

MEMORANDUM

Date: August 7, 2020
To: Interested Parties that Commented on the Phase 1 Chehalis Basin Aquatic Species Restoration Plan
From: Chehalis Basin Aquatic Species Restoration Plan Steering Committee
Re: Summary of Comments and Feedback on Phase 1 Aquatic Species Restoration Plan

Thank you to everyone who reviewed and provided feedback and comments on the Chehalis Basin Strategy Phase 1 Aquatic Species Restoration Plan (ASRP), as well as those who participated in discussions of the Phase 1 ASRP at the 2020 ASRP Symposium event. Your input and support help strengthen and focus the development and implementation of the ASRP.

Phase 1 ASRP comments and symposium group discussions were requested to focus on the following questions:

- What do you value about each of the three scenarios described in the ASRP, and what would you change? Are there actions and/or areas needed to make the basin more resilient to climate change?
- The success of the ASRP relies on landowner support for increased restoration and protection. What additional actions/support is necessary to ensure landowners are supportive and helping to lead implementation through their involvement in this effort?
- The level of restoration needed in a relatively short timeframe is unprecedented. What will improve the certainty that the work can get done at the scale proposed, and in the timeframe needed to counter the negative effects of climate change?
- For practitioners and those interested in doing restoration in the Chehalis Basin – How does the Phase 1 ASRP help you as a practitioner? Where do you see your role in implementing this plan? What specifically would you like added in future phases that would help you implement the actions needed to protect and restore aquatic habitat in the Chehalis Basin?

A total of 41 comment letters, emails, and comment form entries on the Chehalis Basin Strategy website were received. Additional comments were compiled through the four small-group discussions at the ASRP Symposium on January 9, 2020. All of the comments have been catalogued into key themes, provided in the following text in italics, followed by our responses and plans to address concerns in future phases of the ASRP development.

Support for Scenario 3

Comment Themes:

- *It was recognized that the Chehalis Basin ecosystem offers one of the best chances in the state and region to build sustainable salmon and other native aquatic species populations.*
- *Many acknowledged Phase 1 of the ASRP does a good job of laying the scientific foundation for why recovery is needed and describing the level of investment required to save our aquatic species from extinction.*
- *Given the high degree of uncertainty with climate change and expanding human development, many recommended that the Chehalis Basin Strategy pursue the full suite of restoration actions prescribed under Scenario 3.*
- *Scenario 3 of the Phase 1 ASRP provides opportunity for more substantial habitat gains and expanded spatial diversity of salmon species into the Chehalis Basin. Scenarios 1 and 2, while halting downward progression of salmon runs and in some cases providing increases in salmon numbers, do not provide enough restoration to account for future climate change and human population growth.*
- *Given the need to adaptively manage plan implementation over time, commenters encouraged an approach that allows flexibility and does not limit long-term actions to the three restoration scenarios alone. Specifically, there may be a need to look beyond Scenario 3, which addresses just 13% to 14% of the basin.*
- *Scenario 3 was noted as particularly important because it is the only scenario that would significantly increase ecosystem resiliency, a factor that is increasingly important in the face of climate change.*

Response and Plan to Address:

The ASRP Steering Committee appreciates the recognition for the scientific foundation of the Phase 1 ASRP and the acknowledgement of the need and opportunity for species and habitat restoration and protection in the Chehalis Basin. The Steering Committee supports the need for aggressive implementation of the ASRP to achieve the highest results in terms of abundance and spatial diversity. The next steps in development of the plan will look at how to improve the results for salmon and other aquatic species. In late 2020, the Chehalis Basin Board, with the support of the Steering Committee, will decide the magnitude and pace of restoration that will be recommended to the Governor and state legislature for funding in the next biennium and beyond.

Predicted Salmon Results Based on Immediate Implementation

Comment Themes:

- *There were questions about whether modeled predictions misrepresent the outcomes because they assume instant implementation and habitat function, but the overall timeline for implementation is likely 20 to 40 years.*
 - *Some of these comments noted that this issue may be difficult for an average reader to understand.*
 - *Other comments requested a narrative to accompany the model output summary graphs on the topic of confidence in model predictions or requested information be added to the Models and Analyses appendix on the assumptions, caveats, and confidence levels for the modeled outputs.*
- *There were questions about the realism of the modeled outcomes due to implementation barriers such as funding, permitting, landowner willingness, and political changes.*
- *Commenters suggested that time-bound benchmarks be developed along with implementation schedules.*
- *Commenters suggested speeding up implementation, including addressing spring-run Chinook with a greater sense of urgency.*

Response and Plan to Address:

The Phase 1 ASRP included modeled outcomes to capture the magnitude of the effort needed to help inform decision-making and strategic prioritization to achieve the ASRP vision. It is important to convey that the Phase 1 model results reflect relative improvements in habitat and salmonid populations based on the type and scale of actions and results of restoration in other watersheds. The Steering Committee recommends the results should not be viewed as an absolute number of fish that will return, only as a relative comparison to current salmonid habitat conditions and populations. These model outcomes are planning tools designed to assess the effects of habitat conditions on salmonid species population performance. The modeling also considered potential outcomes for mid-century (approximately year 2040) and late century (approximately year 2080), which allowed for the incorporation of projected climate change and development effects in the basin. The model predictions can help to test our underlying scientific foundation as restoration results become known and then adaptively manage in the future based on what we learn.

As noted by commenters, the modeled outcomes depict all ASRP actions as in place and providing many functions by mid-century; because the implementation timeline will be longer, outcomes will be reduced from those shown in the ASRP Phase 1 document. It will take 20 or more years to implement the ASRP, and therefore additional actions could be required to achieve the projected scale of results. The range of expected outcomes will provide important information for development of the Implementation Plan, and the ASRP will continue to discuss how to increase the pace of implementation.

ASRP work in 2020 includes the development of the implementation sequencing plan, including phasing and funding considerations. The intensity of actions and geographic areas of focus will be refined based on the intended outcomes. Sequencing, implementation structure, and oversight will be designed to increase the confidence in achieving intended outcomes. The Implementation Plan is also anticipated to include flexibility to take advantage of investment and cost-sharing opportunities to speed up implementation.

Uncertainties and variability are inherent in ecosystem restoration. This stems from the complexity of natural systems, the limitations of current knowledge and simulation tools, and the inability to control all external factors. The recommended ASRP actions were developed with an understanding that adaptive management will be essential. Through adaptive management, the uncertainty level can be expected to decrease and the ability to build system resilience to natural variability should increase.

Ecological Resilience

Comment Themes:

- *Commenters suggested the topic needs more clarification or a definition, along with sideboards on how it is being applied. Commenters pointed to various options including human resiliency, the ability for humans to live sustainably in the basin, ecosystems resilience, or a combination of these.*
- *It was noted that a communicated value of the proposed scenarios is a focus on ecological resilience.*
- *Commenters suggested promoting resilience by providing contiguous restored and protected riparian habitat for all native species.*

Response and Plan to Address:

ASRP work in 2020 includes the development of a definition for ecological resiliency as it is applied in the ASRP. This definition will allow the program to provide more clarity in how our recommendations provide or support resiliency throughout the basin. Current work also includes a scientific evaluation to understand how the Phase 1 ASRP recommendations promote ecological resiliency and the refinement of those recommendations to ensure the aquatic species of the Chehalis Basin are resilient in the face of climate change.

Concern Whether the Right Issues Are Being Addressed

Comment Themes:

- *Commenters suggested locating and focusing on facilitating movement of species through corridors.*
- *The ASRP does not address impacts of two existing dams in the watershed; some commenters suggested these should be added.*

- *A broader, more balanced evaluation was recommended for problems that limit fish production. This included comments that active restoration of freshwater fish habitat may not be as reliable or significant of a way to offset losses in fish production as measures to directly address increases in escapement goals and address harvest, hatchery practices, ocean productivity, and development of the floodplain.*
- *The ASRP does not address some water quantity and water quality issues, which some commenters found to be a significant oversight. Actions such as purchase of water rights, enforcement of illegal withdrawals, and stronger rules and restrictions during droughts were also noted as needs.*
- *Commenters suggested several specific locations that could be reviewed for restoration opportunities.*
- *Commenters suggested methods for addressing erosion.*
- *Commenters suggested modifications to fisheries management.*
- *Commenters suggested changes to harvest.*
- *Some commenters want to have more intensive buffer requirements, and some requested changes to different Washington State Department of Transportation and county road maintenance operations.*

Response and Plan to Address:

The ASRP is one portion of a larger context of natural resources management programs and practitioners in the Chehalis Basin, Northwest region, and Pacific Coast that affect Chehalis Basin aquatic species. While ASRP Phase 1 focused on a number of specific project types and an initial prioritization of locations for those actions, we acknowledge that it does not encompass all potential actions for comprehensive ecological uplift. Subsequent phases will incorporate additional actions. The following discussion provides some explanation for the reason other actions have been identified for future coordination work.

Many of the actions described in the comment themes listed in this section are managed through existing complex processes that include multiple agencies and organizations. Any recommendations made in the ASRP could be formally developed within these existing frameworks and will arise through a series of conversations between tribes and Washington State, including the following more specifically:

- Fisheries management, including hatcheries and harvest, is not under the management purview of the ASRP, though the co-managers are represented on the Steering Committee and Chehalis Basin Board.
- Existing dam operations and permitting are regulated through a separate established process. Recommendations can be made, but there will need to be additional conversation about what can fall within the legal boundaries of those established relationships.
- Road maintenance operations and procedures are also managed under the various agencies charged with these responsibilities.

- Water quality and quantity can be improved with treatments under the ASRP suite of projects and should be discussed more robustly within the next ASRP phase. However, total maximum daily loads for water quality improvements are regulated through existing protocols and are not subject to ASRP development. In addition, there are existing planning efforts to increase water quality and quantity—such as streamflow restoration planning—that the ASRP will coordinate closely with to ensure complementary pathways are developed.
- Some erosion hazard issues are a responsibility of the Community Flood Assistance & Resilience (CFAR) Program under the Chehalis Basin Strategy, but collaboration between CFAR and the ASRP could work to provide an overall reduction of detrimental erosion. We intend to explore this relationship.

There are many factors controlled by other agencies, individuals, and organizations that may be of concern to the ASRP and may impact the successful implementation of the ASRP. Engaging these other parties and processes may bring critical insights into the ASRP planning process so that we do not plan habitat actions in isolation.

As noted previously, the ASRP is one portion of a larger context of natural resources management in the area; in the next phases of ASRP development and implementation, the Steering Committee will engage the other programs and practitioners of natural resource management more fully, and it will communicate to the public how ASRP fits into, influences, and is impacted by complex natural resource policy and decision-making outside the scope of ASRP actions. This includes harvest and hatchery management, ocean conditions and season-setting processes, international treaty rights, and management structures.

Impacts from and on Harvest and Hatcheries and Wild Fish

Comment Themes:

- *Commenters noted a lack of information about salmon harvest including rate of harvest, timing, viability of runs, by-catch, and enforcement.*
- *Commenters suggested that the ASRP Phase 1 document has an incomplete narrative on the role of hatcheries including management of existing hatcheries, genetic diversity and management strategies, habitat restoration effects on hatchery versus wild fish productivity, hatchery/wild fish interactions, and hatchery impacts within the Chehalis Basin as well as in supporting fisheries along the Washington coast.*
- *In addition to the hatchery and harvest discussion, commenters suggested that hydropower impacts on aquatic species should be incorporated in the ASRP to promote the best possible return on investment for ASRP actions.*
- *Suggestions to strengthen the connection between habitat restoration and harvest and hatchery management plans by identifying the issues of concern related to harvest and hatchery*

management and framing the key questions that need to be addressed through the fishery management process.

Response and Plan to Address:

In 2020 and 2021, the Steering Committee and Science and Technical Review Team are updating the ASRP from the ASRP Phase 1 document. Updates will include additional information related to hatchery and harvest management in the Chehalis Basin. Coordination with state and tribal co-managers will be necessary to enhance discussion of these topics in the ASRP. For example, ASRP readers and practitioners would likely benefit from a more in-depth discussion of the fishery management plan development and season-setting process for harvest and escapement, which, to the extent possible, factors in the biological consequences related to ocean conditions and other factors that affect both hatchery and wild salmon returns. Additionally, more detail related to existing hatchery facilities and management actions could inform the development of restoration implementation objectives.

Questions About Riparian Corridors

Comment Themes:

- *Commenters suggested encouraging protection and restoration of riparian buffers that provide wood and complexity, along with many other functions.*
- *There were requests for more information on riparian width assumptions and science to support them—specifically related to water quality and fish.*
- *Commenters suggested considering cultural, safety, and economic impacts of large buffers.*
- *Commenters suggested considering effects to upstream/downstream landowners and floodplain, as well as any potential for increased flooding from large buffers.*
- *Commenters noted it is very expensive to acquire/replant large buffer areas.*
- *There were requests to consider multiple options for landowners for riparian enhancement.*
- *There were requests to provide stewardship information to landowners to encourage riparian protection.*
- *Commenters had concerns about specific buffer widths, and there were requests for a flexible performance-based riparian program.*
- *Commenters had concerns about taking land out of agricultural production and buffer shading further reducing viability of adjacent agricultural land.*

Response and Plan to Address:

More detailed analysis will be conducted in 2020 to help refine the ASRP. Additional information will be developed to clarify that the ASRP is not a regulatory document and is not proposing fixed-width riparian corridors for projects along streams. However, properties or easements acquired through the ASRP or other Chehalis Basin Strategy programs may exceed regulation-prescribed riparian buffers, as the ASRP has different goals than regulatory processes that are in place. The ASRP program will

coordinate with existing regulatory and non-regulatory programs moving forward. Riparian restoration is typically proposed where other restoration actions occur; there is no intent to require landowners to restore riparian corridors. Additional coordination will be conducted with project sponsors and landowners within each ecological region to refine priority areas and needs as well as developing typical designs and guidance for restoration features, including riparian corridors. The ASRP will prioritize riparian corridors in the best places to achieve substantial shading, protect cold-water refuges, and work in concert with large wood and floodplain habitats. We will also be able to provide specific examples and lessons learned from the early action reach projects that are currently in design, which have provided a range of riparian corridor widths depending on landowner uses. We agree with comments about providing flexibility and options for landowners, including differing types of buffers, such as silvopasture and shrub corridors. The corridor widths used generically by river size class within the ASRP Phase 1 document were for cost-estimating purposes to ensure the costs are not underestimated for such a large program. However, because the ASRP is intended to be process-based and allow for change over time, it is important to consider and design for a corridor that allows channel movement and still maintains a corridor over time. This will vary dramatically, depending on the specifics of each site.

Inclusion of the Estuary

Comment Themes:

- *Commenters noted the estuary is a critical area for juvenile salmon and other species rearing and survival.*
- *Commenters suggested including estuary protection and restoration in the ASRP because there are both high-quality areas and degraded areas of the estuary.*
- *There were requests to consider restoration and protection particularly along the north side of Grays Harbor that is at risk from ongoing development.*
- *There were suggestions to dovetail ASRP actions with other sediment and water quality cleanup actions that are occurring in the industrial areas of the harbor.*

Response and Plan to Address:

We agree that the estuary is a very important part of the overall Chehalis Basin, and the estuary has been identified in the 2020 ASRP work. The first step is a compilation of existing data and plans so that the ASRP can build upon ongoing efforts in the estuary and identify additional priority locations and actions that fit within the ASRP. We will also identify if there are any critical data gaps that could be filled now or in future years with future funding or through the Monitoring and Adaptive Management (M&AM) Plan and how this will inform the detailed sequencing plan that will be developed.

Protection

Comment Themes:

- *There were questions about whether protection is included and suggestions that the document needs clarification on proposed protection.*
- *Commenters noted that protection of headwater streams is very important for water quality and quantity and can provide cool water refugia.*
- *Commenters suggested methods to protect thermal refugia.*
- *Commenters suggested methods to protect floodplains and hyporheic exchange.*
- *There were requests that property acquisition be prioritized for protection of habitats.*
- *Commenters noted that enforcement of existing regulations is important to protect habitats and water flows and protect salmon from illegal harvest.*
- *There were suggestions to encourage a strong protection strategy that includes community engagement and stewardship.*
- *Commenters requested protecting water quantity through acquisition of water rights, reducing illegal withdrawals, and other similar measures.*
- *There were requests for incentives for timber and agricultural landowners to protect habitats and/or participate in the ASRP.*
- *Some suggested including improvements to the Forest Practices Act and other existing regulations, particularly to maintain forest cover and shading.*
- *Commenters noted that some focal species may require specific protection actions (e.g., Oregon spotted frog) or protection during construction (e.g., mussels).*
- *There were suggestions that protection strategies should emphasize voluntarily approaches.*

Response and Plan to Address:

Protection is one of the key strategies of the ASRP. In the next phases of ASRP development, the protection strategy will be further developed to more specifically integrate the protection priorities with the restoration priority areas and actions and support the development of community engagement actions and incentives. The ASRP is not a regulatory document, but it can help support local jurisdictions in the enforcement and updating of existing regulations as they relate directly to aquatic species protection and restoration priorities. The ASRP program will also conduct additional outreach to agency and tribal management to identify how the ASRP fits within the context of other management and conservation efforts that are beyond the authority of the ASRP but are important for the overall conservation of aquatic species. In addition, we recognize how important it is to engage with the forestry community and the watershed planning effort to develop incentives and identify additional funding sources for protection and restoration in forested headwaters and small streams, particularly for actions that can provide water quantity and water quality benefits.

Focal Species and Species-Specific Information

Comment Themes:

Numerous comments were received related to focal species and species-specific information. Comments were grouped into three thematic categories as follows:

1. Detailed information provided on specific species (e.g., mudminnow, mussels, Western toad, etc.)

- Commenters provided new and more specific information on observed distributions for Olympic mudminnow, Western toad, Oregon spotted frog, Cope's giant salamander, and Western ridged mussel. Some commenters also provided corrections for distribution information cited in the ASRP.
- A commenter provided a newly published study about Olympic mudminnow co-existing with other species, which is important when considering invasive species impacts.
- Several corrections were provided to species-specific information in the ASRP.
- A commenter provided additional specific information about Western ridged mussel and other freshwater mussels.
- Commenters noted that bull trout are listed as threatened under the Endangered Species Act (ESA), but little is known about them in the Chehalis Basin. Commenters advocated for the ASRP to identify the lack of fundamental bull trout information as a priority data gap that should be addressed following guidance provided in the 2015 U.S. Fish and Wildlife Service Bull Trout Recovery Plan.
- Commenters noted that while many of the proposed salmon restoration actions are generally also beneficial to freshwater mussels and Oregon spotted frog, these actions can also have unintended negative consequences. Potential negative consequences for non-salmon species should be integral considerations for restoration projects, including pre- and post-project monitoring.
- One commenter recommended that ASRP recommendations be aligned with adopted species-specific management plans, recovery plans, and policy documents.

2. Outcomes for non-salmon species

- Commenters advocated for more data on impacts (positive and negative) from restoration scenarios on non-salmon species, as well as more information overall on non-salmon species.
- One commenter noted that while restoration of beaver habitat is a theme throughout ASRP, protection for beaver is not. They recommended evaluating the extent to which beavers are killed or removed and identifying options to reduce those impacts.
- Commenters noted that salmon restoration in the Chehalis Basin, particularly Chinook salmon, is vital to restoration of the Southern Resident orca population.
- One commenter made the point that wildlife corridors are complementary to aquatic species needs and should be considered as related benefit opportunities.

3. How focal species relate to monitoring

- *One commenter recommended including aquatic invertebrate species as indicator species.*
- *Commenters emphasized monitoring potential impacts to freshwater mussels from restoration projects, including pre-and post-project implementation.*

Response and Plan to Address:

The Steering Committee greatly appreciates the new and additional species-specific information provided by several commenters. This information will be added to the ASRP and integrated into the M&AM Plan. Focal and indicator species are being revisited as the full M&AM Plan is developed in the next phases of ASRP development and as the Steering Committee and Chehalis Basin Board refine their recommended emphasis for the ASRP. We appreciate offers from several commenters to participate in that effort and welcome additional involvement. Specifically related to freshwater mussels, all ASRP-funded restoration projects are expected to use the best management practices developed by the Xerces Society, and pre- and post-construction monitoring includes impacts to mussel beds.

Several topics raised by commenters did not receive significant attention in Phase 1. These include bull trout, beaver, wildlife corridors, and the relationship to orca. We agree that these are important and will consider how additional emphasis can be added around these topics for the revised ASRP.

Invasive Species

Comment Themes:

- *Commenters expressed that the most effective means to control invasive species is to focus efforts early in the process.*
- *Commenters expressed that the topic of invasive species that are known to be harmful to Western toads and Oregon spotted frogs, and believed to be harmful to many other native species, should receive significantly more emphasis and resources than in the ASRP Phase 1 document.*
- *One commenter stated there is evidence of breeding populations of introduced brook trout and westslope cutthroat trout in the headwaters of the Wynoochee River, and that brook trout are known to hybridize with native char and can be a threat to ESA-listed bull trout where they co-occur.*
- *A suggestion to aggressively work to manage in-river invasive fish species that are believed to be predators on salmonids, especially bass and blue gill, through fishing tournaments or other incentives.*

Response and Plan to Address:

While invasive species management did not have a prominent presence in the Phase 1 ASRP, the Steering Committee understands and agrees about the importance of this issue. During the next phases of ASRP development, we anticipate focusing on the following work elements to increase development of this topic:

- The M&AM Plan will include development of a central database/research portal so information can be communicated more easily.
- The M&AM Plan will identify remaining data gaps relative to hypothesis-testing for consideration in future biennia.
- Working relationships will be identified and established with partner agencies and non-governmental organizations that specialize in invasive species management.
- We are also interested in creative ideas like a fishing derby to reduce populations of bass and other non-native fish species.

Work with Forest Landowners and Federal Agencies

Comment Themes:

- *Commenters noted that Habitat Conservation Plans (HCPs) are already implemented on forest lands. Prescriptions are designed to protect natural processes and meet desired future conditions. Activities outside HCP prescriptions are covered under Washington's Forest Practices Act and Rules.*
- *Suggestions that the ASRP does not put enough emphasis on early engagement with industrial timber landowners, the U.S. Forest Service on public land, and the Wynoochee and Skookumchuck dam owners in order to ensure that headwater tributaries have a high priority for protection and restoration in the future.*
- *It was noted that the ASRP currently fails to address the ongoing impacts of the managed forest industry, but commenters believe the ASRP could be a mechanism to work with the managed forest industry to minimize impacts and to change the Forest Practices Act regulations to address issues like clearcutting and buffer measurement rules.*
- *Commenters suggested a need to coordinate with agencies and governments to identify intersections and priorities with the Shoreline Management Act, County Areas Ordinance requirements, Forest Practices Act requirements, the Endangered Species Act, and Clean Water Act.*
- *There were suggestions to work with timber landowners to promote longer forest harvest rotations to protect headwater streams in key areas.*
- *Commenters requested clarification on goals to protect headwater streams and determination of whether actions are already being done through HCPs and Forest Practices Act requirements.*
- *There were suggestions that the Forest Practices Act and Rules do not go far enough in protecting headwater streams.*

- *Commenters requested coordination with large private and public timberland owners and managers.*

Response and Plan to Address:

ASRP recognizes the fundamentally important protections that HCPs and Forest Practices Act regulations provide and that these are the primary regulatory mechanisms related to aquatic species habitat protection for managed forests. ASRP work in 2020 includes targeted engagement with state and federal agencies, as well as small- and large-scale forest landowners in the basin. The agencies contribute through both policy and technical expertise on the development of the ASRP to ensure alignment of policies and leveraging of strategies. Next phases of the ASRP include refinements of restoration and protection recommendations, including those for rivers and stream areas owned by forest landowners, as well as for the non-forested areas in the basin. To achieve this, the ASRP will work with forest landowners, on an individual basis, to understand what opportunities exist on or adjacent to their lands to partner in restoration and protection work particular to the goals of the ASRP. These actions would be voluntary, and complementary to existing regulatory requirements.

Concern for the Future of Agriculture

Comment Themes:

- *There was acknowledgment of the past and current efforts of farmers for conservation.*
- *Concern was expressed about the impact that restoring 10,000 to 15,000 acres of riparian areas could have on the future of agriculture in the basin, both on individual farmers and on the agricultural community in general.*
- *It was recommended that an economic study be conducted to understand the impacts on agriculture from the loss of farmland to habitat restoration.*
- *In the past, the Office of Chehalis Basin has expressed the goal of keeping commercial agriculture viable and healthy. The view was provided that profitable farmers are much more likely to cooperate to improve habitat than a marginal operation.*
- *Commenters noted that when public resources are used to purchase lands, care must be exercised to not inflate land values with public funds. There have been other efforts in the Chehalis Basin to buy easements at values far above fair market value with federal dollars; this inhibits the ability of farmers to expand their operations and may encourage more conversion to land uses with increased impacts to the aquatic environment.*

Response and Plan to Address:

The Chehalis Basin Board supports a vibrant future for agriculture in the basin and believes there is a way for agriculture to prosper while restoring aquatic species habitat. The estimate of 10,000 to 15,000 acres for restoration is significant but will not need to come fully from current agricultural operations. Much of the area targeted for restoration is not in places where farming is currently occurring or likely to occur in the future. In addition, in parts of the basin where there is farmland and

aquatic habitat restoration is needed, there is significant flexibility in where and how to do the restoration so the impacts on current agricultural operations can be reduced. The ASRP will coordinate with the Office of the Chehalis Basin and the Chehalis Basin Board to develop options and incentives for landowners to ensure the overall Chehalis Basin Strategy supports the future viability of agriculture as well as other working lands. This should also include methods to address concerns regarding any potential to increase farmland values that would be detrimental to the agricultural community.

Implementation and Governance Structure

Comment Themes:

- *Commenters noted the need for an implementation schedule.*
- *Commenters agreed on the importance of a detailed and transparent governance structure for implementation as well as monitoring and adaptive management.*
- *Questions were asked about whether the Phase 1 implementation framework is the right approach, and interest was expressed in following different process options for implementation. This included a bottom-up structure (at the ecological region level) for both implementation planning and distribution of funds. In addition, more detail was sought when communicating the final processes.*
- *Commenters requested design guidance be included in the ASRP and requested ways to standardize and simplify more routine projects.*
- *Commenters provided local knowledge of conditions for inclusion in implementation planning.*
- *There were requests to include additional outreach and communication and to fill social science gaps in the ASRP planning.*
- *Commenters expressed interest in being part of the team, particularly related to various stages of implementation, including active discussions during the ASRP Symposium breakout groups by restoration practitioners and others.*

Response and Plan to Address:

The Steering Committee appreciates the expertise of restoration practitioners and other groups who have participated, commented, and expressed interest in future participation. This cooperative effort will be essential to success of the ASRP.

The 2020 and 2021 work includes the development of detailed options for the ASRP implementation structure, including oversight and funding structures and a more detailed implementation schedule. As the program focuses on implementation and adaptive management in the coming years, the governance structure will adapt to suit the range of expertise and perspectives needed to ensure community supported program success. These topics are of high priority for the Steering Committee for engagement in 2020. The Chehalis Basin Board, with the support of the Steering Committee, will then decide the magnitude of restoration and the associated pace of implementation that will be recommended to the Governor and state legislature for funding in future biennia.

Guidance to practitioners regarding the sequencing and design of the projects will be developed as an appendix to the ASRP, and other resources will be developed where possible to streamline efforts and ensure efficient implementation.

Funding and Capacity Building

Comment Themes:

- *There were suggestions for capacity building in the implementation structure, such as designating a lead/steward for each ecological region to facilitate processes and act as a liaison to the communities. Some commenters suggested this position be funded at the conservation districts.*
- *There were suggestions for funding capacity that would be dedicated to helping local agencies to adapt or update their plans and codes for alignment with the ASRP.*
- *Commenters suggested providing more support to groups already working in each area, as well as greater stability in funding to allow hires for longer periods of time.*
- *There were requests for funding to be allocated to each ecological region, with further allocation determined at the local level. Some concerns that more money spent in certain areas than others could lead to jurisdictions and landowners feeling disenfranchised with the process.*
- *Commenters requested streamlining the process to access funding and resources, including the following:*
 - *Landowner resources and easily accessed funding to allow them to conduct their own projects, such as smaller-scale planting projects*
 - *Phased project pipelines with earmarked funds, eliminating the need to reapply at each stage and alleviating some funding delays*
 - *Flexibility with how funds are spent based on defining the work to be done and/or outcomes*
 - *Pre-approved or reduced staff review funds earmarked for acquisitions*
- *There were suggestions to consider how to leverage additional funding options.*

Response and Plan to Address:

The Steering Committee is committed to focusing on these issues in 2020. Additional details on the funding structures and options for capacity building will be incorporated into the Implementation Plan and long-term funding strategy. The Implementation Plan is also anticipated to include flexibility to take advantage of investment and cost-sharing opportunities to speed up implementation. In addition, the Implementation Plan will also highlight opportunities for implementers to become engaged and build capacity.

Monitoring and Adaptive Management

Comment Themes:

- *Numerous comments emphasized the importance of a robust monitoring and adaptive management program.*
- *Specific objectives advocated for included the following:*
 - *Determining if newly opened or restored habitat is being used by salmon*
 - *Project effectiveness, including pre- and post-project implementation*
 - *Monitoring for flood benefits to increase community support and funder willingness for ASRP actions*
- *ASRP Symposium breakout group discussions included interest in streamlined monitoring protocols and need for a central repository for accessible data.*
- *The value of monitoring data that enable informed adaptive management was emphasized; one commenter noted that reach-scale restoration will be challenging, so monitoring results should aid understanding where and how discrete restoration activities provide the most benefits. One commenter noted the value of communicating to the community “what have we done, what have we learned, and what will we do the same and different.”*

Response and Plan to Address:

All of these comments and advice are appreciated and aligned with the ASRP M&AM Team intentions. We are developing the full M&AM Plan in the next phases of ASRP development, and we will incorporate this input.

Cost Comparison to Other Restoration Efforts and ESA Listings

Comment Themes:

- *Commenters noted that the costs associated with the ASRP are high, but when compared to other large-scale restoration plans, the ASRP actually falls into a lower cost bracket.*
- *Commenters pointed out that restoration efforts after ESA listings tend to be more expensive than taking early action to prevent listings.*

Response and Plan to Address:

The three potential restoration and protection scenarios put forward in the Phase 1 ASRP outlined the estimated costs associated with each scenario. As recommended restoration actions and locations are refined, cost estimates will be refined as well. Comparison of ASRP costs relative to other efforts of magnitude in the region will be included as part of long-term strategy efforts to secure a funding package. Puget Sound ESA actions, Streamflow Restoration Act actions, and Columbia River Restoration Plans can all be used for comparison.

Concern About Dam and Coordination with the Larger Chehalis Basin Strategy

Comment Themes:

- *Commenters suggested considering multiple benefits of the Chehalis Basin Strategy's ASRP and flood damage reduction components in future project planning and prioritization during future phases.*
- *Commenters suggested that the ASRP should clearly state that ASRP projects will not be used as mitigation for flood damage reduction projects and that mitigation activities will be additive to the ASRP.*
- *There was concern about impacts from the proposed flood retention facility on fish and important ecological processes relied on by salmon and other aquatic species.*

Response and Plan to Address:

The Chehalis Basin Strategy is a collaborative process that was created to address the dual challenges of extreme flooding and degraded aquatic species habitat. In an effort to better integrate elements of the Chehalis Basin Strategy, the ASRP, in coordination with CFAR, Local Projects, and other basin-wide efforts, is looking at actions and projects that have the potential to meet multiple goals, incorporate habitat-friendly features into projects that are not restoration focused, and efficiently use available resources and funding. The goal of the strategy is to make the basin a safer place for families and communities impacted by flooding and to improve aquatic species habitat now and for future generations. To do this, the strategy employs three key, interrelated approaches across the basin:

1. Habitat protection and restoration for salmon and other aquatic species through the projects identified in the ASRP
2. Local landowner and community-scale projects to adapt to and limit increasing flood impacts, such as flood-proofing homes and buildings and working with willing landowners to relocate vulnerable structures and acquire or repurpose land to restore or protect natural floodplain functions
3. Large-scale measures to prevent potentially disastrous flood episodes, such as protection of Interstate 5 in Lewis County and protection from sea level rise in Grays Harbor

In 2017, a Programmatic State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS) evaluated the combined suite of options that might be used for the Chehalis Basin Strategy to reduce damages from floods and restore degraded aquatic species habitat. The Governor's Chehalis Basin Work Group, the predecessor to the Chehalis Basin Board, recommended a project-level EIS be completed to further identify the probable significant impacts of a flood retention facility. Under the Chehalis Basin Strategy, consideration of a large flood retention facility was evaluated in a SEPA Draft EIS, which was released for public comment on February 27, 2020. Members of the public, tribes, and stakeholders were encouraged to provide comments on the SEPA Draft EIS through May 27, 2020. The SEPA Draft EIS

is an objective, science-based technical document that will help decision makers, project applicants, and the public understand how the proposed flood retention facility would affect the environment. The EIS will be used to help determine the feasibility and appropriate scale of mitigation for the proposed flood retention facility. Parallel to the SEPA process, the U.S. Army Corps of Engineers is leading the National Environmental Policy Act (NEPA) analysis of the proposed flood retention facility project. The Draft NEPA EIS is anticipated to be released for public comment in mid-September 2020.

A June 1, 2018 memorandum to the Chehalis Basin Board states that “the ASRP is not mitigation for aquatic species impacts associated with any of the flood damage reduction actions being considered for the Chehalis Basin Strategy.” Although ASRP projects will not be counted as mitigation for a proposed flood damage retention facility, there is the potential that some ASRP projects may not move forward, such as projects that may occur in the footprint of a potential future flood retention facility.

ASRP Resources (Documentation and Data)

Comment Themes:

- *Commenters pointed out specific information or data that needed to be changed or properly referenced.*
- *Commenters questioned if the data and the ASRP Phase 1 document had been peer-reviewed.*
- *Commenters suggested continued work on refining the ASRP, especially the goals, objectives, and assumptions, and providing a well-prepared Executive Summary.*
- *Commenters requested that all data used in the ASRP program be centrally housed and publicly accessible.*

Response and Plan to Address:

The ASRP Phase 1 document will be further refined and updated in 2020 and 2021. Specific comments on data will be reviewed and added to the ASRP during those future revisions. This public comment period is part of the peer-review effort. Everyone involved in the planning effort is excited to allow experts and the public alike to provide input to better refine the plan. The M&AM Team intends to develop a centralized database, or data portal, for stakeholder and project proponent access. That information will be shared in future revisions of the plan.