for the ASRP and Developing Restoration Strategies  
Assistance from Local Experts:**

1. Tom Schadt requested that if people have information related to a particular sub-basin that should be included or considered in the development of restoration strategies, they should let WDFW or Anchor QEA know today or contact Carol Cloen at WDFW after the meeting to express interest in a sub-basin. People with relevant information or an interest specific to a sub-basin will be contacted to help develop restoration strategies for that sub-basin. As strategies are

being developed for each sub-basin, we anticipate outreach to stakeholders with local knowledge to help guide the development of those strategies. Also, workshop(s) will be convened as appropriate to discuss the restoration strategies for all of the sub-basins and to refine strategies.

## Action Item Summary

ASSIGNED TO	ACTION ITEM
Restoration Experts	Contact WDFW (Carol Cloen— <a href="mailto:carol.cloen@dfw.wa.gov">carol.cloen@dfw.wa.gov</a> ; 360-902-2603) if you have unique local knowledge about habitat conditions and processes within a specific sub-basin, know about key locations that should be considered for protection or restoration, and/or if you information related to ecological goods and services provided by a specific sub-basin or location.
WDFW, Anchor QEA consultants	When determining restoration strategies, confirm and consider that peak flows are getting higher and higher in the Newaukum River through time.
Anchor QEA consultants	Restoration strategy for large wood should consider that managed forests do not allow trees to get very large since they are on a 35-year harvest rotation and that there is no large wood left in the system. Review the managed forest HCPs to see if this issue is documented and if there is technical concurrence of this issue.
WDFW, Anchor QEA consultants	The restoration strategy for large wood needs to address the fact that humans remove large wood from the system.
WDFW, Anchor QEA consultants	The restoration strategy for large wood should consider the placement of large wood into the stream in the short-term to provide improvements to habitat while the impacted processes recover.
WDFW, Anchor QEA consultants	Convene a meeting in March to review restoration strategies developed for each sub-basin.