

Chehalis River Basin Flood Authority

Work Session 9:00 a.m.

Rochester Community Center
10140 Hwy 12 SW, Rochester, WA

May 17, 2012 - Meeting Notes

Board Members Present: Vickie Raines, City of Cosmopolis; Merlin MacReynold, City of Chehalis; J. Vander Stoep, Town of Pe Ell; Lionel Pinn, City of Napavine; Edna Fund, City of Centralia; Ron Averill, Lewis County Commissioner; Terry Willis, Grays Harbor County Commissioner; Mark Swartout, Town of Bucoda; Dan Thompson, City of Oakville; Jim Cook, City of Aberdeen; Karen Valenzuela, Thurston County Commissioner; Ken Estes, City of Montesano

Consultants Present: Bob Montgomery, Paul Schlenger, Jim Shannon, Anchor QEA; Larry Karpack, Watershed Science and Engineering; Ray Walton, WEST Consultants

Others Present: Please see sign in sheet

Handouts/Materials Used:

- Agenda
- PowerPoint: Chehalis River Basin Comprehensive Salmonid Enhancement Plan

1. Call to Order and Welcome

Chairman Raines called the meeting to order at 9:06 and welcomed everyone.

2. Introductions

Self-introductions were made by all attending.

3. Update on OFM Report/Ruckelshaus Center Process – Jim Kramer

Mr. Kramer stated a technical workshop has been scheduled for Monday, May 21 and Thursday, May 24. The purpose is to go over major projects that are being considered or suggested for significant flood damage relief in the basin. There is a hydraulic model now that Mr. Karpack and Mr. Walton have worked on to give a sense of projects up and down the basin. Information from that model will be presented to technical folks and they will be asked the benefits and potential down sides and ecological effects of the options being considered. Those invited to attend are from all the local jurisdictions' public works departments, community development, state agencies and consultants. They will be open public meetings with a technical focus.

Mr. Kramer went on to say that the information received at the technical meetings will provide a technical perspective for policy leaders at the June 14 and 15 workshops at Great Wolf Lodge. Information on the workshops will be sent out in a few days. The purpose of that workshop, sponsored by the Ruckelshaus Center, is to dive into policy issues using the technical information presented. The group will also talk about moving the process forward, who the decision makers might be and determine the key issues. Keith Phillips has agreed to attend and both the Chehalis Tribe and Quinault Indian Nation were invited. The workshops are also open to the public with a focus on the leaders in the basin.

Information received at these workshops will be used for the first draft OFM report, required by the legislature, which will be out in early July. The Flood Authority meets on July 19 and will be making a

decision or discussing a decision. The comment period will end in early August with the final report due at the end of August. The legislature requires a recommendation on the path forward. OFM will not take a position; that is the governor's responsibility before the report goes to the legislature.

Mr. Kramer stated the technical meetings will help determine where there is basic agreement or problems so everyone understands the technical work from each point of view. This will be on suites of projects, such as retention, the I-5 project, roads, bridges and culverts. Mr. Karpack will present initial findings of the modeling and what each project does in terms of reducing flood damage and what the technical concerns are from an ecological standpoint.

4. Hydrologic and Hydraulic Modeling – WSE

Mr. Karpack presented a PowerPoint on the preliminary modeling results and the evaluations of flood relief alternatives. There was a wide range of alternatives; some of them can be modeled, and Mr. Karpack tried to look at benefits and impacts up and down the system.

The baseline model was finalized a week ago and changes were made to reflect the changes along I-5 and to use that as a comparison to other alternatives.

- Upstream Retention on Mainstem Chehalis
- Corps Twin Cities Project
- WSDOT I-5 Flood Protection
- Mellen Street Bypass
- Channel Dredging
- Complete Bridge Replacement
- Specific Bridge Replacement

All of the maps in the PowerPoint show the Chehalis River and tributaries – 108 miles of the Chehalis River and pieces of the tributaries (Newaukum, Skookumchuck and Satsop).

Mr. Karpack explained that the upstream dam graph shows potential benefits of the dam as the water moves down the system, and the changes in water elevation down the system.

Mr. Swartout asked if the graphs included tidal influence. Mr. Karpack explained that the model is on fixed boundary conditions. It is an unsteady model and he could put in a tidal cycle but then he would have to figure out how to pair up the tide with the high flows. He also stated he modeled four different events to see how they coincide with the Skookumchuck and Newaukum. The modeling shows what happened in 1996, 2007, 2009 and a 100-year flood event.

Mr. Treichler suggested some kind of context to the numbers shown on the map; it is not known what the numbers are being compared to. Mr. Karpack stated they are the elevations across the cross section and the cross sections vary. He can create a map showing the depths.

Ms. Powe stated the map showed two numbers in the center. One was 4.1 and the other was 2.6. She asked if that is the elevation of the ground. Mr. Karpack said no, the water is still going out towards the airport. There is a bottleneck there and the water splits. If you look at the profile of the river it is steeper to the north and flattens out to the south. These are the changes in the baseline water level, not the depths.

Mr. Kramer stated that Mr. Karpack is validating the need for the two-day workshop. This is the first cut of the data on all of the alternatives and all the questions being asked will be coming up on the 14th and 15th.

Chairman Raines suggested writing down questions and getting them to Mr. Karpack before the workshops.

Commissioner Averill asked Mr. Karpack if this is the inundation area that he would anticipate with the dam and with or without levees. Mr. Karpack stated it would be with existing levees with the dam in place but not with new levees.

Mr. Kersch stated there is so much emphasis on the river and he was worried about the tidal area. He thought the model fell short of the Wishkah River and tidal effects. Mr. Karpack stated the Wishkah is not in the model; there is no project alternative that addresses tidal influence.

Corps Twin Cities Project

Mr. Walton stated there are two analyses: Mr. Karpack's and the Army Corps of Engineers'. One alternative to look at was the Twin Cities Project and it was put into the model that ran the 100-year flood and the floods of 1996, 2007, 2009. The 100-year flood that was modeled had the Twin Cities project as the focus.

Mr. Walton explained the map showing the 100-year event. The blue was the existing flood plain; the hatched areas are protected areas; the red areas are where the water will go up.

After a technical discussion of this, Ms. Fowler stated a lot of this will be discussed during the technical workshops. She also noted that this morning's work session was being videotaped and would be on the website.

Mr. Walton spoke about the Mellen Street bypass using a graph that showed benefits up to 3" by bypassing the chokepoint with some impact downstream up to ¼ foot.

Commissioner Willis stated she keeps hearing "little impact". She stated if there had been an additional 4" of water in 2007 there would have been hundreds of animals lost. Just because it is 4" doesn't mean it's trivial – that's 4" on top of the water that is already there.

Commissioner Averill stated this is transferring water down to Galvin Road and that is a concern.

Mr. Walton showed a graph if the bridges were removed. The removal of the bridge at Mellen Street would not have much impact because of the hump in the river bed, which is topographic. At Galvin there would be a four-tenths reduction with some increase downstream. If the Sickman Ford Bridge is removed there would be some increase downstream with local benefits of about three inches.

Mr. Kramer reminded everyone that these maps and graphs are preliminary and that they are being finalized for the upcoming workshops. The preliminary maps will raise more questions. He asked that questions get to him by the end of the day Friday. He also stated that there are a number of things that will be looked at next week that are not modeled, such as projects in Aberdeen. Not every idea is being

modeled, and not just modeled projects will be discussed. Also to discuss will be things such as critter pads and riparian improvements to consider.

5. Break

Chairman Raines stated there would be no break to allow for all the items on the agenda.

6. Fisheries Enhancement Study – Anchor QEA

Mr. Schlenger stated the draft Enhancement Plan had been distributed. He thanked everyone who provided information to him. He introduced Mr. Jim Shannon.

Mr. Shannon presented a PowerPoint on the Enhancement Plan which provided the project background starting with HB 2020 which was to “address the potential for flood mitigation through upstream water retention facilities, including benefits and impacts to fish and potential mitigation of impacts”.

The PowerPoint summarized the scope of work, the draft report review process, Phase 1 and Phase 2.

Mr. Vander Stoep asked if the 44% juvenile survival as a median baseline estimate was with or without flow benefit or a multi-purpose dam. Mr. Shannon stated that was without the dam. Mr. Vander Stoep then asked if the 44% was expected to be increased. Mr. Shannon stated it would depend on the species. If the dam was in place the Chinook would benefit due to improvements in water quality. With projects in the main stem the benefit would be expected to be greater.

Mr. Vander Stoep asked if it would be 44% across the entire basin and if these projects were melded together as one project (flood control and salmon enhancement) numerically would you expect the salmon to increase over the current conditions.

Mr. Schlenger stated Anchor was not saying that there will be an improvement through the projects; this is putting together what we got in the fish study with the main stem focus. This different approach is broader with more rivers in the basin. We could not apply the Shiraz to this. We have given indication of main stem population in the first study and the collection of enhancement projects is in the ballpark that can mitigate impacts. There are a lot of uncertainties and assumptions in the fish study. This is more about habitat focus and fish behavior and to characterize impacts. To really pull it together is not something we can do in the format we have used. We brought a tool that can be adapted based on best professional judgment.

Mr. Swartout stated the fish study shows that the dams have a negative impact on all three species. He asked if enhancement will improve that. Mr. Schlenger stated there is no getting away from the upper watershed dam cutting off a lot of spawning of two of the species. Removing culverts will remove barriers but it depends on the species. There is risk here.

Mr. Montgomery stated the figures are in the ballpark. We can't be precise about what the trade-offs are but whether or not you use this enhancement study as a deciding factor to go ahead with the dam, you could say it could be mitigation.

Mr. Kramer stated there is a timeframe for the biologists to comment on this and they are all in the field. He asked how to get input during the field season, and stated it is unlikely to happen before the workshop.

Mr. Nelson stated the biologists are out doing spawner surveys; with this weather, the surveying needs to be done when the weather allows. He also stated he appreciated the word of caution on the modeling numbers. The piece that is unpredictable is the fish. You can fix a culvert and some fish will exploit that but others may never use it. If there is a loss, having a culvert replaced for these species may not show a real time response to the population before the population has a negative impact.

Mr. Gernhard stated WSDOT has a lot of culverts that are fish barriers and it has lost a lawsuit with the tribes. WSDOT has a commitment to replace the culverts that are fish barriers and asked how fast they are required to replace them.

Mr. Schlenger stated the Salmon Recovery funding board has made decisions to include state funds to remove some culverts. If there is enough fish benefit they can accelerate the process. Mr. Hueckel asked if that can be used as a credit.

Commissioner Valenzuela stated it would be helpful to have in a draft some comments and responses for the June workshops. Mr. Montgomery stated that Anchor would post comments and Anchor would need comments by the 7th to allow a week to answer them. If there is a longer time period for additional comments, Anchor is flexible and would be available for the workshops if necessary.

Mr. Schlenger stated he is leaving Anchor QEA but would continue to be available to the Flood Authority.

Mr. Kramer suggested Ms. Fowler, Mr. Nelson, himself and others get together for a few hours to get a better sense of the questions. Mr. Montgomery stated he would be the point of contact for Anchor.

7. Public Comment

Mr. Vince Panesko stated someone had made a comment that a dam would hold all the water from the 2007 flood but the report says it will only hold a portion. He asked if that had changed.

Mr. Karpack stated the volume of storage is larger than runoff that came off upstream. He did not know who said a dam would hold it all. The total amount run off was smaller than 80,000 acre feet.

8. Tour

Commissioner Valenzuela stated the tour today was a farm in Independence Valley that was hit hard by the 2007 flood. The owner will show the members how they have coped with the flooding. The tour is meant to offer a picture of people living in the flood plain.

The meeting adjourned at 11:14 a.m.