

# CHEHALIS BASIN BOARD SUMMARIZED MEETING AGENDA AND ACTIONS

**Date:** November 2, 2017

**Time:** 9:00 am to 4:00 pm

**Location:** Borst Park Kitchen #1 - 2020 Borst Avenue Centralia, Washington 98531

ITEM	FORMAL ACTION	FOLLOW-UP ACTION
1. Consent November 2, 2017 Agenda Approval of October 5, 2017 Meeting Summary	Decision: Agenda approved. October 5 meeting summary approved.	No follow-up action.
2. Water Quality in the Upper Chehalis Basin	Discussion	No follow-up action.
3. Perspectives in the Basin: Chehalis Basin Partnership	Discussion	No follow-up action.
4. Budget Proposal for Continuing Work through February 2018	Decision: Proposal for continuing work on priority elements from December 2017 – February 2018 approved.	Board members requested OCB staff draft a letter to the Corps, for Board review, to clarify that they support dedicated funding for the Corps to conduct the environmental review of the dam consistent with the overall schedule for the Chehalis Basin Strategy, but not to expedite approval of the potential dam.  Board members requested OCB staff provide an update on progress made on the various elements of the 2017-2019 work plan as well as on work or tasks that are not progressing.
5. Aquatic Species Restoration Plan (ASRP) Update	Discussion	QIN, Chehalis Tribe, and WDFW Board members were requested to come to the December Board meeting prepared to talk about what is needed during the Phase 1 ASRP review to support their processes, including

		timelines and form of their responses.
6.	Land Use in the Upper Chehalis Basin: Past/Present/Potential Future	Discussion
		Board members were asked to consider if there are other questions they would like answered about land use and whether they would like a similar presentation and aerial flyover for lower Basin communities.
7.	Next Steps and Closing	Discussion
		Next Board meeting is December 7, 2017 at the Rotary Log Pavilion in Aberdeen.

**Chehalis Basin Board Members Present:**

- Dave Burnett, Confederated Tribes of the Chehalis Reservation [left after 12pm]
- Edna Fund, Chehalis River Basin Flood Authority
- J. Vander Stoep, Office of the Governor
- Jay Gordon, Chehalis River Basin Flood Authority
- Steve Malloch, Office of the Governor
- Tyson Johnston, Quinault Indian Nation
- Vickie Raines, Chair, Chehalis River Basin Flood Authority

**Chehalis Basin Board Ex Officio Members Present:**

- Gordon White, Department of Ecology, Office of Chehalis Basin (OCB)
- Justin Allegro, Department of Fish and Wildlife
- Bart Gernhart, Washington State Department of Transportation, for Kris Strickler
- Stephen Bernath, Department of Natural Resources
- Stu Trefry, Washington State Conservation Commission

**Board Staff/Board Guests Present:**

- Alice Rubin, Washington State Recreation and Conservation Office
- Betsy Dillin, Lewis County
- Bob Amrine, Lewis County Conservation District
- Brian Cochrane, Washington State Conservation Commission
- Chrissy Bailey, Department of Ecology (OCB)
- Colleen Granberg, Department of Natural Resources
- Cynthia Carlstad, Carlstad Consulting
- Dale Lewis, Office of Congresswoman Herrera-Butler
- Danielle Dan, Quinault Indian Nation
- Dave Bingaman, Quinault Indian Nation (ASRP Steering Committee)
- Emil Pierson, City of Centralia
- Erik Martin, Lewis County Flood Control Zone District
- Heather Page, Anchor QEA
- Hope Rieden, Confederated Tribes of the Chehalis Reservation
- Jason Gillie, Confederated Tribes of the Chehalis Reservation (ASRP Steering Committee)
- Jim Kramer, Ruckelshaus Center (Facilitator)
- John Hendrickson, Lewis County Flood Control Zone District (Citizen Representative)
- Julie Balmelli-Powe, Citizen
- Kahle Jennings, Chehalis Basin Partnership

- Ken Ghalambor, Ruckelshaus Center
- Kirsten Harma, Chehalis Basin Lead Entity
- Kris Koski, City of Aberdeen
- Lee Napier, Lewis County
- Mara Healy, Thurston County Conservation District
- Maria Hunter, Department of Fish Wildlife
- Michael Smell, Citizen
- Pierre Augare, Quinault Indian Nation
- Rob Duff, Governor's Office
- Scott Collyard, Department of Ecology
- Tim Kramer, Department of Fish Wildlife
- Trent Lougheed, City of Chehalis

### **Welcome, Introductions**

Chair Vickie Raines called the special meeting to order at 9:10 a.m., and welcomed the Board, staff, and audience. Board members, staff, and guests/participants provided brief introductions.

### **Consent Agenda**

The Board did not have additions or revisions to the November 2, 2017 agenda.

**BOARD DECISION:** Agenda approved by consensus with all voting member's thumbs up.

### **Approval of October 5, 2017 Meeting Summary**

The Board did not have additions or revisions to the October 5, 2017 Meeting Summary.

**BOARD DECISION:** October 5, 2017 Meeting Summary approved by consensus with all voting member's thumbs up.

### **Water Quality in the Upper Chehalis Basin**

#### ***Presentation by Ecology on water quality status and trends in the upper Chehalis Basin***

Scott Collyard (Environmental Assessment Program, Ecology) provided a summary of the current state of water quality in the upper Chehalis Basin and how water quality conditions have changed in relation to projects implemented over time. Of the 9,257 miles of waterways in the upper Chehalis, Ecology has assessed about 8% of streams and found that approximately 30% of streams assessed are meeting water quality standards. In contrast, 70% of the assessed waters are not meeting water quality standards, with the biggest water quality challenges being dissolved oxygen (DO), temperature, bacteria and pH.

The data that inform Ecology's water quality database are usually updated every 2-4 years. The most recent data in the existing database is from 2014 and the last major data collection effort for a large portion of the upper Chehalis Basin was in 2010. Scott noted that a lot of data is currently being collected for temperature as part of the Aquatic Species Restoration Plan (ASRP) and dam technical studies.

Since 1996, nearly \$200M in grant and loan funds have been provided by Ecology and the Recreation and Conservation Office (RCO) for projects in the upper Chehalis. The majority of the Ecology grants were related to total maximum daily load (TMDL) implementation, including construction and repair of wastewater treatment plants. The majority of RCO grants were related to protection and restoration of critical habitat and correction of fish passage barriers.

Along the Chehalis River mainstem in the upper basin, sediment loads are trending upward, and nutrients are consistently trending downward, though not significantly. Fecal coliform is also trending downward, with over 50 miles of streams delisted since the 1990s. Scott also noted that it is difficult to link any improvements in water quality to specific actions.

Key comments and discussion topics included:

- Scott noted that smaller tributaries in the upper Chehalis are not as well assessed as the Chehalis mainstem and larger tributaries.
- Board members discussed how certain treatments that will be included in the ASRP, such as riparian restoration, may also provide water quality benefits for issues like DO and temperature. The Board encouraged the ASRP Steering Committee to consider how restoration projects can achieve dual benefits for restoration and water quality, and to consider these issues when developing a long-term monitoring and adaptive management plan.
- Stephen Bernath (DNR) noted that significant investments by DNR and private industry towards repairing roads and removing fish passage barriers on forest lands was not included in the \$200M of water quality investments referenced in the presentation. The presentation also did not include land use changes, permits, local ordinances, and other agriculture related conservation programs which could provide water quality benefits.
- Board members discussed how many of the investments since the 1990s were for “low hanging fruit,” primarily for point-source issues, and that many of the grant programs available back then are no longer active. Future water quality improvements may be more challenging, given funding limitations and the need to address non-point sources of pollution.

### ***Perspectives in the Basin: Chehalis Basin Partnership***

Kahle Jennings (Chehalis Basin Partnership) provided an overview of the Chehalis Basin Partnership and recommendations for the Chehalis Basin Board to consider from the Chehalis Basin Watershed Management Plan, including:

- Furthering the US Geological Survey (USGS) study on groundwater flow
- Resolving issues related to exempt wells
- Developing tools for meeting water quantity needs
- Working with basin communities to develop flexible strategies for water rights
- Engaging the expertise of Chehalis Basin Partnership members

Key comments and discussion topics included:

- Board members discussed the importance of acknowledging and evaluating potential groundwater impacts from the ASRP, restorative flood protection, and downstream impacts from a dam.
- Jim Kramer (Ruckelshaus Center, Facilitator) noted that the Governor's Chehalis Basin Work Group's 2017-2019 budget recommendations included \$200K for an evaluation of water rights and water use in the Basin. If a 2017-2019 capital budget is approved, this study will move forward.
- Board members expressed interest in having staff identify ways that water quality and quantity issues could be addressed or coordinated with the aquatic species restoration plan.

### **Budget Proposal for Continuing Work through February 2018**

Gordon White (Ecology) reviewed a proposal to the Board for continuing to advance some work on priority elements of the Chehalis Basin Strategy from December 2017 through February 2018. At the August 3, 2017 Chehalis Basin Board meeting, the Board decided to sustain a critical path forward on most of the major elements of the 2017-2019 Strategy work program through November 2017 by repurposing carryover funds from the 2015-2017 biennium. A 2017-2019 capital budget has not been passed, and may not be passed before January or February 2018. Office of Chehalis Basin (OCB) staff recently worked with the Recreation and Conservation Office (RCO) to identify additional funds from 2015-2017 contracts, through savings or funds that could be borrowed from projects that are not scheduled to be constructed until the summer of 2018. The total funds available for work after November 2017 amounts to approximately \$630K (or \$210K/month) for work through February 2018.

OCB staff confirmed that work on the priority work elements listed below can continue from December 2017 – February 2018 with the total additional funds available from 2015-2017 contracts:

- General: funding for OCB staff and Ruckelshaus Center to continue communication with the Chehalis Basin Board (including Board meetings), supporting the Department of Fish and Wildlife (WDFW) and the Tribes in Aquatic Species Restoration Plan (ASRP) Phase 1 discussions with the Board and others, responding to legislative needs, and preparation for restart of the full Chehalis Basin Strategy effort once there is a budget, including contract amendments and tracking budget.
- Restorative Flood Protection Action: ensure the initial phase of outreach to landowners in the Newaukum is completed. Stop technical studies at an endpoint that allows them to restart efficiently when a budget is passed.
- ASRP: support review of the Phase 1 document, including ASRP core staff at WDFW, and Science Team members' availability to answer questions about Phase 1 document. Stop WDFW, Natural Systems Design, and Anchor technical studies at an endpoint that allows them to restart efficiently when a budget is passed.
- Environmental Impact Statement (EIS) for a Dam: continue discussing EIS scoping and other issues with the US Army Corps. Stop Anchor, WDFW and Ecology technical studies at an endpoint that allows them to restart efficiently when a budget is passed.
- Other staffing: support core staff at Tribes, Chehalis Basin Lead Entity, Chehalis River Basin Flood Control Zone District (FCZD), WA State Conservation Commission and WA Department of Natural Resources as necessary to participate in work during the December-February timeframe.

Key comments and discussion topics included:

- Jim Kramer clarified that the Anchor QEA and Natural Systems Design (NSD) consultant teams identified no fatal flaws with the proposal for continuing work through February; they will be able to reduce staffing through February 2017 and re-staff their respective projects at the fully anticipated level once a capital budget passes.
- Board members discussed how their original 2017-2019 work plan listed spring 2019 as the time when the draft project-level EIS for a dam, Phase 2 ASRP, feasibility evaluation for restorative flood protection (RFP), and land use analyses would all be available for the Board to consider as they decide on a long-term strategy. This schedule is already delayed at least three months and will be further delayed, which means a Board decision on a long-term strategy is unlikely during the 2017-2019 biennium.
- Regarding the EIS for a dam, Board members discussed how the language in the U.S. Army Corps of Engineers (Corps) Public Notice to “expedite” evaluation of the FCZD’s Department of the Army (DA) permit applications, pursuant to Section 214 of the Water Resources Reform and Development Act (WRRDA), was misrepresentative of the Board’s intent. The Board supports funding dedicated Corps staff through the WRRDA 214 agreement for purposes of National Environmental Policy Act (NEPA) review to address the questions and concerns raised related to a dam during review of the Programmatic EIS, but does not support expediting a decision on a permit for a dam until the Board and the public have been able to consider all actions being evaluated. Board members requested OCB staff draft a letter for the Board to review to send to the Corps to clarify.
- Board members asked for additional budget follow up, requesting that staff provide an update on progress made on the various elements of the 17-19 work plan as well as on work or tasks that are not progressing.

**BOARD DECISION:** The proposal for continuing work on priority elements of the Strategy through February 2018 was approved by consensus with all voting member’s thumbs up. The Board also approved by consensus with all voting member’s thumbs up for OCB staff to draft a letter to the Corps for the Board’s review. The letter is to clarify that they support dedicated funding for the Corps to conduct the environmental review of the dam consistent with the overall schedule for the Chehalis Basin Strategy, but not to make a permit decision until the Board and the public have been able to consider all actions being evaluated for the Chehalis Basin Strategy.

**FOLLOW-UP ACTION:** OCB Staff will draft a letter to the Corps for the Board’s review to clarify that they support dedicated funding for the Corps to conduct the environmental review of the dam consistent with the overall schedule for the Chehalis Basin Strategy, but not to make a permit decision until the Board and the public have been able to consider all actions being evaluated for the Chehalis Basin Strategy.

OCB staff will provide an update on progress made on the various elements of the 17-19 work plan as well as on work or tasks that are not progressing.

### **Aquatic Species Restoration Plan Update**

Maria Hunter (WDFW) provided a briefing on the development of the Phase 1 ASRP, including previewing initial expected outcomes and costs, and reviewing next steps. The Phase 1 ASRP will be completed by

November 30, and will include expected benefits for aquatic species, and anticipated range of investment in terms of actions and costs.

In the model used to estimate potential benefits from restoration in the Phase 1 ASRP, the Future No Action option represents what the basin will look like in the future if no additional action is taken. It accounts for the impacts of climate change, as well as the benefits of the maturation of riparian buffers in managed forests. It also assumes no additional degradation from development or human activities. In this scenario, model results show significant declines for all salmonid species, at both the mid-century and end of century time periods. Additionally, the Science and Review team concurred that these results would mean increased risk for extinction for Spring Chinook.

In both the moderate and high restoration scenarios, updated model results show that the potential benefits from restoration for salmon are significant when compared to the Future No Action scenario; this includes an increase of 300 to 570 percent for Spring Chinook, and an increase of 119 to 180 percent for Coho, by the end of the century. The estimated costs for each scenario are also significant. For the moderate restoration scenario, which includes restoration of 294 total miles, the costs range from \$400 - \$800 million. For the high restoration scenario, which includes restoration of 478 total miles, the costs range from \$700 million – \$1.3 billion.

After November 30, the ASRP Steering Committee will ask the Chehalis Basin Board, Tribal Councils, and WDFW to review the document and provide feedback by the end of January, at which time the Board can recommend any adjustments or refinements to be considered during development of the Phase 2 ASRP.

The Phase 2 ASRP will be completed in spring/summer 2018 (pending a capital budget), and will include specific information on reaches targeted for restoration, types of projects, refinement of costs, adaptive management principles, and phasing and planning for implementation.

Key comments and discussion topics included:

- WDFW and OCB staff clarified that the Phase 2 ASRP work will also consider modeled results for impacts to fish and the effectiveness of the ASRP scenarios resulting from implementation of different large-scale flood damage reduction actions, like a potential dam and restorative flood protection.
- Board members requested that graphics showing modeled benefits to fish include current conditions, future no action, mid-century, and end of century scenarios.
- Jim Kramer (Ruckelshaus Center, Facilitator) clarified that restoration benefits to chum are minimal because they spend limited time in the freshwater during the winter months in the lower portions of the basin.
- WDFW staff clarified that the modeled salmonid benefits mid-century are less than modeled benefits at the end of century largely because of early effects of climate change and the time necessary for full maturation of riparian buffers in forests.
- One Board member asked if there is any consideration for a recovery hatchery to protect the brood stock for Spring Chinook. Justin Allegro (WDFW) and Tyson Johnston (QIN) noted that this is a question that should be raised with the Co-Managers, not by the ASRP Steering Committee. If the



Board wants the Co-Managers to weigh-in on this question, they should include that request during their review of the Phase 1 ASRP.

- Stephen Bernath (DNR) noted if the Board reaches agreement on a version of the ASRP, they could consider capturing the plan in an agreement with federal agencies to address potential Endangered Species Act issues in the future.
- The ASRP Science and Review Team and Steering Committee have agreement on the methodology and findings in the Phase 1 ASRP, but the Steering Committee has not decided whether it will make a recommendation to the Board on a preferred level of restoration in the Phase 1 document.
- Board members and participants discussed how the level of analyses, incorporation of climate change, and results in terms of modeled salmonid improvements in the ASRP are unprecedented for any watershed on the West Coast. For comparison, the Washington State Department of Transportation (WSDOT) is required to remove over 800 fish passage barriers in the Puget Sound and the low range cost estimate is \$2.4 billion. There was no coordinated planning for this WSDOT effort and it is unlikely to achieve comparable benefits to what is modeled in the Chehalis Basin.
- Justin Allegro and Tyson Johnston were encouraged to go back to their respective agency and tribe to think through what it will take to review the Phase 1 document, what the timing of review will be, and when they will be ready to have a discussion with the Board on their initial thinking.

## **Land Use in the Upper Chehalis Basin: Past/Present/Potential Future**

### ***History of Forest Land Use in Upper Chehalis Basin***

Stephen Bernath (DNR) provided an overview of how forest practices have changed over time in the upper Chehalis Basin. "Forest practice" means any activity conducted on or directly pertaining to forest land and relating to growing, harvesting, or processing timber, or removing forest biomass. The Forest Practices Act of 1974 established the Forest Practices Board as the rule adoption body, and DNR as the implementer of the rules and act. The objectives of the Forest Practices Act are to protect public resources (fish, wildlife, water, and capital improvements of the state) co-incident with maintaining a viable timber industry.

In the upper Chehalis Basin, the number of forest practice applications for the last 5 years above Pe Ell included 75 small forest landowners (SFLOs) and 237 large landowners (LLOs) totaling 15,262 proposed acres of harvest. Small forest landowners average a little over 20 acres/application. Large landowners average a little over 70 acres/application. The number of applications above Boisfort for the last 5 years include 290 SFLOs and 181 LLOs, totaling over 19,000 acres proposed for harvest. The number of applications in the Neuwakum for the last 5 years include 221 SFLOs and 183 LLOs, totaling over 23,000 acres.

Key comments included:

- Stephen clarified that under current rules buffers average 90-140 feet on fish bearing streams, and non-fish bearing streams average 50 foot buffers.
- Some Board members noted that they would like to see a culvert inventory on small forest lands similar to the culvert inventory WDFW is doing in other parts of the Basin.

***Discussion of changes in land use and land cover from 1938-2013, and aerial tour of upper Chehalis Basin.***

Jim Kramer (Ruckelshaus Center, Facilitator) provided a presentation on land use and land cover in the upper Chehalis Basin to help create a common understanding among Board members regarding land use and land cover patterns. The presentation included a visual overview of the upper Basin using aerial videos, and review of a WDFW study on historic changes in land cover in the mainstem Chehalis River floodplain from 1938 to 2013. The presentation focused on the upper Basin because this is where concerns regarding development have primarily been focused, and is where urban development along I-5 is the most visible. The aerial tour highlighted that outside of the I-5 corridor there are large agricultural areas and rural residential development.

WDFW completed an aerial image analysis to determine changes in land cover in portions of the Chehalis River floodplain between 1938 and 2013. The study area was the mainstem Chehalis River floodplain, which totals 57,325 acres. Land cover was divided into three categories: agriculture (47% of floodplain), canopy (33% of floodplain), and development (4% of floodplain).

From 1938-2013, the analysis showed the following total net changes in land cover:

- 1,010-acre net increase in agriculture (1.8% of floodplain)
- 1,356-acre net decrease in canopy (-2.4% of floodplain)
- 686-acre net increase in development (1.2% of floodplain)

Looking only at the period from 1938 to the 1970s, the analysis showed the following net-changes in land cover:

- Increase in agriculture (49 acres per year)
- Decrease in canopy (-59 acres per year)
- Increase in development (7 acres per year)
  - I-5 opened in Centralia and Chehalis, 1954-1960
  - Chehalis/Centralia Airport expanded in the 1940s

In the more recent period of analysis, 1970s to 2013, the trends are different than from the entire 1938-2013 period:

- Decrease in agriculture (-21 acres per year)
- Increase in canopy (21 acres per year)
- Increase in development (10 acres per year) most development in city centers of Centralia, Chehalis, Grand Mound, Aberdeen (6 acres per year)

Regarding potential development pressure in the Chehalis River floodplain downstream to Aberdeen, more than half of the development potential (number of potentially developable lots) under current zoning regulations is anticipated in UGAs and incorporated areas on 7% of the buildable area in the Chehalis River floodplain. The remaining development potential is located on the remaining 93% of the buildable area in the floodplain in rural and unincorporated areas. Very little subdivision is needed to accommodate projected future floodplain development because of the number of existing, undeveloped lots in the floodplain.

Key comments included:

- Stephen Bernath (DNR) noted that “canopy” as defined in the WDFW analysis does not necessarily mean working forest. He also noted that the analysis did not include forest areas outside of the mainstem Chehalis River floodplain. Forested areas account for 80% of the entire Basin.

***Briefing from Centralia, Chehalis, and Lewis County Community Development Directors on planning for potential future land uses in their communities***

Trent Loughheed (Community Development Director, City of Chehalis), Lee Napier (Community Development Director, Lewis County), and Emil Pierson (Community Development Director, City of Centralia) provided the Board briefings on plans for potential future land uses in their respective communities.

Trent noted that most development in Chehalis except for the Chehalis-Centralia Airport and I-5 corridor is on Market Blvd. and eastward, which are outside of the floodplain and on the hillsides. The City has a zero-rise policy and identified a 156-acre area near Airport Road that has the potential to be excavated for flood storage in order to mitigate for fill in the floodplain. The City already owns 2/3 of the land, and there are 16 homes it plans to purchase on the remaining 1/3 of the land.

Lee noted that the Growth Management Act (GMA) does not allow for the expansion of Urban Growth Areas (UGAs) into floodplains. In terms of potential growth or expansion, cities can expand into UGAs, but they cannot further expand their UGAs into a floodplain. Lewis County does have Limited Areas of More Intensive Rural Development (LAMIRDs) like Adna and Onalaska, but these communities do not currently have critical infrastructure like water or sewer systems to accommodate significant new development.

Emil Pierson noted that in Centralia the entire area along the Chehalis River is zoned 1 unit per 5 acres, or is currently a park. In areas where the City’s ‘flood overlay’ is applied, development cannot include any fill without compensation (zero rise policy) and any new structures need to be 3 feet above the base flood elevation. 64% of Centralia’s housing stock was built prior to 1980; from today forward, Centralia is working to either elevate the structures in the floodplain or have new structures built outside of the floodplain. Regarding the future, the City has re-zoned areas outside of the floodplain to 8 units per acre to accommodate growth; in one location, this will allow for 1700 new units outside of the floodplain.

Key comments and discussion topics included:

- Board members discussed comments received on the Programmatic EIS that expressed concern about how construction of a dam could encourage new development. Lee Napier noted that in Lewis County, much of the floodplain is zoned Agricultural Resource Lands (ARL), and outside of those areas it is largely small rural development. Lee noted that to change the development potential in these areas, a Comprehensive Plan change and potentially legislative action would be necessary. Lee does not think whether land is in the floodplain or not is what drives development in these portions of Lewis County.
- Lee noted that Lewis County, Chehalis, and Centralia all have Certified Floodplain Managers on their staff and are constantly looking at ways to protect people in the floodplain.
- Board members discussed comments received on the PEIS that expressed concern about how Restorative Flood Protection (RFP) actions could involve moving people out of the floodplain from

agricultural lands to rural or forest lands, and whether that was possible under GMA. Gordon White noted that it would likely require a change in the GMA around no-net loss of agricultural land.

**FOLLOW-UP ACTION:** OCB staff asked Board members to consider if there are other questions they would like answered about land use and whether they would like a similar presentation and aerial flyover for lower Basin communities. Board members can send comments to Jim and Chrissy.

### **Closing and Next Steps**

Meeting was adjourned at 4:00 pm. The next Board meeting is scheduled for Thursday, December 7, 2017 at the Rotary Log Pavilion in Aberdeen.

### **Other topics:**

- Chrissy Bailey (Ecology) noted that the Board needs to discuss a permanent location for future Board meetings. Otherwise, meetings are considered special public meetings under the Open Public Meetings Act (versus regular public meetings) and the notification requirements are tedious. Chair Raines suggested the Board consider establishing a regular meeting location at the December meeting, and that exceptions can be made when Board meetings include a tour or site visit around the Basin.