

MEMORANDUM

Date: May 13, 2021
To: Chehalis Basin Board
From: Andrea McNamara Doyle, Office of Chehalis Basin Director
Re: Draft Chehalis Basin Board 2021-2023 Capital Budget Spending Plan

This memorandum was developed to provide a more detailed, written summary of the potential major work elements and projects presented at the May 1, 2021, Chehalis Basin Board meeting for consideration as part of the Board’s 2021-2023 Capital Budget spending plan. It also includes additional information in response to Board member questions and suggestions raised at and after that meeting.

Budget Summary

The final legislatively approved 2021-2023 Capital Budget (awaiting action by the governor) includes \$70 million for the Office of Chehalis Basin (OCB), allocated equally for Board-approved habitat projects and flood damage reduction projects (\$33.05M each), and up to \$3.9M for OCB and Chehalis Basin Board operations, oversight, fiscal accountability, etc. Spending from the 2021-2023 budget for major elements of the Chehalis Basin Strategy will now require approval by six of seven voting members of the Chehalis Basin Board. In order for OCB to execute the agreements necessary to authorize spending to begin July 1, 2021, the Board will need to approve some or all of the 2021-2023 spending plan on or before the June 3, 2021 Board meeting.

The table below summarizes the current 2021-23 budget estimates for all major work elements broken into the following categories:

- Aquatic Species Habitat Restoration
- Flood Damage Reduction
- Integrated Projects and Programs
- Management, Coordination, and Administration of Chehalis Basin Strategy

Potential 2021-2023 Capital Budget Element Estimates

BUDGET ELEMENT	2021-2023 (IN MILLIONS)
AQUATIC SPECIES HABITAT RESTORATION	
New Projects	\$22.6
Implementation Support	\$6.2
Program Participation	\$4.2

All-H (Habitat, Harvest, Hatcheries, Hydropower) and Predation Integration	\$0.1
<i>Sub-Total</i>	\$33.1
FLOOD DAMAGE REDUCTION	
Flood Retention Facility and Airport Levee Improvements	\$20.7
Aberdeen/Hoquiam North Shore Levee	\$4.0
Flood Authority Local Projects	\$10.0
Community Floodplain Assistance & Resilience Program (CFAR)	\$3.0
Local Area Structural Flood Protection & Floodplain Mapping/Modeling	\$2.0
<i>Sub-Total</i>	\$39.7
INTEGRATED PROJECTS AND PROGRAMS	
Skookumchuck Dam Analysis	\$0.5
Erosion Management	\$0.3
Floodplain Acquisition Program & Land Use Recommendations	\$3.6
Community Outreach/ Engagement	\$0.3
State, Tribal, and Local Agency Program Participation	\$2.1
<i>Sub-Total</i>	\$6.8
MANAGEMENT, COORDINATION, AND ADMINISTRATION OF STRATEGY	
Core OCB and Chehalis Basin Board Operations and Staffing	\$3.9
TOTAL	\$83.6

Potential 2021-2023 Capital Budget Spending Plan Work Elements and Budget Estimates

The following sections summarize the anticipated work to be completed for each of the potential major work elements for the 2021-23 Capital Budget spending plan.

I. Aquatic Species Habitat Restoration

The ASRP Steering Committee developed a \$33M budget estimate for the 2021-23 biennium that fell within the parameters of a “50-50” split of \$70M for habitat and flood damage spending to support the next phase of aquatic species habitat restoration actions. The Steering Committee further subdivided their budget recommendations into the following three categories.

New Projects (\$22.6M)

New projects include all priority restoration and protection project types focused on at-risk species habitat. This would include:

- Construction of up to 13 miles of new priority reach-scale habitat restoration projects to protect critical habitat and at-risk species.
 - Projects will occur in high priority implementation areas such as the Satsop, Newaukum, and Skookumchuck, Chehalis Tidal and Black River tributaries. These areas are prioritized to restore core habitat for spring and fall chinook, coho, steelhead and Oregon spotted frog. In areas such as the Satsop River the Steering Committee expects to build upon early successes from the Early Action Reach project to implement two new reach scale projects, increasing habitat and creating opportunities for salmon and steelhead to thrive.
- Construction of up to five new restoration projects to protect critical amphibian habitat and create cold water refuge habitat.
 - Amphibian focused projects will restore habitat for Oregon Spotted Frog in the Black River, work to control invasive bullfrog populations to reduce predation on native fish species and create new habitat for stream associated amphibians such as western toad.
 - Cold water focused projects will implement beaver dam analogues to increase floodplain reconnection and create cool water ponds for rearing, as well as test sediment wedge applications to increase groundwater flow.
- Up to six property protection acquisitions to protect high quality habitat.
 - Projects will protect core habitats for multiple species and conserve existing ecosystem function. These will be in locations such as spring chinook holding pools, cold water springs, and wetland and oxbow areas that provide refuge habitat.
- Up to 16 miles (supported by up to eight partial full-time equivalent personnels [FTEs]) of project development and design efforts in immediate priority sub-basins to prepare projects to be construction-ready for funding by the 2023–2025 funding cycle.
 - Project development will be focused in high priority implementation areas such as the Satsop, Newaukum, Skookumchuck, Chehalis Tidal and Black River tributaries. These areas are prioritized to develop restoration projects to restore core habitat for spring and fall chinook, coho, steelhead and Oregon spotted frog.

Implementation Support (\$6.2M)

Implementation support includes strategic material sourcing to accelerate implementation of future restoration projects, a locally-led process to build project ownership and landowner willingness, project review capacity, permitting/cultural resources support, and monitoring and adaptive management studies. Anticipated outcomes of this work include:

- Restoration material bank initiation to support efficient project implementation.
- New implementation structure and processes are in place to strengthen the capacity to increase pace of project implementation.
- Project technical review capacity to ensure that new projects are robust and meet the goals of the program.

- Monitoring outcomes to inform adaptive management decision making based on the following suite of recommended monitoring and adaptive management studies:
 - Status and Trends Sampling Program, which will establish the current condition of a watershed and aquatic species (e.g., salmon smolts produced and adult escapement) and then repeat the sampling to monitor the changes in condition (i.e., the trend) through time. This includes a total of 7 studies, e.g., salmon and steelhead spawning surveys, western toad surveys, high resolution stream temperature monitoring, Oregon spotted frog surveys and non-native fish surveys to track current and future trends of restoration benefits at the basin scale.
 - Project Effectiveness Sampling Program, which tracks the physical response of habitats to restoration. The results will be used to determine the success of restoration actions at the project scale and whether the actions are achieving their expected outcomes. This includes a monitoring of three project types: sediment wedge applications, beaver dam analogue installations, and reach scale restoration projects. There are a total of 16 ongoing and new targeted effectiveness questions that would be tested through these highly coordinated study efforts.
 - Hypothesis Testing Sampling Program, which includes two types of studies: filling data gaps and testing scientific assumptions made during ASRP development. The objective of hypothesis testing actions in the 2021-2023 biennium is to fill gaps in information needed to inform and adjust restoration action types, designs, scale, and locations starting in the near-term implementation period. This includes a total of 8 studies, e.g., spring and fall Chinook genetic diversity fry and smolt trapping, thermal refugia analyses, Satsop Pond reconnection monitoring projects, and experimental off channel reconnection monitoring. These short-term studies will directly inform adaptive management of the ASRP in the near term.

Program Oversight Participation (\$4.2M)

This includes staff support for overall implementation and participation on committees, including the ASRP Steering Committee and Science Review Team meetings, workshops, site tours, and support of other subgroups. This work also includes providing overall project management, budget and fiscal oversight, and grant and contracts administration required for satisfying compliance requirements, risk management, transparency and oversight, and fiscal accountability. Estimates include costs associated with engagement and support services from:

- Washington Department of Fish and Wildlife (WDFW)
- Recreation and Conservation Office (RCO)
- Washington Department of Ecology (Ecology)
- Washington Department of Natural Resources (DNR)
- Washington State Conservation Commission
- Chehalis Basin Lead Entity

- Confederated Tribes of the Chehalis Reservation
- Conservation Districts (Lewis, Grays Harbor, Thurston)
- Quinault Indian Nation
- Agency or Contractor facilitation and coordination services

All-H and Predation Integration (\$100K)

This would fund work by WDFW, tribes, and OCB to advance integrated management of habitat, harvest, hatcheries, hydropower and predation. This may include development of a tool to understand how changing impacts on any “H” or predation can influence other species and inform improved salmon management decisions. Note that this budget element was not part of the original \$33M 2021-23 aquatic species habitat restoration budget developed by the Steering Committee.

II. Flood Damage Reduction

In consultation with local governments and other project partners, OCB staff has identified up to approximately \$40M in flood damage reduction work that could advance the Board’s approved flood damage reduction outcomes, which is almost 60% of the available \$70M in funds. Roughly half of that amount (\$20.7M) is estimated for continuing work on the proposed Flood Retention Facility/Airport Levee Improvement project, and the other half (\$19M) is proposed for implementing a suite of basin-wide, non-dam local flood damage reduction actions. To meet the budget limitations, either or both categories need to be reduced by a total of approximately \$10M. Additional work proposed in the “Integrated Projects and Programs” budget category is also intended to advance local flood damage reduction efforts and is described more fully in section III.

Note that agency, tribal, and local government’s program oversight, management, and participation costs are embedded within each of the flood damage reduction work elements below.

Flood Retention Facility and Airport Levee Improvements (\$20.7M)

This would include finalizing SEPA and NEPA EISs to incorporate input from tribal and public comments, and new information from the Flood Control Zone District. It would also include developing and refining avoidance, minimization and compensatory mitigation analyses. This estimate includes applicant and agency costs, participation from tribes, and other local entities including:

- Chehalis River Basin Flood Control Zone District
- Ecology
- U.S. Army Corps of Engineers (Corps)
- WDFW
- DNR
- Confederated Tribes of the Chehalis Reservation

- Quinault Indian Nation
- Contractor support for EISs and technical studies

This budget element also includes preliminary engineering activities for permit applications and supporting plans, e.g., finalize draft Hydraulic Project Approval/Aquatic Species Mitigation Plan for permitting, finalize draft Wetlands Mitigation Plan, develop draft avoidance, minimization and compensatory mitigation plans for recreation, land use, cultural resources, etc.

This work will support the Chehalis Basin Board's deliberations and recommendations for the long-term strategy by providing the best available science on the project's flood damage reduction benefits, environmental impacts, and feasibility of potential mitigation.

These budget estimates include costs associated with overall project management, budget and fiscal oversight, and contracts administration required for satisfying compliance requirements, risk management, transparency and oversight, and fiscal accountability.

Aberdeen/Hoquiam North Shore Levee (\$4M)

This request from the cities of Aberdeen and Hoquiam would include completion of final design and right of way acquisition to achieve shovel-ready construction status by 2023 for the Aberdeen-Hoquiam North Shore Levee West Segment. A conditional letter of map revision was submitted to FEMA with preliminary engineering reports in 2020. When constructed, the North Shore Levee West Segment will protect 2000 properties and 360 businesses and remove \$1M in annual flood insurance premiums from the community.

These budget estimates include costs associated with overall project management, budget and fiscal oversight, and contracts administration required for satisfying compliance requirements, risk management, transparency and oversight, and fiscal accountability.

Flood Authority Local Projects (\$10M)

This would implement up to nine local project proposals recommended and prioritized by the Flood Authority, and provide continued Flood Authority staffing support.

1. Grays Harbor County: Lower Satsop Restoration & Protection Program (Phase II) - \$1,986,405
2. Hoquiam: Queen Ave Pump Station - \$1,581,918
3. Hoquiam: 10th Street Pump Station - \$2,204,167
4. Aberdeen: Farragut Street Pump Station Rebuild - \$2,283,119
5. LCFCD#1: Chehalis Industrial Park Flood Conveyance - \$1,347,000
6. Lewis County: Boistfort (South Fork Chehalis) CMZ - \$60,000
7. Aberdeen: Fry Creek Phase IIIa Pre- Design Planning & Alternatives Analysis - \$145,000
8. Cosmopolis: Mill Creek Phase II Multi -Objective Implementation Plan - \$145,000

9. Port of Grays Harbor: Chehalis River Erosion (Satsop Business Park) - \$60,000 (Note that this project could also potentially be funded under the Erosion Management pilot project proposed in Section III below)

Anticipated outcomes for these nine projects include:

- Protecting farmland, essential infrastructure, and restoring river/floodplain functions and habitat for a major, multi-phase project, building on work completed last summer (#1)
- Replacing three pump stations in the lower basin approaching the end of their useful life that protect properties currently assessed at over \$100M (#2, 3, & 4)
- Constructing improvements that would convey floodwaters away from the Chehalis Industrial Park to Dillenbaugh and Berwick creeks (#5)
- Prioritizing actions/plans to protect the road, utilities, wells, & emergency access in rural area within Boistfort valley (#6)
- Identifying a preferred conceptual design for daylighting a portion of Fry Creek (#7)
- Prioritizing 4,500 feet of culvert improvements along Mill Creek (#8)
- Identifying a preferred protection approach for the Port of Gray Harbor's Satsop Business Park (#9)

These budget estimates include costs associated with overall project management, budget and fiscal oversight, and contracts administration required for satisfying compliance requirements, risk management, transparency and oversight, and fiscal accountability.

Community Floodplain Assistance and Resilience Program (CFAR) (\$3M)

This would enable OCB to continue providing technical assistance and financial support to local and tribal governments, residents, and business owners. It would also fund implementation of new priority retrofit/floodproofing and acquisition projects with willing landowners and local governments who have completed OCB technical assistance evaluations.

Based on early pilot project cost estimates, this level of effort is anticipated to be able to complete projects for approximately 20-30 property owners who are currently subject to damage during major floods, through home elevations, crawlspace and flood opening retrofits, or property acquisitions.

These budget estimates include support for overall project management, budget and fiscal oversight, and contracts administration required for satisfying compliance requirements, risk management, transparency and oversight, and fiscal accountability.

Local Area Structural Flood Protection & Floodplain Mapping/Modeling (\$2M).

This would include feasibility-level analysis, design, and hydraulic modeling for up to four areas that could benefit from local structural flood protection actions (such as levees) in areas along tributaries or

within the lower Chehalis River Basin that would not have significant benefits from the proposed Flood Retention Facility/Airport Levee Improvements project. The analysis would focus on the best opportunity and interest for local structural flood protection, as well as benefits, costs, effects on water surface elevations, and whether any location should move forward to further design.

More than a dozen potential local structural flood protection focus areas were evaluated by the OCB's Local Actions Program Advisory Groups. Based on feedback from the Board, and further outreach to local governments, staff has identified the following two potential focus areas which would be confirmed after additional coordination with local jurisdictions:

- Lower Skookumchuck River in Centralia
- Skookumchuck River near Town of Bucoda

It would also fund new modeling and analysis along up to four tributaries, prioritized with input from local governments, to evaluate the magnitude and extent of existing flooding problems and identify potential flood damage reduction alternatives.

Potential modeling focus areas:

- Skookumchuck River Flooding of Highway 507 and Town of Bucoda
- Mill Creek Flooding Near Cosmopolis and South Aberdeen
- Black River Floodplain Storage Assessment
- Salzer Creek Floodplain Analysis and Storage Assessment

These four study areas are on tributaries to the Chehalis River, and any flood reduction benefits achieved in these areas would be independent of main stem flood reduction projects such as the proposed Flood Retention Facility/Airport Levee Improvement project. Some efficiencies could be gained between the proposed modeling efforts and feasibility analysis of local structural flood protection areas.

These budget estimates include support for overall project management, budget and fiscal oversight, and contracts administration required for satisfying compliance requirements, risk management, transparency and oversight, and fiscal accountability.

III. Integrated Projects and Programs

Integrated projects and programs simultaneously reduce flood damage risk and improve aquatic species outcomes. While the benefits need not be precisely equal, to qualify as integrated, a project or program must have both the intent and the potential to significantly advance both priorities.

Skookumchuck Dam Analysis (\$450K)

This would enable detailed feasibility study of potential Skookumchuck dam modification/removal options, and modeling of potential benefits for aquatic species (primarily spring Chinook and steelhead) and/or flood damage reduction downstream of the Skookumchuck dam from different scenarios. This analysis would build upon and be informed by initial work occurring in 2021 to compile existing information on the dam and its operations and upper watershed conditions.

Erosion Management Strategy to Reduce Damage to Aquatic Species and Property (\$320K)

This would enable feasibility analysis and design for three high-priority erosion reaches, and final design for one pilot project that would include bioengineered bank treatments to protect infrastructure and adjacent lands and benefit aquatic species at a reach-scale. Note that this pilot project could encompass the Flood Authority's recommended Port of Grays Harbor: Chehalis River Erosion (Satsop Business Park) project. See Section II above.

It would also allow for detailed reach-scale erosion hazard mapping for up to 20 miles of priority erosion areas that could inform further project analyses and designs in the 2023-2025 biennium. Potential cost-sharing or efficiencies could be realized if a reach-scale erosion management strategy project also provided significant aquatic species benefits and could be funded in part by both aspects of the Strategy.

Floodplain Acquisition Program & Land Use Recommendations & Guidance (\$3.6M)

This would fund the design and early implementation of a coordinated acquisition program for both flood damage reduction and aquatic species protection to acquire development rights and/or use other incentives to discourage expansion of high-density zoning, maintain low-density zoning in rural areas, and prevent environmental damage. This could also include the design of a floodplain and habitat revolving acquisition fund.

It would fund initial master planning work in one local jurisdiction; and would provide support and guidance to local governments to implement land use recommendations.

This estimate also includes \$3M to pay for property acquisition projects. These acquisition funds are in addition to the property acquisition funds separately recommended for the ASRP and CFAR, and would be responsive to requests from willing landowners in strategic locations or areas that can offer multiple benefits.

Community Outreach (\$300K)

This would include implementation of a more inclusive public involvement strategy, tailored to priority audiences such as landowner needs, environmental justice communities, economic development organizations, and other affected communities and groups. The funds would be used to produce tailored

education and outreach materials; and to plan and conduct workshops, site tours, trainings, and other similar opportunities intended to increase awareness of, and engagement with, the Strategy.

State, Tribal, and Local Agency Program Participation (\$2.1M)

This includes costs estimates for state and local agency, and tribal staff time needed for participating in regular Board meetings, work group meetings, and workshops, and engaging additional technical staff with particular expertise. It also includes overseeing inter-agency coordination and coordination with outside agencies as needed (federal, state, and local), and providing overall project management, budget and fiscal oversight, and grant and contracts administration required for satisfying compliance requirements, risk management, transparency and oversight, and fiscal accountability. Note that these costs are above and beyond participation estimates provided for aquatic species habitat restoration included in Section I and flood damage reduction budget elements included in Section II. Support is included for:

- RCO
- WDFW
- DNR
- Washington State Conservation Commission
- Washington State Department of Transportation
- Confederated Tribes of the Chehalis Reservation
- Quinault Indian Nation

IV. Management, Coordination, and Administration of Chehalis Basin Strategy (\$3.9M)

This would include Core OCB and Chehalis Basin Board operations and staffing, operations, oversight, coordination, fiscal accountability, and contractor support. This includes:

- OCB and consultant staff to support agency, tribal, and community involvement in all technical, policy, and public processes related to the Chehalis Basin Board's continued development and implementation of the Chehalis Basin Strategy
- Serving as the primary point of contact for Board members, local and tribal governments, other state and federal agencies, members of the public, and other entities
- Board meeting support, facilitation, coordination, facilities and travel expenses, and materials development
- Providing financial accountability and project management, technical assistance, and stakeholder coordination on individual projects
- Providing media relations, communications and outreach support, budget preparation and management support, and administrative support

- Developing contract scopes of work for Chehalis Basin Strategy and assisting in maintaining the RCO PRISM database for Chehalis Basin Strategy activities to ensure agency and consultant staff are regularly reporting and monitoring their grant and contract deliverables
- Managing, maintaining, and updating the chehalisbasinstrategy.com and OCB websites

Next Steps

The potential 2021-2023 Capital Budget work elements detailed in the memorandum are based on the Board's previously approved priorities and recommendations, requests and recommendations from the ASRP Steering Committee, the Flood Control Zone District, the cities of Aberdeen and Hoquiam, the Flood Authority, CFAR staff and consultants, as well as newly identified work elements that were an outgrowth of the Local Actions Program Advisory Group process.

The work elements derived from the Local Actions Program Advisory Group process were developed by OCB staff and include the floodplain acquisition program, erosion management, local area structural flood protection and other integrated projects and programs that may simultaneously reduce flood damage risk and improve aquatic species outcomes (e.g., Skookumchuck Dam analysis, community outreach and engagement, land use recommendations and guidance).

Initial Allocations

The budget strategy elements listed in the sections above total well over \$70M, so the Board will need to decide how to adjust funding levels for some or all of these major budget categories. There are several options for how the \$70M budget can be allocated - choices that initially need to be determined by the Board. For example, if the Board approves funding for some or all of the Integrated elements, that funding will need to come from one or both of the \$33.05M allocations for aquatic species and flood damage projects.

And if the Board desires to increase or decrease the funding level for any of the more specific work elements within any of the major budget categories (e.g., more or less for the ASRP's New Projects, Implementation Support, All-H integration, etc.; or more or less for the Flood Retention Facility/Airport Levee project, the Flood Authority's recommended projects, CFAR, Erosion Management, Floodplain Acquisition Program, etc.), staff will need direction from the Board about how the re-scoping decisions should be made. Will the Board want to delegate those allocation adjustments to the OCB Director, based on recommendations from the ASRP Steering Committee, the Flood Authority, the Flood Control Zone District, etc., or will you want to reserve some or all of those decisions for the Board?

Future Adjustments

At the May 6, 2021 Board meeting, Board members discussed the idea of scheduling a check-in halfway through the 2021-23 biennium for the Board to assess spending and progress on projects and work plans, and to make any modifications to the spending plan as appropriate. Board members also

discussed the need for a more thorough process to define and identify Integrated projects that can both reduce flood damage risk and improve aquatic species outcomes.

With your decisions on this 2021-2023 spending plan, the Strategy will be embarking on a more comprehensive and diverse set of flood damage reduction planning and implementation activities over the next biennium. And, depending on your decisions, the Strategy may also include a larger role for integrated projects that intersect between flood damage reduction and aquatic species habitat restoration.

This presents another opportunity to revisit and potentially adjust the approach to developing recommendations to the Board going forward. For example, in launching the Local Actions Program Advisory Group process last fall, the Board determined the technical and implementation advisory groups should be temporary and advisory to the OCB Director, and that they should not be tasked with developing consensus recommendations given the short timeframe available to complete the work.

While these budget process decisions do not need to be made immediately, staff has been considering adjustments that could better support the level of transparency and broad representation appropriate for the Board's ongoing work on the Strategy. Any major changes to the structure for recommendations and decision-making may require costs that are not currently budgeted.

May 17 Board Meeting

At the May 17, 2021 Board meeting, OCB staff will present each of the potential major work elements for the 2021-23 Capital Budget spending plan, provide time for Board discussion on the major factors affecting the total budget and allocations (including the proposed one-year check-in, Integrated project identification, and other potential approaches to future adjustments), and discuss potential options to configure the budget to match the \$70M budget approved by the legislature.

Appendix A: 2019-21 Construction Projects that will be Completed in 2021-23 Biennium

At the May 6, 2021 Board meeting, Board members requested a list of construction projects that were funded during the 2019-21 biennium, but which will not complete construction until the 2021-23 biennium. The table below summarizes those projects.

Table1: 2019-2021 Chehalis Basin Strategy Projects that will be Completed in 2021-2023 Biennium

#	PROJECT SPONSOR	PROJECT TITLE	PROJECT TYPE
FLOOD DAMAGE REDUCTION			
1	City of Centralia	China Creek Floodwater Storage and Fish Enhancement	Flood Authority Local Project
2	Port of Chehalis	Berwick Creek Flood Reduction and Restoration	Flood Authority Local Project
3	OCB: Community Flood Assistance & Resilience Program (CFAR)	Home Elevation Project (x12)	Landowner Property Protection
4	OCB: Community Flood Assistance & Resilience Program (CFAR)	Crawlspace and Flood Opening Retrofits (x2)	Landowner Property Protection
5	OCB: Community Flood Assistance & Resilience Program (CFAR)	Priority Property Acquisition	Landowner Property Protection
6	Grays Harbor County	Lower Satsop Restoration & Protection	Flood Damage Reduction & Aquatic Species Habitat Restoration
AQUATIC SPECIES HABITAT RESTORATION			
7	WDFW	Skookumchuck River EAR	Reach
8	WDFW	Newaukum River EAR	Reach
9	WDFW	East Fork Satsop River EAR	Reach
10	WDFW	Wynoochee River EAR	Reach
11	WDFW	Stillman Creek EAR	Reach
12	Trout Unlimited	Camp Creek Fish Passage Restoration	Fish Passage Barrier
13	Capitol Land Trust	Blooms Preserve Oregon Spotted Frog Restoration Project	Amphibian Restoration
14	Forterra	Udder Place East Fork Satsop Acquisition—Phase 1	Protection
15	WDFW	Oregon spotted frog oviposition site—Salmon Creek/Black River Acquisition	Protection
16	Lewis County Conservation District	Marker 19 Oxbow Restoration	Fish Passage Barrier
17	WDFW	Lower Chehalis River Floodplain – Davis Creek Wildlife Area unit expansion	Protection
18	Capitol Land Trust	Tree Fever Property Conservation Easement	Protection

#	PROJECT SPONSOR	PROJECT TITLE	PROJECT TYPE
19	Grays Harbor County	Lower Satsop Restoration & Protection Program – Phase II, Habitat Connectivity and Reach-Scale Aquatic, Riparian and Floodplain Restoration Project	Reach
20	Grays Harbor Conservation District	Satsop River Mile 2.5-5.0 ASRP Design Project	Reach
21	Grays Harbor Conservation District	Still Creek Design Project	Reach
22	Lewis County Conservation District	Chehalis Basin Watershed Coordinator	Project Development
23	Wild Fish Conservancy	Building decision-support for science-based Beaver Dam Analogue implementation in the Chehalis	Project Development
24	Thurston County Conservation District	Independence Valley Project Development	Project Development
25	Thurston County Conservation District	Riverbend Ranch ASRP Project Development	Project Development
26	Grays Harbor Conservation District	Lower Chehalis River Project Development	Project Development
27	WDFW	Sediment Wedging, an Active Restoration Approach to Create Localized Reductions in Stream Temperature in the Chehalis River stream network	Project Development
28	Trout Unlimited	Launching Trout Unlimited’s Chehalis Basin Restoration Program: Concept to Implementation	Project Development
29	Mason County Conservation District	Project Development on the East Fork Satsop River	Project Development
30	Grays Harbor Conservation District	Olympic Mountains Ecological Region Timber Landowner Project Development	Project Development
31	Ducks Unlimited	The Missing Link: Strategies for engaging resource landowners and conservation leaders	Project Development
32	WDFW	Off Channel Reconnection Project	Amphibian Restoration
33	WDFW	Oregon Spotted Frog Habitat Restoration	Amphibian Restoration
34	Grays Harbor Conservation District	Materials Procurement – Riparian Plants	Materials Sourcing
35	WDFW	Materials Procurement – Large Wood	Materials Sourcing