

CHEHALIS BASIN STRATEGY: SUMMARY OF GROUPS AND WORK EFFORTS (DRAFT 6/28/17)

This document provides a summary of the primary groups and organizations involved in the Chehalis Basin Strategy, and the major work elements and related studies for the 2017-2019 biennium. This document is intended to serve as a discussion piece for the Chehalis Basin Board's July 7 meeting, when the Board discusses the organizational structure for coordination and oversight of activities related to the Chehalis Basin Strategy.

Each section includes a brief overview, major milestones (where appropriate), members, and contact information. A draft Chehalis Basin Strategy 2017-2019 organizational structure diagram was also developed for review by the Chehalis Basin Board that mirrors the content in this document.

Groups

Office of Chehalis Basin (OCB)/Chehalis Basin Board

Overview

The Office of Chehalis Basin is charged to aggressively pursue implementation of an integrated strategy for long-term flood damage reduction and aquatic species habitat restoration in the Chehalis River Basin. The Office will administer funding provided by the Legislature to implement the Chehalis Basin Strategy. The new Office will officially launch in July 2017, pending approval of a State budget.

The Board will build on the previous work of the Governor's Chehalis Basin Work Group (Work Group). The Chehalis Basin Board consists of seven voting members: two members appointed by the Governor; one each appointed by the Confederated Tribes of the Chehalis Reservation and the Quinault Indian Nation; and three members appointed by the Chehalis River Basin Flood Authority. Five State agency directors or their designees will serve as ex officio members. The Chehalis Basin Board may also consider inviting a representative from the Governor's Office to participate in the meetings.

Operating Authority and Decision-making Structure

In 2016, House Bill 2856 was passed to establish the Office of Chehalis Basin within the Department of Ecology. The same bill created the Chehalis Basin Board to oversee implementation of the Chehalis Basin Strategy, supported by the Office of Chehalis Basin.

The Chehalis Basin Board is anticipated to develop and finalize operating procedures and guiding principles, including decision-making process, code of ethics/conflict of interest policy, and other administrative procedures during their initial meetings in 2017.

Staffing and Support

Office of Chehalis Basin and Ruckelshaus Center staff will provide facilitation and administrative support for the Chehalis Basin Board.

Meeting Frequency

The Chehalis Basin Board is anticipated to meet approximately once a month.

Milestones

In addition to the milestones listed below, regular meeting topics will include budget updates and decisions, opportunities to hear from different interests and groups in the Basin, monitoring of the major 2017-2019 work elements – including the Aquatic Species Restoration Plan, project-level EIS for a dam on the upper Chehalis River, restorative flood protection analyses, local flood damage reduction projects, floodplain management, and floodproofing – and development of a set of long-term recommendations for the Chehalis Basin Strategy.

- May 2017 – all members of the Chehalis Basin Board designated
- July 2017 – first meeting of the Chehalis Basin Board and launch of OCB
- September 2017 – OCB Director hired
- October 2018 – Chehalis Basin Board 2019-2021 budget recommendations to Governor
- May 2019 – Chehalis Basin Board recommendations on long-term strategy

Chehalis Basin Board Members

- David Burnett (Confederated Tribes of the Chehalis Reservation)
- Edna Fund (Lewis County Commissioner)
- J. Vander Stoep (Private Attorney, Pe Ell Alternate Flood Authority)
- Jay Gordon (Washington Dairy Federation and Chehalis Farmer)
- Steve Malloch (Western Water Futures)
- Tyson Johnston (Vice President, Quinault Indian Nation)
- Vickie Raines (Grays Harbor County Commissioner, Chair Flood Authority)
- *Ex-officio members:*
 - Gordon White (Washington Department of Ecology)
 - Justin Allegro (Washington Department of Fish and Wildlife)
 - Kris Strickler (Washington Department of Transportation)
 - Stephen Bernath (Washington Department of Natural Resources)
 - Stu Trefry (Washington Conservation Commission)

Contact

- Chrissy Bailey, Office of Chehalis Basin Project Manager (Ecology) - chr461@ECY.WA.GOV; (360) 407-6781
- Jim Kramer, Chehalis Basin Board Facilitator (Ruckelshaus Center) - jim@jkramer.co; (206) 841-2145

Aquatic Species Restoration Plan Steering Committee

Overview

The ASRP Steering Committee consists of representatives from the Washington Department of Fish and Wildlife, Quinault Indian Nation, and Confederated Tribes of the Chehalis Reservation, and is responsible for developing and revising the Aquatic Species Restoration Plan (ASRP) of the Chehalis Basin Strategy. This includes developing short- and long-term strategies, selecting priority reaches/sub-watersheds, prioritizing and sequencing actions, reviewing and selecting projects, overseeing the Monitoring and Evaluation Committee, preparing biennial budget requests, coordinating with the Chehalis Lead Entity, and identifying and addressing potential conflicts that could impact project implementation. The ASRP Steering Committee will communicate its decisions and recommendations to the Chehalis Basin Board. The Chehalis Basin Board will consider the ASRP Steering Committee decisions and recommendations in implementing the Chehalis Basin Strategy.

The Monitoring and Evaluation Committee will be created by the Steering Committee from the pool of WDFW, Tribal, and Ecology staff most familiar with the development and implementation of monitoring and adaptive management programs, as well as policy and technical experts from the restoration community. The Monitoring and Evaluation Committee is responsible for designing and implementing the ASRP monitoring program consistent with the goals and objectives for the ASRP, identifying and addressing data gaps, coordinating data management, reviewing research proposals, and submitting research budgets and recommendations to the ASRP Steering Committee.

In addition, a Science Team will engage with the ASRP Steering Committee. The Science Team will provide input on many aspects of the plan as it is developed, including restoration priorities, scientific foundation, goals, measurable objectives, model results, strategies, actions, sequencing of implementation and monitoring/adaptive management, and will review draft sections of the ASRP and provide feedback to the authors and the ASRP Steering Committee.

The Chehalis Basin Lead Entity's relationship to the ASRP Steering Committee is described in the Chehalis Basin Lead Entity section later in this document.

Operating Authority and Decision-making Structure

The Washington Department of Fish and Wildlife, Quinault Indian Nation, and Confederated Tribes of the Chehalis Reservation developed and approved an ASRP Steering Committee charter, in which voting membership consists of Washington State Department of Fish and Wildlife, Quinault Indian Nation, and

Confederated Tribes of the Chehalis Reservation. Each voting entity appoints one policy and one technical representative. The policy representative will serve as the voting representative on the ASRP Steering Committee decisions unless he/she designates someone else to participate in their place. The technical representative will provide technical input and perspective on the issues before the ASRP Steering Committee.

The ASRP Steering Committee requested the Washington Department of Ecology, Washington Department of Natural Resources, and Chehalis Basin Lead Entity participate as ex-officio members of the ASRP Steering Committee. The ASRP Steering Committee may choose to add additional members at its discretion.

The ASRP Steering Committee uses a consensus model for decision making. Consensus is presumed unless an objection is formally lodged at the meeting if a representative is present, or within a week of being notified of a decision if a party's representative is not present. The reasons for the objection must be provided in writing to the Steering Committee members and incorporated as part of the official record for the decision. In instances where consensus amongst the three policy representatives cannot be attained, decisions will be made based on majority vote. Votes will only be allowed in instances where two-thirds of the voting member entities (Quinault Indian Nation, Confederated Tribes of the Chehalis, WDFW) are present.

Staffing and Support

The ASRP restoration manager (WDFW) is responsible for the continued development of the ASRP on behalf of and at the direction of the ASRP Steering Committee, basin-wide coordination among external partners, integration of key research studies and technical reports into the plan, and is the point of contact for the Steering Committee with the Office of the Chehalis Basin.

Meeting Frequency

The Steering Committee meets regularly on the first and third Wednesday of each month.

Milestones

- Fall 2017 - draft summary document that includes vision, goals, objectives, initial strategies, and cost estimates shared with governing entities and key stakeholders for review
- July 2018 - full draft of the ASRP shared with governing entities and key stakeholders for review
- January 2019 – full draft of the ASRP available for public review

Members

- Dave Bingaman (policy representative) and Mark Mobbs (technical representative) for the Quinault Indian Nation

- Bill Secena (policy representative) and Jason Gillie (technical representative) for the Confederated Tribes of the Chehalis Reservation
- Dave Price (policy representative) and Maria Hunter (ASRP manager) for the Washington Department of Fish and Wildlife
- Ex-officio members (non-voting):
 - Alan Lebovitz (Washington Department of Natural Resources)
 - Chrissy Bailey (Washington Department of Ecology)
 - Kirsten Harma (Chehalis Basin Lead Entity)
- Science Team members, unless otherwise designated:
 - Chip McConnaha (ICF)
 - Cynthia Carlstad (Carlstad Consulting)
 - John Ferguson (Anchor QEA)
 - Larry Lestelle (Northwest Biostream)
 - Tim Abbe (Natural Systems Design)
 - Tim Beechie (NOAA)
 - TBD (Scientist appointed by Chehalis Tribe)
 - TBD (Scientists appointed by WDFW)
- Monitoring and Evaluation Committee Team members:
 - To be determined

Contact

- Maria Hunter, ASRP Manager (WDFW) - Maria.Hunter@dfw.wa.gov; (360) 701-6086

Chehalis Basin Lead Entity

Overview

The Chehalis Basin Lead Entity (Lead Entity) allocates state and federal salmon recovery (SRFB) funding, including prioritizing habitat restoration projects primarily focused on salmon species and coordinating the work of hundreds of volunteers and professionals to sponsor and implement the Chehalis Basin Salmon Habitat Restoration and Preservation Strategy for WRIA 22 and 23.

In relationship to the ASRP Steering Committee, the Lead Entity—at the request of the Steering Committee and within available resources—will support implementation of the ASRP. The Steering Committee may seek advice and assistance from the Lead Entity to identify and prioritize habitat restoration projects, administer projects and grants, determine landowner willingness, and seek partners and project sponsors. The Lead Entity may advise the ASRP Steering Committee on the selection of strategies and actions and serve as the interface between interested landowners, project sponsors, and the Steering Committee upon request.

Operating Authority and Decision-making Structure

The purpose of the Lead Entity is to fulfill the requirements of Chapter 77.85 RCW, Salmon Recovery, for Watershed Resource Inventory Areas 22 and 23.

The Habitat Work Group is the steering body for the Lead Entity. The Habitat Work Group takes action through the consideration and passage of motions or resolutions during meetings. Passage of a motion or resolution, with the exception of amending bylaws, requires a simple majority vote of those present at meetings. The Habitat Work Group requires a vote of two-thirds majority to amend bylaws or to exclude a project from moving forward during a current year's ground round. The Lead Entity Coordinator may coordinate such votes at meetings, by mail, or email.

Staffing and Support

The Lead Entity Coordinator is in charge of the day-to-day operations of the Lead Entity.

Meeting Frequency

The Habitat Work Group meets approximately once a month.

Member Tribes, Groups/Organizations

- Chehalis Basin Fisheries Task Force
- Chehalis River Basin Land Trust
- Chehalis River Council
- Citizens of Thurston, Lewis, and Grays Harbor Counties
- Confederated Tribes of the Chehalis Reservation
- Creekside Conservancy
- Grays Harbor Conservation District
- Lewis County
- Lewis County Conservation District
- Mason Conservation District
- Quinault Indian Nation
- Thurston County
- US Department of Fish and Wildlife
- Washington Department of Ecology
- Washington Department of Fish and Wildlife
- Wild Fish Conservancy

Contact

- Kirsten Harma, Watershed Coordinator (Chehalis Basin Lead Entity) - kharma@chehalistribe.org; (360) 488-3232

SEPA/NEPA Government Advisory Team

Overview

For the 2017-2019 biennium, Ecology anticipates, in tandem with the U.S. Army Corps of Engineers, convening a Government Advisory Team to provide consultation and coordination during development of the project-level SEPA and National Environmental Policy Act (NEPA) EIS for a potential dam on the upper Chehalis River. During the 2015-2017 biennium, Ecology, as the State Environmental Policy Act (SEPA) lead agency, consulted with a Government Advisory Team during the preparation of the Programmatic SEPA Environmental Impact Statement (EIS). The Government Advisory Team was made up of representatives from state, federal, and tribal interests. Ecology sought input from members of the Government Advisory Team either in a large group meeting or through individual discussions during the following SEPA milestones:

1. Purpose and need, draft alternatives and pre-scoping coordination
2. Scoping
3. Draft and final range of alternatives
4. Identification of potential impacts and proposed mitigation
5. Preview of and input on the Draft Programmatic EIS
6. Final Programmatic EIS

In addition to the Government Advisory Team, other key groups that were consulted with during the Programmatic EIS process included the Governor's Chehalis Basin Work Group, Tribal staff and consultants, and Chehalis River Basin Flood Authority.

Operating Authority and Decision-making Structure

The 2015-2017 Government Advisory Team did not have a formal operating authority or decision-making structure. The Government Advisory Team played a strictly advisory role for Ecology. If a Government Advisory Team is reconvened in 2017-2019, the structure will be similar.

Staffing and Support

Ecology staff, including the Chehalis Basin Strategy Project Manager and EIS project manager, are anticipated to take the lead on administrative duties related to convening a Government Advisory Team.

Meeting Frequency

Ecology anticipates meeting with members of the Government Advisory Team in large-group meetings or through individual discussions during key milestones in the development of the EIS, e.g., purpose and need, scoping, alternatives development, and draft EIS review.

GAT Invitees (2015-2017)

- Mark White (Confederated Tribes of the Chehalis Reservation)
- Mark Mobbs and Junior Goodell (Quinault Indian Nation)
- Sharon Love (Federal Highways Administration)
- Jeff Fisher and Mike Grady (NOAA Fisheries)
- Dave Martin (U.S. Army Corps of Engineers)
- Curtis Tanner and Miranda Plumb (U.S. Fish and Wildlife Service)
- Mark Clark (Washington State Conservation Commission)
- Rob Whitlam (Washington Department of Archaeology and Historic Preservation)
- Justin Allegro (Washington Department of Fish and Wildlife)
- Steven Bernath, Chuck Turley, Sue Casey (Washington Department of Natural Resources)
- Derek Sandison (Washington State Department of Agriculture)
- Mark Barkley and Paul Johnson (Washington State Department of Commerce)
- Gordon White, Brenden McFarland, Chrissy Bailey, and Jessica Hausman, Perry Lund (Ecology)
- Kevin Miller (Washington State Department of Transportation)

Contact (until an EIS project manager is designated)

- Chrissy Bailey, Office of Chehalis Basin Project Manager (Ecology) - chrb461@ECY.WA.GOV; (360) 407-6781

Flood Damage Reduction Technical Committee

Overview

In the 2015-2017 biennium, a flood damage reduction technical committee was formed to discuss and review the technical work related to flood damage reduction carried out for the Chehalis Basin Strategy. It is anticipated that a technical committee will again be created for the 2017-2019 biennium to provide input on project elements such as:

- Approach and schedule for the technical work
- Technical assumptions and what data will drive the analyses
- Evaluation of research and initial conclusions
- Technical memoranda and final conclusions

This will require flood damage reduction technical committee members to participate in technical and policy workshops, and committee meetings as needed. The flood damage reduction technical committee would work on technical aspects related to all flood damage reduction studies, including but not limited to: project-level EIS for a dam, restorative flood protection analyses, Aberdeen/Hoquiam North Shore levee, local flood damage reduction projects, floodproofing, and floodplain management. Subcommittees may be formed for specific technical areas to focus technical reviews and make the technical committee process efficient.

Operating Authority and Decision-making Structure

The 2015-2017 flood damage reduction technical committee did not have a formal operating authority or decision-making structure. The flood damage reduction technical committee advised and provided technical feedback on flood damage reduction actions and reports. If a flood damage reduction technical committee is reconvened in 2017-2019, the structure will be similar however it is anticipated that Ecology will convene and facilitate the technical committee.

Staffing and Support

Ecology staff, including the Chehalis Basin Strategy Project Manager and Floodplain Management/Floodproofing Project Manager, are anticipated to take the lead on administrative duties related to convening a flood damage reduction technical committee.

Meeting Frequency

Ecology anticipates meetings of the flood damage reduction technical committee will occur in large-group settings or through subcommittee discussions at key milestones in the development of the technical analyses related to flood damage reduction e.g., technical assumptions, draft and final reports, and progress reports.

Participants (anticipated)

- Confederated Tribes of the Chehalis Reservation
- Local jurisdictions
- National Oceanic and Atmospheric Administration
- Quinault Indian Nation
- Technical consultants
- Washington Conservation Commission
- Washington Department of Ecology
- Washington Department of Fish and Wildlife
- Washington Department of Natural Resources
- Chehalis Flood Authority

Contact (until otherwise designated)

- Chrissy Bailey, Office of Chehalis Basin Project Manager (Ecology) - chrb461@ECY.WA.GOV; (360) 407-6781

Chehalis River Basin Flood Authority

Overview

The original purpose of the Chehalis River Basin Flood Authority was to develop a basin-wide set of solutions to address flooding issues. However, after the formation of the Governor’s Work Group in 2012, the purpose of the Flood Authority transformed to prioritizing and overseeing local flood-damage reduction projects, and overseeing work with local governments to improve floodplain management regulations. It is anticipated the Flood Authority will advise the Chehalis Basin Board on these topics. The Flood Authority project committee reviews proposed local flood damage reduction projects from basin jurisdictions and provides a prioritized list of projects to recommend for funding during each biennium. The Flood Authority also oversees a basin-wide flood monitoring and alert system.

Operating Authority and Decision-making Structure

In response to the 2007 flood, local jurisdictions in the basin signed an interlocal agreement to form the Chehalis River Basin Flood Authority. The Flood Authority uses a consensus based model for decision-making.

Staffing and Support

The Flood Authority utilizes contract staff to provide facilitation and day-to-day administrative and logistical support. Lewis County asks as the fiscal agent for the Flood Authority.

Meeting Frequency

The Flood Authority meets once a month, either in person or via conference call.

Members

- Alan Vanell (Bucoda)
- Brian Shay (Hoquiam)
- Bud Blake (Thurston County)
- Dan Wood (Montesano)
- De Anne Shaw (Aberdeen)
- Edna Fund (Lewis County)
- Frank Chestnut (Cosmopolis)

- Jim Haslett (Napavine)
- Lonnie Willey (Pe Ell)
- Richard Armstrong (Oakville)
- Ron Averill (Centralia)
- Trent Loughheed (Chehalis)
- Vickie Raines (Grays Harbor County)

Contact

- Scott Boettcher, SBGH-Partners (Staff to Flood Authority) - scottb@sbgh-partners.com; (360) 480-6600
- Jim Kramer, Kramer Consulting (Facilitator to Flood Authority) - jim@jkramer.co; (206) 841-2145

Chehalis Basin Strategy Project Management Team

Overview

In the 2015-2017 biennium, the Chehalis Basin Strategy Project Management Team oversaw the work of the technical consultants and state agencies working on development of the Chehalis Basin Strategy. The Project Management team met bi-weekly and provided a regular venue for communication and oversight of the broad features of the work plan and budget, coordinated on response to emerging issues, and made recommendations to the Governor's Chehalis Basin Work Group. Members included staff from the Washington Department of Ecology, Washington Department of Fish and Wildlife, Anchor QEA, and Ruckelshaus Center.

It is anticipated that a Project Management Team will continue in the 2017-2019 biennium, with guidance and direction from the OCB Director. In addition to the Project Management Team, the OCB Director may also consider the development of two consultant management core teams for the two major consultant contracts: Anchor QEA for the SEPA/NEPA project-level EIS and Natural Systems Design for the restorative flood protection analyses.

Operating Authority and Decision-making Structure

The 2015-2017 Project Management Team did not have a formal operating authority or decision-making structure. Recommendations regarding the work plan and budget were provided directly to the Governor's Chehalis Basin Work Group.

It is anticipated that the Office of Chehalis Basin would convene a Project Management Team in 2017-2019 and participants would report to the OCB Director, who would provide oversight, direction, and guidance to the team.

Staffing and Support

Ruckelshaus Center staff provided the 2015-2017 Project Management Team administrative and facilitation duties.

Meeting Frequency

In 2015-2017, the Project Management Team met bi-weekly via conference call or in-person meetings.

Members (2017-2019 anticipated)

- Quinault Indian Nation
- Technical consultants (Anchor QEA, NSD)
- Ruckelshaus Center
- Washington Department of Ecology
- Washington Department of Fish and Wildlife

Contact (until OCB Director is designated)

- Chrissy Bailey, Office of Chehalis Basin Project Manager (Ecology) - chrb461@ECY.WA.GOV; (360) 407-6781

Work Elements and Related Studies for the 2017-2019 Biennium

This section provides a summary of the major work elements and related studies for the 2017-2019 biennium recommended by the Governor's Work Group. Each section includes a brief overview, major milestones, and key participants. This work plan will be refined by the Chehalis Basin Board in response to the adopted level of funding and adapting to additional needs for funding key objectives of the plan. An accompanying tracking document is also being developed that will provide more specificity regarding each of the specific analyses – including a work plan, technical assumptions, deliverables, and contact information – contained within each major work element.

Aquatic Species Research/Studies

Current research/studies planned for the 2017-2019 biennium include development of riparian and culvert restoration plans and approaches, better understanding the Chinook and steelhead population structure, continuation of riverscape studies, identifying how temperature and habitat are connected to fish distribution, an extensive evaluation of off-channel habitat, NOAA watershed characterization and life-cycle model, Ecosystem Diagnosis and Treatment (EDT) modeling, flow and water quality modeling, and hydraulic modeling to evaluate restoration scenarios. These studies are being conducted for multiple purposes, including to provide more certainty of the impacts and benefits of restoration activities for consideration in the project-level EIS for the dam and restorative flood protection analyses, and to guide development of the long term Aquatic Species Restoration Plan. Completed studies can be found [here](#).

Milestones

- July 2017 – new and continued aquatic species restoration analyses initiated

Participants

- Washington Department of Fish and Wildlife
- Washington Department of Ecology
- Technical consultants (Anchor QEA, Natural Systems Design, and subcontractors)
- Washington Department of Natural Resources
- National Oceanic and Atmospheric Administration

Aquatic Species Restoration Plan

Historically, the Chehalis Basin has been one of the least studied basins in the state of Washington despite its important salmon runs and diversity of aquatic species. Comprehensive data collection on salmon and other species was initiated four years ago. Continued data collection, research, and analyses as outlined above will develop a more robust and empirically based understanding of the habitat and aquatic species in the Chehalis Basin, and contribute to development of the basin-wide Aquatic Species

Restoration Plan (ASRP). This work will be informed by and include various modeling efforts, as well as initiation of a monitoring and adaptive management program.

Milestones

- October 2017 – scientific foundation, and draft goals, measurable objectives, and initial strategies available for review by governing entities and key stakeholders
- March 2018 – revised summary of goals, objectives and initial strategies
- Spring/Summer 2018 – initiate permitting for early action reach projects
- Summer 2018 – construction of fish barrier removal projects
- Fall 2018 – implementation strategies and final draft plan
- January – final draft plan available for public review

Participants

- ASRP Steering Committee
- Washington Department of Fish and Wildlife
- Confederated Tribes of the Chehalis Reservation
- Quinault Indian Nation
- Technical consultants (Anchor QEA, Natural Systems Design, and subcontractors)
- Washington Department of Ecology
- Washington Department of Natural Resources

Large-scale Flood Damage Reduction Studies

Project-level EIS for Potential Dam on Upper Chehalis River

A project-level environmental review for the dams being considered on the mainstem Chehalis River will begin in 2017-2019 to address questions raised during public review of the draft Programmatic EIS and determine the feasibility to mitigate the impacts of the dam. At this time, it is anticipated this work will include applying for initial permits required to start the formal State Environmental Policy Act (SEPA) and National Environmental Policy Act (NEPA) processes. Work will include draft project-level SEPA and NEPA EISs, with supporting studies (cultural, wetlands, biological, water quality, geotechnical, WDFW aquatic species studies, etc.), modeling (EDT, NOAA watershed, hydrologic/hydraulic, water quality), and preliminary information from the Doty Hills Fault Investigation being conducted by DNR. Studies completed thus far related to a potential dam can be found [here](#). Prior technical studies and modeling have been carried out primarily by Anchor QEA and their subcontractors, Ecology and Portland State University, WDFW, and DNR.

Draft project-level SEPA and NEPA EISs are anticipated to be completed during the 2017-2019 biennium, but not final SEPA and NEPA EISs. The Department of Ecology will be lead agency for the SEPA EIS and the U.S. Army Corps of Engineers will be the lead agency for the NEPA EIS. Input from tribes will be solicited at key points throughout development of the Draft EIS, as will input from interested agencies

(likely via the Government Advisory Team as described above). Input would likely be solicited on the topics of EIS purpose and need, scoping notice and process, proposal objectives, range of alternatives, and potential impacts and mitigation.

The Chehalis Basin Board will be engaged in reviewing the draft scope and comments on scoping, and updated on progress during the development of the EISs.

Milestones

- July 2017 – continued dam analyses initiated
- September 2017 – public scoping for EIS
- January 2019 – draft project-level EIS issued
- Fall 2019 – final project-level EIS

Participants

- U.S. Army Corps of Engineers
- Washington Department of Ecology
- Lewis County Flood Control Zone District (project sponsor for permit applications and environmental review)
- Technical consultants (Anchor QEA and subcontractors)
- *Government Advisory Team (see above)*

Restorative Flood Protection Analyses

The 2015-2017 [Preliminary Scientific Assessment of a Restorative Flood Protection Approach for the Upper Chehalis River Watershed](#) will be complemented by proposed work in the 2017-2019 biennium to advance feasibility evaluation for the Restorative Flood Protection approach. The proposed work focuses on addressing critical data gaps, analyses, and designs for a pilot sub-basin in response to comments received during review of the draft PEIS. The approach will advance the analysis of this action throughout the entire potential treatment area, but will focus feasibility evaluation in the North and South Forks of the Newaukum basin. Technical studies have been carried out primarily by Natural Systems Design and their subcontractors. Work proposed in 2017-2019 will include landowner and community outreach, hydraulic and hydrologic modeling, conceptual and pre-permit level design, and preliminary evaluation of relocation, buy-out, and upland land-use strategy.

Milestones

- July 2017 – new and continued analyses initiated
- January 2019 – draft report
- Fall 2019 – final report

Key Participants

- Lewis County
- National Oceanic and Atmospheric Administration
- Technical consultants (Natural Systems Design and subcontractors)
- Washington Department of Ecology
- Washington Department of Fish and Wildlife
- Washington Department of Natural Resources

Aberdeen/Hoquiam North Shore Levee

The proposed Aberdeen/Hoquiam North Shore Levee would protect approximately 2,700 properties in the cities of Aberdeen and Hoquiam from tidally-influenced coastal floods and from high-water levels in the Chehalis, Wishkah and Hoquiam rivers. The proposed project includes approximately 5.8 miles of levees, including elevated roadways, earthen berms and floodwalls, as well as a network of pumps to convey rainfall out of the protected area.

Proposed work in 2017-19 includes obtaining Federal Emergency Management Agency (FEMA) approval of the levee design (CLOMR, or “Conditional Letter of Map Revision”); submitting applications for permits; and completing final design documents incorporating FEMA and permit requirements.

Milestones

- Summer 2017 – Submittal of 60% design documents to FEMA.
- Winter 2017 – Obtaining FEMA approval (CLOMR)
- Spring 2018 – Permit applications
- Fall/Winter 2018/2019 – Final Aberdeen/Hoquiam North Shore Levee design and operations plan

Key Participants

- Cities of Aberdeen and Hoquiam
- Washington Department of Ecology
- Washington Department of Fish and Wildlife
- FEMA
- Regulatory and permitting agencies
- Chehalis River Basin Flood Authority

Local-scale Flood Damage Reduction Studies and Projects

Floodplain Management/Floodproofing

Technical consultants overseen by the Flood Authority continue to work with local governments to ensure that new floodplain development does not impact floodplain ecological function or cause

additional harm for residents and structures that are located in the floodplain. This includes work on improving and revising land use regulations and practices. Improved Land Use Management would protect remaining floodplain functions and prevent future flood damage by minimizing floodplain development. Some of the recommended revisions would restrict the creation of developable parcels in the floodplain through open space preservation, subdivision set asides, and low-density zoning. Other recommendations would reduce adverse impact and damage to future development in the floodplain, and include filling restrictions and freeboard elevation requirements. In addition, Work Group members recently approved a scope of work for a land use analysis that would assess how current land use plans and regulations protect critical areas within sample areas in the Chehalis Basin.

The City of Centralia and Thurston County have also developed community-wide floodproofing plans to protect homes and businesses from flood damage through elevation, acquisition, and other structure retrofit projects. Floodproofing also includes protecting livestock and farm investments during flooding events by constructing farm pads and creating evacuation routes. Farm pads are constructed of fill and provide an area elevated above flood levels to hold livestock and critical farm equipment during a flood.

Proposed work in 2017-2019 includes developing the framework for a basin-wide floodproofing program. Technical work includes developing a comprehensive inventory of flood-prone buildings. Policy development including review by the Chehalis Basin Board includes objectives for flood damage reduction; minimum requirements to participate; and a funding strategy including cost-sharing. The early focus is likely in Centralia and Thurston County for elevation, acquisition, and other structure retrofit projects. In addition, there will be continued work with local governments to improve floodplain management standards. The OCB will have a dedicated staff member focused on floodproofing and floodplain management efforts.

Milestones

- July 2017 – new land use analyses initiated
- July 2017 – OCB floodproofing program launched
- September 2018 – floodproofing program draft to Flood Authority and Chehalis Basin Board
- December 2018 – Recommended floodproofing Program adopted by Board
- January 2019 – draft land use report
- Fall 2019 – final land use report

Key Participants

- Washington Department of Ecology
- Technical Consultants (French & Associates, consultant to the Flood Authority)
- Flood Authority
- Local Jurisdictions
- Washington State Conservation Commission

- Grays Harbor, Lewis, and Thurston Conservation Districts

Local Flood Damage Reduction Projects

Many local flood damage reduction projects have been completed and others are underway in communities across the basin to protect key infrastructure like roads and wastewater treatment plants from flood damage and others to restore individual floodplain areas. These local projects are: (a) capable of being completed within the funding cycle, (b) supported by the jurisdiction effected and (c) vetted and advanced through the Chehalis River Basin Flood Authority's Chehalis Basin Projects Committee. The State Capital Budget has been the primary funding source for local projects. Proposed work in 2017-2019 includes continued planning, design and of priority local projects, including the Centralia China Creek (Phase II) flood and habitat mitigation project, Montesano Wastewater Treatment Plant Wynoochee River bank protection project, and Thurston County Independence Road flood study.

Milestones

- July 2017 – new local projects begin
- October 2018 – proposed project list for 2019-2021 biennium

Key Participants

- Flood Authority Projects Committee
- Basin tribes and local jurisdictions
- Washington Department of Ecology

Long-Term Strategy Assessment

The Chehalis Basin Board will oversee the development of a long-term strategy assessment that will inform their deliberations on a long-term Chehalis Basin Strategy for funding and implementation beyond the 2017-2019 biennium. This assessment will build off the 2015-2017 Programmatic EIS and will include new information developed in the 2017-2019 work elements (project-level NEPA/SEPA EIS[s] for a dam, restorative flood protection analyses, Aberdeen Hoquiam North Shore Levee analyses, floodproofing/floodplain management, ASRP). The assessment will also include an updated economic analysis and ecosystem services evaluation of flood damage reduction and aquatic species restoration alternatives.

A public process will engage the basin community on new information and findings through presentations and meetings, and include a draft report and formal public comment process for the assessment (separate from SEPA/NEPA). This will be followed by a final report that includes the Chehalis Basin Board's long-term Chehalis Basin Strategy.

Milestones

- January 2019 – Draft long-term strategy assessment

- May 2019 – Final long-term strategy assessment

Key Participants

- Chehalis Basin Board
- ASRP Steering Committee
- Technical consultants (Anchor QEA, NSD, and their subcontractors)
- Washington Department of Ecology
- Washington Department of Fish and Wildlife
- Quinault Indian Nation
- Confederated Tribes of the Chehalis Reservation