

Chehalis Basin Strategy
"Reducing Flood Damage and Enhancing Aquatic Species"
Technical Workshop

Wednesday, October 30, 2013 from 8:30 am to 4:30 pm and
Thursday, October 31, 2013 from 8:30 am to 3:00 pm
Lacey Community Center
6729 Pacific Avenue SE
Lacey, WA

Purpose of Workshop

This is the first of three Technical Workshops for the Chehalis Basin Strategy "Reducing Flood Damage and Enhancing Aquatic Species." The other two workshops will be held in February and September, 2014. For more background information on the project, please visit <http://ruckelshauscenter.wsu.edu/ChehalisFlooding.html>. The Technical Workshops will present technical material related to the various studies being completed as part of the Chehalis Basin Strategy studies and provide a forum to comment on the results of the studies or proposed methodologies to complete upcoming studies. The material presented at these Technical Workshops will have been reviewed by technical committees organized for the purpose of coordinating technical studies and reviewing the results of those studies.

Each of the Technical Workshops will be followed by a Policy Workshop. The first Policy Workshop will be Wednesday, November 13, 2013. The purpose of the Policy Workshops is to present technical studies to the Governor's Chehalis Basin Work Group, Chehalis Basin Flood Authority members, tribal officials, state agency managers, and other interested parties who will provide input regarding the policy implications of the technical issues. The Governor's Chehalis Basin Work Group will make the policy decisions that guide the direction of the project and ultimately form their recommendations to the Governor and legislature by November 2014.

For the October 30-31 Technical Workshop, we are asking for feedback regarding the results of studies completed to date and proposed methodologies to complete future studies. It will be important to know where there is technical concurrence and where there are differences. If key technical issues remain, we plan on evaluating those issues and performing additional work to address those issues and/or present those issues at the November 13 Policy Workshop for further discussion and decisions on the path forward to resolve the issues.

The agenda for this workshop is provided on the following pages.

Chehalis Basin Strategy
“Reducing Flood Damage and Enhancing Aquatic Species”
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Agenda

Wednesday, October 30

- I. Introduction and Purpose of Workshop: Anchor QEA (8:30 am to 8:45 am)

- II. Presentation of Preliminary Results to Date
 - A. Engineering
 1. Dam Design Study: HDR, Jim Peterson (8:45 am to 9:15 am)
 - a. A review of the types of dams that are typically used will be presented along with research into innovative designs. We will be looking for any input the workshop attendees have regarding potential dam design, and any other characteristics that should be considered for a potential dam.

 2. Fish Passage Design Study: HDR, Mike Garello (9:15 am to 9:45 am)
 - a. A review of the types of fish passage structures being considered will be presented. We will be looking for workshop attendees to share any concerns they have regarding fish passage structures they have knowledge of, good fish passage designs they have knowledge of, and what characteristics they think a potential structure will need to have in order to provide the optimum passage.

 3. Discussion (9:45 am to 10:30 am)

 - B. Hydrology and Hydraulics
 1. Presentation of review of 2007 flood event peak flow at Doty gage: Watershed Science and Engineering, Larry Karpack (10:30 am to 11:00 am)
 - a. The results of the review of the 2007 flood event at the Doty gage will be presented. We will be looking to workshop attendees to provide any comments they have on the results and where there is concurrence and differences regarding the findings.

 2. Re-evaluation of statistical hydrology/the historical record of flood events in the basin and recommendation for flood scenarios to be used: Watershed Science and Engineering, Larry Karpack (11:00 am to 11:30 am)

- a. A summary of the evaluation of historic floods in the basin will be presented to address the likely contribution of flow from the Cascades and Black Hills compared to the upper Chehalis Basin. Technical recommendations for the magnitude of floods from each area to use for the evaluation of flood mitigation measures will be presented. We will be looking to the workshop attendees to provide comment on the statistical analysis, and where there is concurrence and difference on the results to be used moving forward.

3. Discussion (11:30 am to 12:00 pm)

Lunch 12:00 pm to 1:00 pm There are no restaurants nearby. Workshop attendees are encouraged to bring a brown bag lunch.

C. Scenario of Small Flood Damage Reduction Projects

1. Presentation of criteria and locations for small flood-damage project scenario analysis: HDR, Beth Peterson (1:00 pm to 1:45 pm)
 - a. A summary of the criteria for evaluation and location of projects being considered as part of the study will be presented. A preliminary, unscreened list of projects will also be presented. We will be looking to the workshop attendees to provide input and comment on the criteria being considered and the preliminary list of projects.
2. Discussion (1:45 pm to 2:30 pm)

D. Identification of Floodplain Structures

1. Methodology for deciding which floodplain structures will be surveyed: Watershed Science and Engineering, Larry Karpack (2:30 pm to 3:15 pm)
 - a. Larry will provide a summary of their work to identify the floodplain structures. The methodology includes a GIS analysis of structures and surveying a select number of structures to get more detailed information. This information will be used in the evaluation of flood damage reduction alternatives. We will be looking for workshop attendees to provide comment on the methodology for identifying floodplain structures and the approach to obtain more detailed information.
2. Discussion (3:15 pm to 4:00 pm)

Thursday, October 31, 2013

II. Presentation of Preliminary Results to Date (Continued from October 30)

E. Environmental

1. Collect Data on Fish Use - Preliminary results: WDFW, Mara Zimmerman, (8:30 am to 9:00 am)
 - a. This presentation will provide a brief overview of what is known about aquatic species in the basin, what data gaps are present and how the fisheries data collection program was designed to fill data gaps. A presentation of data collected to date will also be made. We will look to the workshop attendees to provide their perspective on aquatic species in the basin and our approach to filling data gaps.
 - b. Discussion (9:00 am to 9:30 am)
2. Water Quality - Preliminary results of water temperature and water quality data collection and thermal infrared study: Anchor QEA, Bob Montgomery (9:30 am to 10:15 am)
 - a. This presentation will provide a brief overview of what we know about water quality in the Chehalis River, what data gaps are present and how the water quality data collection program was designed to fill data gaps. A presentation of data collected to date will also be made. We will look to the workshop attendees to provide their perspective on water quality in the basin and our approach to filling data gaps.
 - b. Discussion (10:15 am to 10:45 am)

F. Aquatic Species Enhancement Plan

1. Recommendation for models to be used in the Aquatic Species Enhancement Plan – Anchor QEA (10:45 am to 11:15 am)
 - a. An overview of the ASEP will be made along with the role of models in preparing the ASEP. A summary of the models being considered for the ASEP will be presented. We will look to the workshop attendees for input on the models, comments they have on the models (e.g., don't like and why or like and why).
 - b. Discussion (11:15 am to 11:45 am)

Lunch 12:00 pm to 1:00 pm There are no restaurants nearby. Workshop attendees are encouraged to bring a brown bag.

G. Comparison of Alternatives

1. Methodology selection: EES Consulting, Anne Falcon (1:00 pm to 1:45 pm)
 - a. A presentation will be made describing the process for developing the economic analysis framework, discussing the previous economic analysis methodology and presenting other available methodologies. We will be looking to the workshop attendees to provide comments on the different methodologies that are available and their use for this project.
 - b. Discussion (1:45 pm to 2:15 pm)
- H. Wrap up and Final Questions and Answers (2:15 pm to 2:45 pm)