

## **SNOQUALMIE VALLEY FISH FARM FLOOD ADVISORY COMMITTEE**

June 12, 2017

The Honorable Dow Constantine  
King County Executive  
401 Fifth Avenue, Suite 800  
Seattle, WA 98104

The Honorable Joe McDermott, Chair  
King County Council  
516 Third Avenue, Room 1200  
Seattle, WA 98104

Dear Executive Constantine and Councilmember McDermott:

This letter contains the recommendations of the Snoqualmie Fish, Farm, Flood (FFF) Advisory Committee (Committee), which was convened in November 2013 as a response to Comprehensive Plan policy R-650 and which constitutes the watershed planning process contemplated in R-650a adopted by the King County Council in the 2016 Comprehensive Plan Update (added as Appendix I to this letter). The recommendations contained in this letter and the attached appendices are intended to assist the Executive and Council to advance and balance three important county goals at a watershed scale: restoring habitat to aid salmon recovery, supporting farmers and preserving farmland, and reducing flood risk for farmers and other Snoqualmie Valley residents.

This letter and the attached matrix of recommendations represent the culmination of three years of dedicated and committed work by the Committee, and establish the foundation for additional work by a future stakeholder group. We look forward to the Executive and Council's response to these recommendations, and many of the organizations that have participated in phase one of the FFF process look forward to continuing to work together on these issues.

The Committee was comprised of thirteen individuals of diverse backgrounds and perspectives, including local farmers as well as representatives of the Tulalip and Snoqualmie tribes, the King Conservation District, the Wild Fish Conservancy, the City of Duvall, the Snoqualmie Watershed Forum, the Snohomish Basin Salmon Recovery Forum, Futurewise, and the Washington Department of Ecology. Two of the four farmers on the committee also represented the King County Agriculture Commission and the Snoqualmie Valley Preservation Alliance. The Committee held 26 meetings over the course of three years, as well as numerous smaller work sessions and caucus group meetings along the way, breaking during the months of peak farm activity.

The Committee's work concluded in May 2016 with the package of recommendations attached to this letter. The geographic scope of the committee's work was the Snoqualmie River

watershed, focusing primarily on the 30-mile lower valley from the base of Snoqualmie Falls to the county line located north of the city of Duvall. More specifically, the committee's discussions focused on the roughly 14,500 acres of the Snoqualmie Agricultural Production District (APD), which is designated as Agricultural Land of Long-term Commercial Significance under the Washington State Growth Management Act.

The Committee's recommendations comprise:

1. Specific action recommendations with an emphasis on the next three years [Appendix II, III and IV];
2. Creation of three task forces and an associated body of recommended near-term work [Task Force scopes of work provided in Appendix V];
  - a. Riparian Buffers Task Force
  - b. Regulatory Task Force
  - c. Agricultural Strategic Plan Task Force
3. A memorandum of mutual understanding (Appendix VI); and
4. Letters from Participating Entities (Appendix VII).

The Committee's 34 recommended actions outlined in Appendix II and III represent: 1) flood risk reduction for valley landowners, 2) accelerating habitat restoration progress in key areas, 3) accelerating comprehensive agricultural drainage progress, 4) preserving the agricultural land base, and 5) integrated multi-objective solutions. These recommendations comprise a diverse list that addresses high-priority actions for salmon recovery, supporting farming and preserving farmland, and flood risk reduction.

The Committee recommendations demonstrate the fact that each interest group agrees to support each other's highest priorities. Therefore, making progress on the full spectrum of recommendations in a balanced way is absolutely critical for the success of the agreement. Recognizing this, this letter also addresses two key areas of agreement among participants in the Committee: one, that the stakeholder group for the second phase of the FFF effort must have balanced representation from Fish and Farm and Flood interests and two, that the Committee's recommendations be implemented in a balanced way, so that investments that support salmon recovery and farmers and farmland preservation occur concurrently.

**Fish, Farm, Flood Phase II Committee:** We are recommending that the County establish a reconstituted FFF Committee to oversee implementation of the recommendations included in this letter, and to provide support and accountability for the implementation phase of these recommendations.

The Fish, Farm, and Flood process was created because of a perceived imbalance between regional investments in salmon recovery and support for farmers and farmland preservation. Decisions around how flood control projects are undertaken can have impacts on both salmon recovery efforts and farmers, and so they were included as an important consideration in this

effort. Through working together for the past three years, the Committee has built trust between individuals and entities, despite differences in interests and perspectives.

A key element in organizing the work of Committee members was an alignment of members into one of the three primary interest areas (“caucuses”), which helped organize the thinking of each of these different perspectives in the process. Consequently, a Farm Caucus, Fish Caucus and Flood Caucus were formed. Each of the caucuses had the following membership of Committee members.

#### **Farm Caucus**

- King County Agriculture Commission
- Farm Landowner Representatives
- King Conservation District
- Snoqualmie Valley Preservation Alliance
- SnoValley Tilth (not an official Committee member, but active in supporting the process)

#### **Fish Caucus**

- Snoqualmie Watershed Forum
- Snohomish Basin Salmon Recovery Forum
- Wild Fish Conservancy
- Tulalip Tribes
- Snoqualmie Tribe
- Futurewise

#### **Flood Caucus**

- City of Duvall
- Department of Ecology (also participated in fish caucus)
- King County Flood Control District

Because of the significant benefits associated with the caucus structure, we recommend that this process be formalized in the Fish, Farm and Flood Phase II Committee; and, to build on the investment made by FFF Phase I participants, we encourage the Executive and Council to appoint a significant number of Phase I participants to the Phase II committee. Additionally, while there would be three caucuses, the composition of the Phase II Committee should have equal representatives supporting salmon recovery and farm interests. We would recommend that the Flood Caucus have members representing organizations focused primarily on public safety, infrastructure development and protection, and without a policy position on salmon recovery or farming.

We recommend that the Executive and County have a Committee with no more than fifteen members, and that they select individual representatives from the following organizations for

each of the caucuses. The Committee recommends that the Executive and Council seek appointees who are collaborative and have substantive knowledge of the subject matter before the committee, and who will work in good faith with the committee.

#### **Farm Caucus**

- Individual Farmers
- Farm Bureau
- King Conservation District
- SnoValley Tilth
- King County Agriculture Commission
- PCC Farmland Trust
- Snoqualmie Valley Watershed Improvement District
- Snoqualmie Valley Preservation Alliance
- Citizens' Alliance for Property Rights

#### **Fish Caucus**

- Snoqualmie Watershed Forum
- Snohomish Basin Salmon Recovery Forum
- Wild Fish Conservancy
- Tulalip Tribes
- Snoqualmie Tribe
- Futurewise
- Sound Salmon Solutions
- Puget Sound Keepers Alliance
- Stewardship Partners
- WA Department of Fish and Wildlife
- Department of Ecology
- US Army Corps of Engineers
- Mountains to Sound Greenway

#### **Flood Caucus**

- Snoqualmie Valley Cities
- Snoqualmie Valley Governments Association
- King County Flood Control District
- King County Sheriff
- King County Roads
- Housing Interests
- WSDOT

As an alternative to membership on the Advisory Committee, the organizations identified above could also be selected to serve on the task forces and pilot projects identified in the appendices to

this letter. Steering committees for task forces and pilot projects should also be balanced with representatives from the fish and farm caucuses, unless agreed to by the FFF Phase II Committee.

**Bundling of Recommendations:** At its final meeting in spring 2016, the Committee worked on drafting an initial timeline for some of the recommendations to illustrate how actions might be sequenced during the first three years -- the draft timeline is captured in tabular form as part of Appendix IV. Related to this timeline, a guiding principle of the Committee's recommendations is the need to achieve tangible gains for all three F's (fish, farm, flood) over time.

Work will be required by all interests to ensure balance and, ideally, concurrent progress will occur naturally, given the trust and mutual awareness that is in place. The timeline identified in Appendix IV is the best example we have of how to track concurrency and progress toward agreed upon commitments. And, we recommend that in order to achieve certainty of effective bundling (ensuring that future concurrent progress in the three areas is in fact occurring), the FFF Phase II Committee refer to the timeline to evaluate progress on the recommendations. We further recommend that the Phase II Advisory Committee develop a more complete calendar of critical milestones.

The concept of "bundling" was developed, received intense discussion, and has been agreed to by the FFF committee as necessary to maintain trust and fairness. A critical element of the Committee's final agreement was the specific "bundling" of two top-priority recommendations: 1) the acceleration of large capital habitat restoration projects in the key reaches of the Snoqualmie River within the APD (See Appendix II recommendation referred to by the Committee as Fish 1), and 2) developing a comprehensive drainage maintenance program that addresses the practical, financial and regulatory hurdles associated with various types of drainage issues and infrastructure (See Appendix II recommendation also known as Farm 2). The agriculture caucus stated clearly that its support for future large-scale restoration projects in the APD, such as levee setbacks, was contingent on achieving durable changes in the way that drainage systems are maintained on agricultural lands. In practical terms, given the 3-4 year timeline before ground is likely to be broken on the next large capital project in the APD, achievement of specific milestones on drainage improvements must precede the commencement of project construction.

The evaluation of progress on top tier bundled priorities will be the responsibility of the corresponding fish, farm or flood caucus. Each caucus should first discuss any concerns with the entire committee, but if that is not satisfactory, the caucus as a last resort may employ the mechanism of writing a letter to the King County DNR Director, copying the Executive and Council, describing the situation and requesting a rebalancing of effort. The Director will be responsible for working with the committee to achieve rebalanced progress.

We are confident that the participants in the next phase of the Fish, Farm and Flood process will continue to build mutual trust and, hopefully, will never have to resort to the rebalancing

mechanism described above. However, we believe that it is in the interests of all parties engaged in this process that there is some recourse if the process were to falter.

It should also be noted that most of the items in Appendix II are unfunded, and that while bundling is focused on the top tier commitments, the Committee's intent was that there be a mutual commitment to pursue funding and resources to accomplish as many of the priorities in Appendix II as possible in the next 3 years. We feel strongly that King County and all of the signatories to this letter should be committed to finding the necessary resources to that end.

As participants in the Fish, Farm and Flood Advisory Committee, we, as individuals or through our respective organizations, pledge to support the recommendations attached to this letter. Specifically, we will support the recommended actions identified in Appendices II and III, the task force efforts, and the importance of bundling so that all F's achieve progress together. Moreover, we will stand up for and advocate for all of the actions identified in the recommendations and will rely upon the undersigned to advocate for all actions as well. Finally, through our work with implementing partner organizations, we will support the recommended actions that are reflected in this letter.

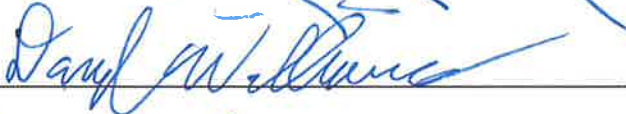
Bobbi Lindemulder  
Farmer



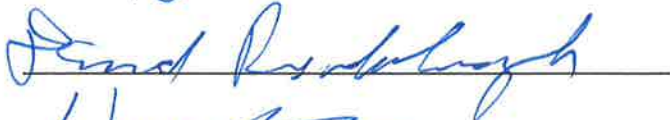
Cindy Spiry  
Snoqualmie Tribe



Daryl Williams  
Tulalip Tribes



David Radabaugh  
Dept. of Ecology, Floodplain Mgmt.



Heather Trim  
Futurewise



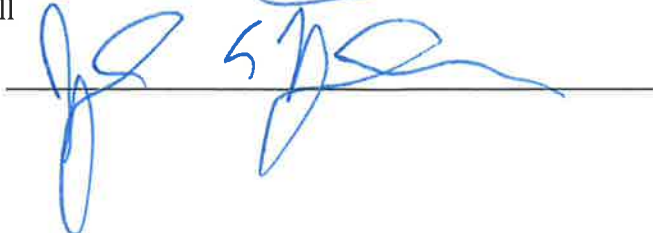
Jarvis Keller  
Farmer



Jason Walker  
Snoqualmie Watershed Forum/City of Duvall



Josh Monaghan  
King Conservation District



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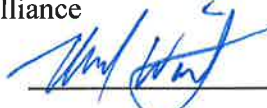
Lara Thomas  
City of Duvall



Lawrence Carlson  
Farmer/Snoqualmie Valley Preservation Alliance



Micah Wait  
Wild Fish Conservancy



Scott Powell  
Snohomish Basin Salmon Recovery Forum



Siri Erickson-Brown  
Agriculture Commission



Enclosures

cc: King County Councilmembers  
ATTN: Carolyn Busch, Chief of Staff  
Melani Pedroza, Acting Clerk of the Council  
Carrie S. Cihak, Chief of Policy Development, King County Executive Office  
Dwight Dively, Director, Office of Performance, Strategy and Budget  
Christie True, Director, Department of Natural Resources and Parks (DNRP)  
Josh Baldi, Division Director, Water and Land Resources Division (WLRD), DNRP  
John Taylor, Assistant Division Director, WLRD, DNRP  
Joan Lee, Manager, Rural and Regional Services Section (RRSS), WLRD, DNRP  
Janne Kaje, Regional Partnerships Unit Supervisor, RRSS, WLRD, DNRP

Appendices:

- I. Council-Adopted Comprehensive Plan Policy R-650A: Preamble and R-649, R-650 and R-650a
- II. Snoqualmie Fish, Farm, Flood Advisory Committee Action Recommendations: Language as approved on May 11, 2016
- III. Action Recommendations: Additional Detail
- IV. Focused Schedule for Snoqualmie Valley FFF Agreement Implementation (Preliminary Draft)
- V. Task Force Scopes
  - 1. Addressing Snoqualmie Riparian Buffers
  - 2. Addressing Regulatory Barriers to Agriculture
  - 3. Snoqualmie Valley Agricultural Land Resource Strategic Plan
- VI. Memorandum of Mutual Understanding (Conclusion of Phase 1, May 2015)
- VII. Letters from Participating Entities
- VIII. Other Phase 1 Committee Materials (not included)
  - 1. Phase 1 Report
  - 2. Proposed Solutions



## **Appendix I**

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### **Council-Adopted Comprehensive Plan Policy R-650A**

Preamble and R-649, R-650 and R650a

- R-647                    Agriculture should be the principal land use in the Agricultural Production Districts. Permanent new construction within districts shall be sited to prevent conflicts with commercial farming or other agricultural uses, and nonagricultural uses shall be limited. New development shall not disrupt agriculture operations and shall have a scale compatible with an active farming district.**
- R-648                    On-site housing for farm employees shall be allowed where this can be accomplished without unnecessarily removing land from agricultural use or conflicting with other public interests. King County should address the regulatory constraints that make it difficult for farmers to offer housing for farm employees.**

The river valleys in King County are critical locations for agriculture, salmon habitat and natural floodplain processes. In compliance with growth management, portions of several of these valleys were designated as Agricultural Production Districts to protect the diminishing farmland for long-term commercial agriculture, thereby preventing their conversion to other uses that are often incompatible with habitat protection or that would require expensive flood risk reduction projects.

Some of the highest quality of salmon habitat in King County is found within the Agricultural Production Districts. As a result of federal listing of Chinook salmon as a threatened species, King County is obligated to take actions for protection of Chinook habitat in the county's watersheds. Such actions include restoration of habitat in portions of each of the county's rivers and, because many sections of the county's river systems are in a highly altered state, those reaches within Agricultural Production Districts offer some of the most promising opportunities for habitat restoration critical to salmon recovery. Each of the Water Resources Inventory Area Salmon Recovery Plans has recommended additional protection or restoration of critical habitat within the Agricultural Production Districts. At the same time, King County is committed to the preservation of productive agricultural soils and local agricultural production and protection of public safety in flood prone areas through the restoration of floodplain processes.

The farmers in the county support fish protection and fish recovery through many regulated and voluntary actions. King County recognizes that fish, flood management, and farm interests must work together in a collaborative manner. It is essential that farmers and other property owners in each watershed be directly included in planning and in the review of integrated, watershed-wide strategies that support the needs of agriculture, fish recovery, and flood risk reduction and floodplain management. Specific habitat protection rules should not jeopardize the agricultural productivity within the Agricultural Production Districts.

The 2012 Comprehensive Plan Update added policy R-650 that directed the County to convene a collaborative watershed planning process within each of the Agricultural Production Districts. The County choose to start the process in the Snoqualmie Valley Agricultural Production District, where the County has undertaken a number of habitat restoration projects, to develop an approach to improving and balancing the interests of agricultural

production, ecological function and habitat quality for salmon, and flood risk reduction and floodplain restoration.

In response to this, the Fish, Farm, and Flood Advisory Committee was formed in 2013, and the group of stakeholders representing agriculture, salmon recovery and flood management interests have been meeting regularly for the past three years. In 2016 the Advisory Committee developed a final report and a set of recommendations that balances near term actions as well as program and policy recommendations for all three resource interests. The Advisory Committee also recommended the formation of three task forces to undertake more detailed analyses of specific policy areas. Together the final recommendations and the work of the three task forces will form the foundation of a watershed planning approach in the Snoqualmie Valley Agricultural Production District to sustain agriculture production, salmon recovery, and flood risk reduction.

The Fish, Farm and Flood Advisory Committee participants recognize the importance of salmon recovery efforts, a vibrant agricultural economy and protecting agricultural soils in the Snoqualmie Valley Agricultural Production District, and the importance of protecting the public in flood prone areas. To address inherent conflicts between these three overlapping interests, the Advisory Committee recommended a suite of near term actions to address critical needs for all three resource areas, and the creation of three task forces:

- Buffers Task Force, with the goal of developing a science-based riparian buffer planting implementation strategy for the Snoqualmie Valley Agricultural Production District that strikes a balance between increasing ecological function of waterways and maintaining the agricultural viability of the Snoqualmie Valley Agricultural Production District.
- Snoqualmie Valley Agricultural Production District Strategic Plan Task Force, with the goal of improving the long-term productivity of farmland, bring more acres into production, especially food production, and increasing opportunities for farmers to develop the necessary infrastructure to support or increase their farm businesses. This task force will conduct an assessment of specific farmland resource property needs and assets in the Snoqualmie Valley Agricultural Production District and create an implementation plan for project improvements to land (e.g., drainage) and water access. It will complement other related efforts, such as King County's Local Food Initiative which is an economic development and marketing plan for food and agriculture in the region.
- Regulatory Task Force, with the goal of evaluating regulations and recommending process improvements or possibly statutory changes, as appropriate, pertaining to key regulatory issues identified by the Fish, Farm and Flood agricultural stakeholders. The goal of the task force is to identify changes that will reduce compliance costs and increase predictability without diminishing the overall level of environmental protection or the level of flood protection that regulations are intended to assure. Initial areas of focus for the task force include:
  - Drainage regulations that make maintenance expensive or time-consuming or otherwise restrict the ability to improve drainage of farm fields.

- Flood regulations related to constructing farm pads, buildings and other farm improvements.
- Mitigation required when farmers maintain drainage ditches or build a farm pad or other structure in a wetland or a buffer of a wetland or stream.

Those recommendations are reflected in a new policy R-650a.

- R-649**                    **Agriculture must remain the predominant use in any Agricultural Production District and aquatic habitat or floodplain restoration projects, as well as, King County mitigation reserves program projects shall not reduce the ability to farm in the Agricultural Production District. Therefore, until the county implements the watershed planning process described in R-650, such projects are allowed only when supported by owners of the land where the proposed project is to be sited. Criteria to be considered:**
- a.            **For a project proposed to be sited on lands that are unsuitable for direct agricultural production purposes, such as portions of property that have not historically been farmed due to soil conditions or frequent flooding, and which cannot be returned to productivity by drainage maintenance, or**
  - b.            **For a project proposed to be sited on lands suitable for direct agricultural production:**
    - (1)        **there are no unsuitable lands available that meet the technical or locational needs of the proposed project, and**
    - (2)        **the project is included in, or consistent with, an approved Water Resources Inventory Area Salmon Recovery Plan, Farm Management Plan, Flood Hazard Management Plan or other similar watershed scale plan; or the project would not reduce the baseline agricultural productivity within the Agricultural Production District.**
- R-650**                    **Aquatic habitat restoration projects, floodplain restoration projects and projects under King County’s mitigation reserves program in an Agricultural Production District shall be evaluated through a collaborative watershed planning process with the goal of maintaining and improving agricultural viability, improving ecological function and habitat quality, and restoring floodplains through integrated, watershed-wide strategies. A watershed planning process shall be established for an agricultural production district because of the number of potential restoration projects and shall:**
- a.            **ensure that agricultural viability in the Agricultural Production District is not reduced as the result of actions taken and that agriculture remains the predominant use in the agricultural production district;**
  - b.            **evaluate and recommend actions at all scales across the affected watershed to maintain and improve agricultural viability, restore**

- ecological functions and aquatic habitat and restore floodplains, including voluntary actions taken by landowners;
- c. be a collaborative effort among affected land owners, interested stakeholders, and King County and shall be updated on a periodic basis; and
  - d. identify and recommend actions that King County should take or ensure are taken to maintain and improve agricultural viability in the Agricultural Production District and address any impacts to agriculture from aquatic habitat restoration projects, floodplain restoration projects and projects under King County's mitigation reserves program constructed in the Agricultural Production District.

**R-650a**

The Snoqualmie Valley Agricultural Production District is the first Agricultural Production District to undergo a watershed planning effort called for in R-650. King County shall implement the recommendations of the Snoqualmie Fish, Farm and Flood Advisory Committee. The recommendations of the task forces and other actions identified in the final Advisory Committee Report and Recommendations will form the basis for a watershed planning approach to balance fish, farm and flood interests across the Snoqualmie Valley Agricultural Production District and an agreement on protecting a defined number of acres of agricultural land. The Advisory Committee, or a successor committee, will monitor progress of the task forces and will reconvene to evaluate the watershed planning approach to balancing interests prior to the next Comprehensive Plan Update. The policy issues and recommendations outlined in the Snoqualmie Fish, Farm, Flood Advisory Committee Report and Recommendations are largely specific to the Snoqualmie Valley and are not intended to be applied broadly in other Agricultural Production Districts. Future Fish, Farm, Flood efforts focused in other Agricultural Production Districts will need to go through their own processes to identify barriers to success for all stakeholders in these geographic areas. R-649 continues to apply to the Snoqualmie Valley Agricultural Production District until the watershed planning effort outlined in the Fish, Farm and Flood recommendations is complete. A policy reflecting the outcome of this effort shall be included in the next four-year cycle Comprehensive Plan Update.

**R-651**

Maintaining the viability of farmlands is a high priority for King County. Within the Agricultural Production Districts, measures to protect threatened or endangered species shall be tailored to ensure working farms can continue to operate.

Two Agricultural Production Districts in or near urban areas, the Lower Green River Valley and Sammamish Valley, were designated in the 1985 Comprehensive Plan, and those designations have been retained. The

## **Appendix II**

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### Snoqualmie FFF Advisory Committee Action Recommendations

Language as approved on May 11, 2016

## Snoqualmie Fish, Farm, Flood Advisory Committee Action Recommendations - Language as approved on May 11, 2016

The table below reflects agreement language exactly as approved by the Committee on May 11, 2016. In the Committee Report, these recommendations have been reorganized and assigned individual numbers 1 through 34. See Appendix II for additional detail.

<b>COMMITTEE ACTION RECOMMENDATIONS</b>	
Flood 1:	<p>Accelerate &amp; complete elevation of ~90 homes in APD in 10 years, prioritize based on depth of flooding (per needs assessment).</p> <p>Explore ways to improve efficiency &amp; effectiveness of program (in particular to address affordability &amp; equity – lower income owners may be stymied by need to come up with up-front money which is later reimbursed). Flood District should address staff capacity shortage for this program. Prioritize homes at greatest risk per first floor elevation, acknowledging that landowners readiness matters as well.</p>
Flood 2:	<p><u>Action 1.</u> Implement an outreach process regarding topic of limited floodplain capacity and impacts of placing fill, and exploring creative solutions within existing regulatory framework. Outreach would be with farmers and non-farm residents of the valley.</p> <p><u>Action 2.</u> Expand pilot project to elevate ag infrastructure in constrained reaches, consistent with existing regulatory framework and based on additional needs assessment with farmers.</p>
Flood 3:	<p>Assess flood-safe road access, particularly serving populated areas.</p> <p>In 3 years, at least identify conceptual alternatives to provide improved access during floods for largest numbers of people and while not impacting landowners / land uses. Could lead to removal of road prism fill &amp; thus added capacity for farm pad fill.</p>
Flood 4:	<p>KC should take lead on identifying partners &amp; pursuing a housing trust for affordable farmworker housing. There is an immediate need to secure land due to escalating land prices &amp; diminishing supply.</p>

## ***COMMITTEE ACTION RECOMMENDATIONS***

Flood 5:	When pursuing large levee or revetment setback projects, prioritize the use of any created flood storage capacity for agricultural uses.
Fish 1:	<p>Move Forward 2-3 Large Restoration Projects <i>Inside the APD</i></p> <p>We are behind in meeting our Salmon Plan habitat restoration goals. In order to catch up, we need to move forward two to three large capital projects in the Snoqualmie APD, specifically in the two alluvial fan reaches (i.e. Raging River to Patterson Creek, and Tolt River to Harris Creek).</p> <p><u>Action 1.</u> Increase King County funding to boost staff capacity (e.g., additional basin stewards and/or CIP staff) and capital funding for large restoration projects inside the APD.</p> <p><u>Action 2.</u> To improve efficiencies and certainty, King County WLRD will revise its internal project approval process for large capital restoration projects so that the framework is transparent and predictable while improving engagement of local landowners and complying with all permitting processes.</p>
Fish 2:	<p>Accelerate the Pace of Restoration to One Project Per Year Outside the APD</p> <p>We are behind in meeting our Salmon Plan habitat restoration goals. Much of the King County resources have been dedicated to undertaking projects in the highest priority reaches within the APD. This has delayed implementation in other areas.</p> <p><u>Action 1.</u> Increase King County funding to boost staff capacity (e.g. additional basin stewards and/or CIP staff) and capital funding for large restoration projects outside of APD to a rate of at least one project per year.</p> <p><u>Action 2.</u> To improve efficiencies and certainty, King County WLRD will revise the existing project approval process for large capital restoration projects so that the framework is transparent and predictable while improving engagement of local landowners and complying with all permitting processes.</p>
Fish 3/AG 1-3	Conduct a low-flow assessment and develop a strategy to improve flow conditions for fish that is integrated with efforts to increase availability of



## ***COMMITTEE ACTION RECOMMENDATIONS***

	<p>irrigation water supply.</p> <p>In 2015, we experienced some of the lowest flows on record and some of the hottest recorded stream temperatures. At the same time, valley farms suffered from a lack of access to irrigation water. Identify drivers of lower flows (including land use, climate change, consumptive uses, and development, etc.) and conduct an assessment of how flow moves through the valley, both above and below ground, to understand critical issues that contribute to low flows in the lower Snoqualmie River.</p> <p><u>Action</u> Work together to secure funding from King County and other sources to undertake the low flow assessment. Develop a strategy to improve flow conditions in conjunction with improving irrigation water supply.</p>
Fish 4:	<p><b>Move Forward One or Two Pilot Tributary Restoration Projects that Combine Drainage Waterways</b></p> <p>As shown with the Waterwheel Creek project, it is possible to create multi-objective projects by combining waterways in a way that improves drainage and farmability while also improving aquatic habitat and reducing overall area dedicated to riparian buffers.</p> <p><u>Action 1.</u> King County needs to increase funding for King County sponsored restoration projects and staffing (e.g. ADAP, ERES), or increase the funding to other entities like the KCD, NRCS, and WFC.</p> <p><u>Action 2.</u> Project sponsors will monitor habitat and drainage improvements to document benefits and impacts. Sponsors will create an adaptive management framework to evaluate impacts from the projects. Projects will explore innovative approaches to improving drain tiles and other drainage infrastructure.</p>
Fish 5:	<p><b>Ensuring Ecological Review of King County's Drainage Projects</b></p> <p><u>Action</u> Restore funding for a fish biologist to participate in King County's Agricultural Drainage Assistance Program Team to improve water quality and habitat for fish on project sites while improving the efficiency of environmental permitting for the overall program.</p>

## **COMMITTEE ACTION RECOMMENDATIONS**

Fish 6:	<p>Support the Buffer Task Force and work with task force participants to Create a Buffer Implementation Plan as a subsequent task.</p> <p>The completion of the Buffer Task Force work is important to creating a path forward to determine buffers that are ecologically robust and provide landowners flexibility.</p>
Farm 1:	<p>Study and plan for a wide range of solutions for water storage for flood risk reduction and low flow augmentation.</p> <p>Reduce peak flood elevations and increase water supply for irrigation. Snoqualmie Valley landowners and residents have significant concerns about preserving safety, our livelihoods, and managing insurance costs in the face of flooding.</p> <p><u>Action 1.</u> Assess previous studies of all water storage options in the Snoqualmie basin and identify elements for further analysis.</p> <p><u>Action 2.</u> Work together to secure funding from grants or other sources to conduct a water storage feasibility study, excluding large dam solutions. These may include groundwater injection, ponds, wetlands, storm water retrofitting, floodplain reconnection, etc.</p> <p>[Action 3. See Fish 3/Farm 1– 3 above]</p>
Farm 2:	<p>Improve Drainage, Reduce Costs and Complexity of Drainage Projects, and Increase Certainty</p> <p>Each of the following Actions will have different timelines. These different Actions will require different pathways based on their complexity. The use of the word “opportunities” below is understood to mean: establish clear and simplified systems in consultation w/regulatory agencies.</p> <p><u>Action 1.</u> Create a routine pathway for ag drainage maintenance (see AG2-1 table) program to undertake comprehensive drainage assistance that extends beyond current ADAP to encompass all agricultural drainage infrastructure (i.e., ditches, tiles, floodgates) as well as other drainage challenges (i.e., beavers, alluvial fans) in modified and artificial waterways irrespective of pump size needed for the waterway. This program will establish routine management for all of these types of drainage infrastructures and the challenges of each type, while minimizing impacts on the resources. See the AG2-1 table below that summarizes what activities</p>

## **COMMITTEE ACTION RECOMMENDATIONS**

	<p>should be covered in each type of waterway per the ADAP classification. The current streamlined ADAP program applies to traditional dredging maintenance projects only and is limited to artificial and modified waterways that can be de-watered with a 4-inch pump. It is acknowledged that new tiles and large waterway modifications will be challenging.</p> <p>This will include:</p> <ul style="list-style-type: none"> <li>• Restore funding for a fish biologist to participate in King County's Agricultural Drainage Assistance Program Team to improve water quality and habitat for fish on project sites while improving the efficiency of environmental permitting for the overall program.</li> <li>• A drainage comprehensive technical needs assessment to inform a "Drainage Recovery Plan" that involves WID, KCD, and the Flood Control District.</li> <li>• Opportunities to install and/or improve necessary drainage infrastructure including field tiles, flood gates, and pumps on modified waterways and activities not currently covered by ADAP.</li> <li>• Address alluvial fan management in partnership with relevant federal agencies, KCD, and community-based organizations.</li> <li>• Address beaver management in partnership with relevant federal agencies, KCD, and community-based organizations.</li> </ul> <p><u>Action 2.</u> The Regulatory Task Force will address any policy issues coming out of Activity 1, including:</p> <ul style="list-style-type: none"> <li>• Evaluate the total cost of drainage and look for ways to reduce costs including regulatory-driven components.</li> <li>• Explore utilizing the individual permit for turbidity standards that larger projects use. If there is a positive outcome, pursue a pilot project followed by widespread implementation.</li> <li>• Research mitigation requirements for projects that need periodic maintenance. In the case of mitigation for re-dredging, find out whether Farmers owe new net acres.</li> </ul> <p><u>Action 3.</u> Allocate the appropriate amount of money to fund Actions 1&amp;2</p>
Farm 3:	<p>Regulatory changes to make farms safer during floods, such as greater flexibility for farm pad size and placement.</p> <p>According to the H&amp;H study, the work that occurred above the Snoqualmie</p>

## COMMITTEE ACTION RECOMMENDATIONS

falls has resulted in a 1" increase in flood levels in portions of the lower Snoqualmie Valley closer to the falls and a lesser increase in areas further downstream. While the project above the falls met permitting standards, farms that need farm pads and are being held to a <0.1" net impact standard, which is inconsistent. We need a better regulatory approach and more resources to fund farm pads.

Action 1. Strive to achieve infrastructure needs such that every farm in the Snoqualmie APD has the ability to erect an appropriately-sized and appropriately-located farm pad/platform.

Appropriately-sized means that each pad will be proportional to the size of the farm.

Research for farm pad implementation includes:

- The valley's total capacity for farm pads
- River reaches where more farms need farm pads
- Places where fill removal could be achieved to create more capacity for farm pads within constrained reaches, such as roads, trails, etc.

Action 2. Develop a Farm Safety Strategy so that all farms have a way to be safe during floods. Offer wide range of tools (e.g., farm pads where there's fill capacity; funding for elevated platforms or other non-fill solutions; shared farm pads or shared nearby high ground; make sure existing pads are high enough; use flatbed trailers to move equipment prior to flood). Use the needs assessment to better quantify which farms still need high ground; are they in constrained reaches - if not, could they get a farm pad; if they are, can they get help with non-fill solutions?

Action 3. Although no change to zero rise standard is recommended, propose we better understand the current regulatory framework and look for ways to gain more flexibility in applying zero-rise, but not in changing the standard itself.

Action 4. The Regulatory and Buffer Task Forces will collaborate to:

- model tree impacts, followed by planting solutions
- determine tree size and/or types in orientation modeling that point to thresholds/ volumes /scale that adversely affect hydrology and/or hydraulics
- incorporate these results into the work of the Buffer Task Force and the Ag Strategic Plan

## ***COMMITTEE ACTION RECOMMENDATIONS***

	<p><u>Action 5.</u> King County and appropriate agencies shall regularly and clearly communicate with Snohomish County, USDA NRCS, Department of Ecology and other relevant agencies, about floodplain management, including tree planting, so that King County landowners are not adversely impacted by the decisions of those entities. A standard operating procedure (SOP) will be created.</p>
Farm 4:	<p>Permanently protect a certain amount of land for farm use as well as ecological restoration</p> <p>Snoqualmie Valley landowners and residents are willing to give up some farmland for wildlife habitat. However, there needs to be certainty that enough land remains for active and viable farm production.</p> <p style="padding-left: 40px;">A. Following completion of Task Force work products, including the Agricultural Strategic Plan, and with reference to the salmon plan and flood plan, determine the acreage of agricultural land in the Snoqualmie APD to be permanently protected for agricultural production. The amount shall be greater than the current amount of land protected under the Farmland Preservation Program. Restoration actions as well as road and other infrastructure projects would not be allowed to diminish agricultural acreage below that new level. The process for determining the acreage number is to be determined later, using policy and science, through a collaborative process that includes development of common language.</p> <p style="padding-left: 40px;">B. In conjunction with A., following completion of the task force products, determine the amount of agricultural land in the APD that is to be reserved for future habitat restoration actions.</p> <p><u>Action 2.</u> Every three or five years, complete an inventory of farmland conversion and loss, including plantings, in the Snoqualmie Valley.</p> <p><u>Action 3.</u> Prevent further farmland loss through bank erosion by:</p> <ul style="list-style-type: none"> <li>• Creating an inventory of all land in Snoqualmie Valley, including farmlands, that has revetments. This will draw on King County data including data from King County Rivers and the Ag Strategic Plan.</li> <li>• Conduct an assessment of the relative risk of bank erosion of farmland that does not have revetments.</li> <li>• Conduct a multi-objective cost/benefit analysis of different bank stabilization techniques and consider using a tool such as Ecosystem Management Decision System to inform the relative benefits of each technique.</li> </ul>

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	<ul style="list-style-type: none"> <li>After completing the inventory, assessment, and multi-objective cost/benefit analysis described above, utilize a tool such as the Ecosystem Management Decision System (as well as applicable flood and salmon recovery plans) to prioritize measures to protect net total farmland acreage including revetment repairs and soft-shore armor/stabilization techniques.</li> </ul> <p><u>Activity 4.</u> Inspect and evaluate the condition of river stabilization facilities annually. Make inspection results available to the public. <i>[NOTE: Committee discussion occurred regarding county facilities vs. other facilities. Assume that the intent is to include all facilities, but recognize that inspection of non-county facilities may require cooperation from owner.]</i></p> <p><u>Activity 5:</u> Establish an ongoing accountability system to track measures, including changes in land uses and conversions, and overall progress on all FFF agreements. <i>[NOTE: This is best suited as an overarching recommendation for all recommendations, rather than as part of “Farm 4”.]</i></p>
Farm 5:	<p><b>Watershed/APD-Wide Mitigation Program</b></p> <p>Voluntary projects and plantings large and small will be eligible for mitigation of farm improvement projects that have a public benefit. Examples include those that address drainage or safety during flooding, where compatible with funding. Create an accounting system so that mitigation projects can be counted toward future farm improvement projects.</p> <p><u>Activity 1.</u> Appoint a group of farm, fish and regulatory experts to establish a clear advanced mitigation system for “out-of-time” projects on the same property, so that a person who has had a voluntary planting on their property can get mitigation credit for it later. Collaborate with the Buffer and Regulatory Task Force.</p> <p><u>Action 2.</u> Appoint a group of farm, fish and regulatory experts to establish a clear mitigation system for “off-site” mitigation within a watershed for agricultural drainage projects. Explore a pathway for farmers to have access to address mitigation through the Mitigation Reserves Program. Collaborate with the Buffer and Regulatory Task Force.</p> <p><u>Action 3.</u> Look for appropriate grant sources to allow for support of activities 1 &amp; 2, Given that very few grant sources allow mitigation, communicate with potential funding partners and change these policies or create exceptions where possible.</p>

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Farm 6:	<p>Large capital projects, such as levee setbacks, have the potential to affect neighboring properties. Landowners need greater certainty that potential impact pathways have been identified and that project design reflects an effort to eliminate or minimize any adverse impacts.</p> <p><u><b>Action 1.</b></u> Conduct listening sessions, site visits, and adaptive management of all potentially impacted landowners, both upstream and downstream before, during, and after each project. The goal of this work is to understand the impact of each project and the system as a whole. This work will include:</p> <ol style="list-style-type: none"> <li>1) Pre and post project landowner consultations involving small groups of neighbors. In these consultations, clearly communicate the potential impacts and the confidence level in each prediction. To the extent possible, be clear that there may be unintended consequences.</li> <li>2) For each project, plan for addressing safety risks and any net farmland impacts.</li> <li>3) Pre-project, acknowledge potential impacts. Post-project, track and acknowledge impacts, if any.</li> </ol> <p><u><b>Action 2.</b></u> Have a third-party evaluator participate in the identification of potential (pre-) and actual (post-) impacts of all large-scale river restoration projects (in mainstem Snoqualmie, Tolt River, Raging River, including projects that entail levee setbacks and revetment removal), with the same type of third-party arrangement used for Phase 1 of the H&amp;H study. Input from third-party review will be given serious consideration in project design and post-project response. Third party evaluation will be performed at the cost of the project sponsor in the case of King County, which performs the vast majority of large scale projects. Work together to secure funding to perform similar third party assessments for projects sponsored by other parties. KC will partner in funding if no other funding resources can be found.</p> <p><u><b>Action 3.</b></u> King County shall communicate its process for compensating farmers for any demonstrable, quantifiable losses due to project impacts., A third-party evaluator should be engaged in this process to help determine whether a given landowner has been impacted by a given project.</p> <p><u><b>Action 4.</b></u> King County shall evaluate the direct and cumulative effects of large scale river restoration projects (e.g. levee/revetment removals) undertaken since 2005 in relation to other watershed actions (e.g. the 205 project, upland development, and climate change). The assessment should use a third party evaluator arrangement similar to what was used for the Phase 1 of the H and H study.</p>
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### ***COMMITTEE ACTION RECOMMENDATIONS***

	<p><u>Action 5.</u> Institute a dynamic, distributed flood monitoring system that allows landowners to share real time information during floods. Not only will this help landowners cope with flooding, it will also collect data longitudinally over time to improve our understanding of how and why the river is changing, which will guide adaptive management practices as we head into an uncertain future.</p>
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*Farm 2, Action 1 Table*

	ADAP [2012-present] (less than 4" pump)		ADAP 2.0 (>4" pumps)	
	Waterway channel type- <u>modified</u>	Waterway channel type- <u>artificial</u>	<u>Modified</u> channel type- larger waterways* (e.g. AMES, Tuck)	Waterway channel type- <u>natural</u>
Typical dredging and culverts	Current program	Current program		Not adding
Tiles new/old				Not adding
Beavers- D16 a,b,d (not c!)				Not adding
Alluvial fan				Not adding
Flood gates and pumps (assuming < than 10)				Not adding
Daylighting				Not adding



***Services included in current ADAP program***



***Proposed new services within waterways currently served by ADAP.***



***Proposed new services in larger, modified waterways.***



***Natural classification waterways not included for proposed services.***

***This program will establish routine management for all of these drainage infrastructures and challenges (blue and lavender above).***

***ADAP: Agricultural Drainage Assistance Program***

***Channel type refers to classification system described in current ADAP documentation and mapping.***

## **Appendix III**

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Action Recommendations

Additional Detail

Action Recommendations – Additional Detail

Note: Additional details regarding current or potential funding, partners, etc. to be added

No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
1	Farm 1, Actions 1,2	Review prior studies of all water storage options for purposes of flood risk reduction in the Snoqualmie basin and identify elements for further analysis. Following the review, conduct a water storage feasibility study, excluding large dam solutions.	The Snoqualmie Valley is subject to flooding during the wet season and drought conditions during the growing season. Farmers and valley residents in the floodplain have asked for relief from flooding, particularly with regard to removing or reducing the peak of floods in the spring and fall. Spring and fall floods have specific economic impacts that include, but are not limited to: delayed planting or harvesting, crop damage and contamination of human food crops, rendering them non-marketable for human consumption. The feasibility study is intended to help the community understand how effective the different options are for reducing the peak of fall and spring flooding and how likely it is that those options could be implemented. Outreach work is necessary to determine what levels of peak reduction in the fall and spring would be of significance to the farming community. The Farm Flood Task Force notes may provide guidance in regards to this topic.	Lead: SVPA for review KC WLRD (multiple units) for feasibility study  Partners: Snoqualmie WID Tulalip Tribes Snoqualmie Tribe Snoqualmie Forum KCD Sno-Valley Tilth	None identified	
2	Flood 1	Accelerate home elevation program	It is important to preserve the housing stock that exists in the APD, and to assure that the farm homes in the floodplain are safe during floods. According to the Lower Valley Needs Assessment, there are 180 farms in the APD and there are 127 farm homes within the portion of the APD which falls inside the floodplain. Of those 127, about a third have a first floor above the level of the 100 year flood (14 of those have been elevated through county programs). The remaining homes (approximately 90) are at risk of flooding in their living space during a 100 year flood, or the elevation of the first floor is unknown. The county provides cost share of 95% to support farmers who choose to elevate their homes three feet above the 100 year flood level. The county currently elevates an average of two farm homes per year in the lower valley.	Lead: King County FCD (via KC WLRD RFMS)  Partners: KC WLRD (Ag) KC DPER Snoqualmie WID KCD Sno-Valley Tilth SVPA	Partial. Additional resources needed to expand current program to this level.	
3	Farm 3, Action 1	Strive to achieve farm infrastructure needs such that every farm in the Snoqualmie APD has the ability to erect a farm pad or platform to keep	Most of the Snoqualmie Valley APD is in the floodplain and floodway. Farm pad construction was allowed immediately following the devastating 1990 flood, and then again following the 2008 Flood-Farm Task Force Report. Thirty three (33) farm pads have been constructed through the county’s farm pad program since	Lead: King County FCD (via KC WLRD RFMS)  Partners: KC WLRD (Ag)	None identified	

No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
		livestock, equipment or other key assets safe during floods.	2008. However, 29 of the 180 farms in the APD have neither high ground (above BFE) nor a farm pad. Farmers in some areas of the valley are no longer able to construct pads because they cannot meet the zero rise standard (see report for explanation of constrained reaches). This recommendation address both the need for more flexibility in creating refuge for farms and providing more county support to implement these solutions.	KC DPER Snoqualmie WID KCD Sno-Valley Tilth SVPA FEMA WADOE KC Ag Commission		
4	Farm 3, Action 2	Develop a Farm Safety Strategy so that all farms have a way to be safe during floods.	[see Context for #3 above] This recommendation focuses on a range of alternatives to placing fill in the valley. These “creative solutions” would offer flood safety infrastructure including, but not limited to: elevated platforms and shared farm pads, constructing farm pads out of large culverts so that water can still pass through them, looking for places where fill can be removed (e.g., Snoqualmie Valley Trail) to provide more capacity for farm pads, offsite storage outside floodplain, floating structures, etc.	Lead: King County FCD (via KC WLRD RFMS)  Partners: KC WLRD (Ag) KC DPER Snoqualmie WID KCD Sno-Valley Tilth KC Ag Commission SVPA FEMA WADOE	No, except as directly related to existing program as noted above (#2)	
5	Farm 3, Action 3 & Flood 2, Action 1	Implement an outreach process with farmers and non-farm residents of the valley regarding topic of limited floodplain capacity and impacts of placing fill. Explore creative solutions for greater flexibility within the existing zero-rise regulatory framework <i>[Note to committee: combined recommendations Ag 3-3 with Flood 2-1].</i>	[see Context for #3 above] This recommendation calls for better education and outreach to the Snoqualmie Valley community about how floodplain capacity works, what the regulations are trying to do, so that farmers and non-farmers can better understand why there are limits on placing fill. Explore and about potential creative solutions in the constrained reaches.	Lead: King County FCD (via KC WLRD RFMS)  Partners: KC WLRD (Ag) KC DPER Snoqualmie WID KCD Sno-Valley Tilth KC Ag Commission SVPA FEMA WADOE	None identified	Partner orgs may have outreach capacity to participate.
6	Flood 2, Action 2	Expand existing pilot project to elevate farm infrastructure, such as barns, in constrained reaches, based on additional needs assessment with farmers	Calls on the county to expand its pilot program which was created in 2011 to help farmers elevate ag infrastructure, such as barns, or to design and construct other non-fill solutions such as elevated platforms. According to the Lower Valley needs assessment there are 118 barns in the APD inside the 100 year floodplain; it isn't known how many of those need to be elevated.	Lead: King County FCD (via KC WLRD RFMS)  Partners: KC WLRD (Ag) KC DPER	No, except as directly related to existing pilot effort.	

No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
				Snoqualmie WID KCD Sno-Valley Tilt SVPA WADOE		
7	Flood 5	When large levee or revetment setback projects result in net removal of fill, prioritize the use of any created flood storage capacity for agricultural uses, such as farm pads.	When a large levee/revetment setback project occurs, flood storage capacity is made available in two ways: 1) physical material (e.g., rocks, soil) removed from the project site can be moved to another location such as a farm pad, and 2) hydraulic modeling is done annually (through farm pad program) to evaluate the cumulative impact of fill placed for all farm pads and net fill removed for all restoration projects. So the removal of material at a project site is reflected in the model as freed up capacity. This recommendation is currently being done informally. When King County sponsors a large levee setback project in the Snoqualmie Valley, staff within KC Water and Land Resources Division coordinate movement of physical material (e.g., rocks, soil) from a project site to a farm pad construction site. This current informal approach has logistical challenges around the timing of specific actions and very high staff costs. Because of these challenges it can be more expedient for the County to just pay to haul the material to an approved receiving site.	Lead: King County FCD (via KC WLRD RFMS) and KC WLRD (ERES)  Partners: KC WLRD (Ag & RPU) KC DPER KCD KC Roads (in case they make fill available)	No, except as current program operates case-by-case. Additional resources needed.	Already being done informally, case by case.
8	Flood 3	Assess opportunities to improve flood-safe road access, particularly serving populated areas.	There are a number of state and county roads that connect population centers within and outside of the Snoqualmie Valley. Many of these roads pass through the 100 year floodplain including those that run east/west (e.g., NE Woodinville-Duvall Road, NE 124th St, Tolt Hill Road) and those that run north/south (e.g., SR203 and W. Snoqualmie River Road). The cities of Duvall and Carnation depend on these roads to move people and goods, and both communities can become cut off during significant floods. This recommendation calls for an assessment of the impacts that flooding has on the roads which connect to populated areas (such as Duvall and Carnation), and what solutions could be considered. Such a study would analyze at what flows the different roads become impassable due to flood depth and velocity, and develop conceptual alternatives for ways to improve vehicular access during floods, such as by elevating roadways.	Lead: KC Roads  Partners: King County FCD (via KC WLRD RFMS) WSDOT Carnation Duvall	None identified	
9	Flood 4	Identify partners and pursue a housing trust for affordable farmworker	Most Snoqualmie valley farms are in the floodplain and floodway. Current state law prohibits construction of new residential development in the floodway; changing this	Lead: KC WLRD (Ag)	None identified	

No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
		housing located outside the floodplain.	law would be difficult to accomplish and would have the potential to have detrimental unintended consequences. However, there is a need to locate housing for farm owners and farm workers in reasonably close proximity to the farms. Development of housing in lower valley cities (Duvall and Carnation) is one potentially promising option.	Partners: Duvall Carnation Washington State Farmworker Housing Trust WADOE KCD Sno-Valley Tilth SVPA Snoqualmie WID KC Ag Commission		
10	Farm 6, Action 5	Institute a dynamic, distributed flood monitoring system that allows landowners to share real time information during floods.	Valley farmers/residents use the river level gauges to predict the flood timing and levels on their property. Flooding in the last decade has not been as predictable, according to residents. Farmers/residents have asked if the gauges can be improved so there is a mechanism to predict how and when high flows will propagate down the valley. One of the challenges with the gauges is that multiple high water events are necessary to improve their calibration. There is a limited amount of information related to the high water events and all parties are interested in finding ways to provide this supplemental information.  The Snoqualmie Valley Preservation Alliance (SVPA) has taken a leadership role in developing a proof-of-concept “citizen hydrologist” monitoring system to augment the USGS gauge information. The SVPA has teamed with Floodzilla mobile application developer and valley resident Geary Eppley, as well as other valley residents with applicable expertise to install a water level sensor connected to beta software platform before the 2016/2017 flood season. According to the SVPA website, the final system will be a tool that will “allow users to upload observations into a map, and allow others to view it real time.	Lead: SVPA  Partners: King County FCD (via KC WLRD RFMS) Snoqualmie WID KC WLRD (Science)	SVPA initial start-up funding, but additional needed.  None identified for King County FCD.	Project initiated by SVPA via contract with Geary Eppley (Floodzilla)  Possible participation by KC Science (gaging)
11	Farm 6, Action 1	For all large capital projects, conduct listening sessions, site visits, and adaptive management of all potentially impacted landowners, both upstream and	Large capital projects that change the configuration of river banks, potentially change how water flows in the channel, which has the potential to affect neighboring properties. Large scale restoration projects are required to assess and minimize upstream and downstream effects, but farmers and residents have raised concerns that actions taken to reduce some type of flood risk and/or improve salmon habitat are changing the way the river	Lead: King County FCD (via KC WLRD RFMS) and KC WLRD (ERES)  Partners: Tulalip Tribes Snoqualmie Tribe	None identified, except as already included in project management procedures.	



No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
		downstream, before, during, and after each project particularly following flood events.	and floods behave. This recommendation increases transparency and makes the communication type and frequency more clear by taking advantage of lessons learned in recent projects and by incorporating outreach recommendations received from residents.	Wild Fish Conservancy KCD Sno-Valley Tilth SVPA Snoqualmie WID KC Ag Commission KC WLRD (RPU & Ag)		
12	Farm 6, Action 2	A third-party evaluator should participate in the identification of potential (pre-) and actual (post-) impacts of all large-scale river restoration projects, such as levee or revetment setbacks.	[see Context for #11] Recommendations third party review process to provide additional assurance to landowners that potential impacts have been considered with landowner interests in mind. The inclusion of a third party reviewer (selected by the SVPA) lent trust and credibility to the recent Snoqualmie River Hydraulic Study in terms of methodology and interpretation of final results <sup>22</sup> .	Lead: King County FCD (via KC WLRD RFMS) and KC WLRD (ERES)  Partners: See #11 above	None identified.	Some granting organizations may not support this expenditure. This may require King County to step in with funding for project sponsors who are solely grant funded.
13	Farm 6, Action 3	King County should clarify its process for compensating landowners for any demonstrable, quantifiable losses due to project impacts.	[see Context for #11] Increase transparency by documenting how potential impacts to surrounding properties are evaluated, and if such impacts are found to be demonstrably related to the project, how compensation is determined.	Lead: King County FCD (via KC WLRD RFMS) and KC WLRD (ERES)		
14	Farm 6, Action 4	King County should evaluate the direct and cumulative flooding effects of large scale river restoration projects (i.e., levee/revetment removals) undertaken since 2005 in relation to other watershed changes (e.g., the PSE/205 project, upland development, and climate change).	A number of projects that modify the Snoqualmie River have been undertaken in the last 10 years. During roughly the same time period, the Snoqualmie Valley has experienced many high flow events, including five in the last year of the FFF process. At various times during the FFF process, concerns were expressed that all of these river projects are having a negative impact on different farms in the valley either by changing the amount or timing of flooding, including changes in water surface elevations, velocities, or how and where sediment deposits. Projects undertaken since 2005 include habitat restoration projects (e.g., removal or setting back of levees and revetments) as well as projects like the Snoqualmie 205/PSE evaluated in the Snoqualmie River Hydraulic Study.  This recommended study is supported by both farm and fish interests for different reasons. Farm interests are	Lead: King County FCD (via KC WLRD RFMS) and KC WLRD (ERES)  Partners: KCD Sno-Valley Tilth SVPA Snoqualmie WID KC Ag Commission Tulalip Tribes Snoqualmie Tribe Wild Fish Conservancy Snoqualmie Forum Snohomish Forum Technical Committee	None identified.	

<sup>22</sup> Full title: Snoqualmie River Hydraulic Study – Evaluation of Effects of Snoqualmie Falls Projects on Downstream Flooding. Prepared for King County by Watershed Science and Engineering and Herrera, 2016. Independent review by Dr. Ed McCarthy.

No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
			concerned that the restoration projects are having negative impacts that fish interests are not aware of or not acknowledging. They would like to see an evaluation similar to what was done as part of the H & H study to evaluate the potential impacts of habitat restoration projects on farms in the lower valley. Fish interests supported this study recommendation in the hopes that it can help reduce the fear and uncertainty that some in the farming community have about the flood effects of salmon restoration projects, which are fundamentally different than the Snoqualmie 205/PSE channel widening project performed above the falls.	KC WLRD (RPU & Ag & Science)		
15	Farm 3, Action 4	Conduct modeling to analyze potential flood impacts of large scale tree plantings at maturity.	<p>[see Context for #3 above].</p> <p>The Snoqualmie Valley floodplain is managed under a zero rise standard. Work on a large tree planting project, just north of the Snohomish County line, has raised concerns among valley residents that a large number of trees in a particular configuration may negatively affect flooding on upstream or downstream properties. Since farmers' actions such as constructing buildings or farm pads are regulated under the zero rise standard, they want to make sure other forms of floodplain displacement are accounted for, if appropriate and measurable.</p> <p>This action calls for hydraulic modeling to assess the potential for flood water surface elevations to be affected by large scale, continuous tree plantings along the river banks or floodplain. The modeling would assess the sensitivity of tree sizes and density, as well as planting orientation and location in the floodplain, to determine if there are thresholds/volumes/scale that adversely affect hydrology and/or hydraulics.</p>	<p>Lead: King County FCD (via KC WLRD RFMS) and KC WLRD (ERES)</p> <p>Partners: KC DPER KC WLRD (RPU &amp; Ag &amp; Science) WADOE FEMA Snohomish County KCD Sno-Valley Tilth SVPA Snoqualmie WID Snoqualmie Forum Snohomish Forum Technical Committee</p>	None identified.	Will depend on timing and whoever leads it will need to coordinate with RFMS re: hydraulic modeling protocols; hire hydraulic modeler
16	Farm 3, Action 5	Improve communication and coordination between government agencies regarding floodplain management.	<p>[see Context for #3 above].</p> <p>The Snoqualmie Valley floodplain is located in King and Snohomish Counties. There are different floodplain management regulations in the two counties, but actions in one have the potential to adversely affect the other. A large planting in Snohomish County, sponsored by NRCS, may be responsible for drainage and flooding changes on adjoining farmland in King County. King County farmers felt their concerns weren't properly addressed because the project was in Snohomish County. A clear, established method of communicating with both counties and related agencies could reduce problems in the future.</p>	<p>Lead: KC WLRD RFMS</p> <p>Partners: KC DPER KC WLRD (RPU &amp; Ag) WADOE FEMA USDA NRCS Snohomish County Snohomish CD KCD</p>	None identified.	



No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
				Sno-Valley Tilt SVPA Snoqualmie WID		
17	Fish 1, Action 1	In the next three years, make demonstrable progress on two to three large capital projects in the Snoqualmie APD, specifically in the two alluvial fan reaches.	<p>This action applies to capital projects that have as a primary goal the restoration of salmon habitat. The expectation of this recommendation is not that 2 to 3 projects are completed within three years, but that 2 to 3 projects have been initiated (in the design process), and at least one project is scheduled for construction or in construction by the end of the third year. Some projects can benefit both fish and flood risk reduction goals. The County/WRIA's habitat goals are behind schedule, some by more than 50%. The implementation rate of mainstem edge habitat restoration (e.g., via levee setback) projects has slowed by 50% between 2010 and 2015 in comparison to the previous 5 year period. The salmon recovery effort was intended to take 50 years, but the current rate of project implementation looks more like a 100 year timeline.</p> <p>An analysis completed in 2014 for the FFF process of potential larger river habitat restoration projects in the Snoqualmie Valley (does not include buffers) over the next 50 years showed that the likely footprint of restoration projects for salmon recovery purposes was limited to about 1000 acres, with about 650 acres occurring within the APD and of those acres, less than 300 would occur on land that is currently being farmed.</p>	<p>Lead: KC WLRD (ERES &amp; RPU)</p> <p>Partners: Snoqualmie Forum King County FCD (via KC WLRD RFMS) KC DPER KC WLRD (Ag) Tulalip Tribes Snoqualmie Tribe Wild Fish Conservancy Snohomish Forum Technical Committee</p>	Limited existing funds available for pre-design, planning.	<p>KC DPER - The current process (an administrative procedure for R-649) for approving restoration projects within the APD goes through a committee that includes DPER staff. This process is applied to projects within the APD, irrespective of project proponent.</p> <p>KC WLRD (Ag). The Agricultural Program participates in the project review group that administers the R-649 process.</p> <p>KC WLRD (RFMS) participates in the project review group that administers the R-649 process. RFMS is also often involved on design team and in funding for large cap projects <u>that also have flood risk reduction aspect.</u></p>
18	Fish 2	Increase King County funding to boost staff capacity (e.g., additional basin stewards and/or CIP staff) and capital funding for large capital restoration projects outside of the APD to a rate of at least one project per year.	<p>[see Context in #17 above]</p> <p>The high priority salmon restoration areas outside the APD include the lower six miles of the Tolt and Raging Rivers, the Snoqualmie River from the Falls to the Raging River, as well as in other larger streams (i.e. Cherry, Tuck, Patterson, Harris, Ames, Griffin).</p>	<p>Lead: KC WLRD (ERES &amp; RPU)</p> <p>Partners: Snoqualmie Forum King County FCD (via KC WLRD RFMS) Tulalip Tribes Snoqualmie Tribe Wild Fish Conservancy</p>	<p>None identified for staffing, capacity.</p> <p>Initial design funding for Frew Levee on Tolt River in hand.</p>	No review per R-649 (see above)
19	Fish 1, Action 2	To improve efficiencies and certainty, King County Water and Land Resources Division will revise its internal project	<p>[see Context in #17 above]</p> <p>Action calls for KC WLRD to revise its internal project approval process for large capital restoration projects in the APD so that the process is accelerated (pace of implementation is faster than 2012-2015), transparent and</p>	<p>Lead: KC WLRD (ERES &amp; RPU)</p> <p>Partners: King County FCD</p>	None identified	

No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
		approval process for large capital restoration projects.	predictable for staff and allows staff to efficiently interact with the private landowners. This action is anticipated to be integrated with actions in Recommendations 11-14 that call for improving WLRD's community engagement processes.	(via KC WLRD RFMS) KC DPER KC WLRD (Ag)		
20	Fish 6	Following completion of the Buffer Task Force effort, work with task force participants to create a Buffer Implementation Plan.	[see Buffer Task Force Scope of Work – Appendix III] The focus of the Buffer Task Force Scope of Work (SOW) is getting agreement around the width and type of streams buffers of different sizes and compositions that should be planted, based on a review of locally relevant scientific literature and the explicit consideration of agricultural concerns related to buffers. The SOW does not include the development of an actual on the ground implementation plan. The fish interests recognized that a follow-up effort (likely years 3-5) would be needed to create an implementation plan that would incorporate the other FFF buffer related solutions that address implementation issues.	Lead: Snoqualmie Forum or KC WLRD (RPU)  Partners: KC WLRD (Ag & Science) See Task Force participant list in Appendix III	None identified.  Partial in-kind funding possible via Snoqualmie Forum work plan once Task Force completed.	
21	Farm 2, Action 1	Create a program to provide comprehensive drainage assistance and establish routine management for all types of drainage infrastructure.	The goal of this recommendation is to improve the productivity of existing farmland through increased funding to implement a larger variety of drainage projects and streamlined processes in an effort to maximize production capabilities. This would expand agricultural drainage assistance beyond the existing Agricultural Drainage Assistance Program. This expanded assistance would apply to all artificial and modified waterways regardless of the size of the waterway. This expansion of services does not apply to waterways classified as 'natural'. The assistance is expected to be in both implementing on the ground projects and in finding ways to make the process of undertaking projects less expensive, quicker, and easier for farmers.	Lead: KC WLRD (Stormwater) and KC WLRD (Ag)  Partners: KC WLRD (RPU & ERES & Science) KCD Sno-Valley Tilth SVPA Snoqualmie WID WDOE WDFW Tulalip Tribes Snoqualmie Tribe	Additional funding for drainage program in KC WLRD (Stormwater) likely. KC WLRD (Ag) regulatory specialist funding likely.	Some larger drainage efforts will require participation of other programs, such as KC WLRD (ERES) for which there is no current funding.
22	Farm 2, Action 2	Regulatory issues related to the establishment of a comprehensive drainage assistance program (described above) should be high priorities for the Regulatory Task Force.	[see Regulatory Task Force Scope, Appendix III; and Context #21 above] This recommendation emphasizes the importance of resolving regulatory issues related to drainage as a top priority for the Task Force.	Lead: KC WLRD (Ag) and KC DPER  Partners: See Task Force participant list in Appendix III	KC WLRD (Ag) regulatory specialist funding likely.	
23	Farm 2, Action 3	Allocate sufficient funding to fund the drainage services identified above (#21 & #22).	[see Context #21 and #22, above]	Lead: KC WLRD Director's Office  Partners:		Budget item

No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
24	Farm 5, Activity 1	Appoint a group of farm, fish and regulatory experts to pursue the establishment of a clear, advanced mitigation system for projects on the same property, so that a person who undertakes a voluntary planting on their property can get mitigation credit for it some years in the future.	<p>Many grant funding sources that help pay for voluntary restoration planting projects do not allow their funds to be used for mitigation of permit-associated impacts. This limitation makes logical sense in that restoration is intended to achieve net gains in ecological condition. Some farmers are hesitant to participate in voluntary planting efforts (even if otherwise willing) because they anticipate the need to dedicate additional farmable lands to riparian plantings in the future in the event that they are required to mitigate for farm improvement actions.</p> <p>King County DPER has enabled some voluntary riparian/wetland plantings to be eligible for mitigation credit on a case by case basis, and depending on the funding source. The process for when and where DPER supports this approach is not transparent. The primary goal of this recommendation is for DPER to document its current approach and work with FFF stakeholders and with other regulatory agencies to explore adoption of the same or similar process for certain types of farm improvement actions, such as drainage maintenance.</p>	<p>Lead: KC DPER</p> <p>Partners: See note at right re Task Forces.</p>	<p>Initial funding for launching Task Forces available.</p> <p>Additional funding needed.</p>	Recommendation calls for engaging Buffer Task Force as well as Regulatory Task Force participants
25	Farm 5, Activity 2	Appoint a group of farm, fish and regulatory experts to pursue the establishment of a clear mitigation system for “off-site” mitigation within a watershed for agricultural drainage projects.	As described in #24, mitigation planting can lead to the loss of productive acreage. This is of particular concern to small farms. Some farmers would prefer to do mitigation planting offsite. Mitigation sequencing described in state and county codes indicates that on-site mitigation is generally preferred. That said, there are some circumstances where off-site mitigation is allowed, but it tends to be allowed on a case by case basis. There may be benefits to allowing the mitigation to occur in an offsite area where more ecological benefit is garnered. The primary goal for this recommendation is for DPER to work with FFF stakeholders and with other regulatory agencies to explore streamlined off-site mitigation options associated with drainage maintenance projects.	<p>Lead: KC DPER and KC WLRD (MRP)</p> <p>Partners: See note at right re Task Forces.</p>	<p>Initial funding for launching Task Forces available.</p> <p>Additional funding needed.</p>	Recommendation calls for engaging Buffer Task Force as well as Regulatory Task Force participants
26	Farm 5, Activity 3	Given that very few grant sources allow spending on mitigation projects, establish dialogue with potential funding partners and explore changes in these policies or create exceptions where	[see Context for #24 and #25 above.]	See #24 and 25 above	None identified	

No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
		possible.				
27	Farm 4, Activity 3	Inspect and evaluate the condition of river stabilization facilities annually.	<p>[Also for #28-#31, below]</p> <p>Farmers are concerned about losing land adjacent to rivers through erosion. Most of the revetments in the valley were initially installed between 1900 and the late 1960s, in many cases to protect agricultural lands. There are 126 levees and revetments in King County's facility inventory in the Lower Snoqualmie. The vast majority of these are revetments that limit bank erosion adjacent to agricultural land, roads, trails, etc. In addition, there are some revetments that are not in the county's inventory.</p> <p>Erosion of river banks generally creates positive outcomes from a fish habitat perspective, if it is not occurring at unnaturally high rates. Measures to reduce erosion rates generally negatively impact fish and fish habitat. Approximately 40% of the banks of the lower Snoqualmie River are armored with revetments, with most outside bends already being revetted. Many of the projects and policy recommendations in the salmon recovery plan strive to remove the existing facilities or set them back to reduce their negative impacts and increase available fish habitat.</p> <p>The purpose of this recommendation is two-fold: 1) to improve understanding of the existence of revetments regardless of ownership and the extent of the problem of farmland erosion; and 2) to evaluate and prioritize options to address farmland erosion while considering tradeoffs among farm, fish, and flood objectives related to bank stabilization.</p>	<p>Lead: King County FCD (via KC WLRD RFMS)</p> <p>Partners:</p>	Existing program. But additional resources needed if expanded to include non-King County facilities, or increased inspection frequency, and making results publicly available.	
28	Farm 4, Activity 3	Create an inventory of all land in Snoqualmie Valley, including farmlands, that have revetments (or levees).	[see #27, above]	<p>Lead: KC WLRD (Ag &amp; Science)</p> <p>Partners: SVPA Snoqualmie WID KCD Sno-Valley Tilt Ag Commission</p>	None identified	Fairly straightforward GIS analysis, but will be informed by inspection results (see #27).
29	Farm 4, Activity 3	Conduct an assessment of the relative risk of bank erosion of farmland that does not have	[see #27, above]	<p>Lead: KC WLRD (Ag &amp; ERES)</p> <p>Partners:</p>	None identified	

No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
		revetments.		KC WLRD (RPU & Science) King County FCD (via KC WLRD RFMS) SVPA Snoqualmie WID KCD Sno-Valley Tilth Ag Commission		
30	Farm 4, Activity 3	Conduct a multi-objective (i.e., fish, farm, flood) cost/benefit analysis of different bank stabilization techniques.	[see #27, above]	Lead: KC WLRD (ERES & RPU & Ag)  Partners: KC WLRD (Science) King County FCD (via KC WLRD RFMS) SVPA Snoqualmie WID KCD Sno-Valley Tilth Ag Commission Snoqualmie Forum Tulalip Tribes Wild Fish Conservancy Snoqualmie Tribe	None identified	
31	Farm 4, Activity 3	Utilize a modeling tool such as the EMDS, and with reference to related goals and strategies in flood and salmon recovery plans, to identify and prioritize potential measures to protect net total farmland acreage, including revetment repairs and soft-shore armor/stabilization techniques.	[see #27, above]	See above #31	None identified, but see note.	EMDS being tested for limited application now. May be able to build on that to explore this question.
32	Farm 4, Activity 1	Permanently protect a certain amount of land in the APD for farming as well as for ecological restoration.	There has been ongoing tension within the FFF process over how much land each interest needs to achieve their broader goals and that each group places high value on much of the same geographic locations. It was determined that there is not currently enough information available to	Lead: KC WLRD (Ag) and Snoqualmie Forum  Partners:	Future stakeholder process	Relies on completion of Buffer Task Force and Agricultural Strategic Plan Task Force



No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
			be able to arrive at specific quantities of permanently protected agricultural land and dedicated restoration acreage. But, it was agreed that identification of quantitative goals is possible in the future following the completion of Task Force efforts.	See notes re Task Force participants SVPA KC Ag Commission Snoqualmie WID KCD Sno-Valley Tilth American Farmland Trust PCC Farmland Trust WDOE WDFW Snohomish Forum Tulalip Tribes Wild Fish Conservancy Snoqualmie Tribe		
33	Fish 3 & Farm 1, Action 3	Conduct a low-flow assessment and develop a strategy to improve flow conditions for fish that is integrated with efforts to increase availability of irrigation water supply	<p>Low flows affect both fish and farm resources. During low flow years, like 2015, neither may have sufficient water to thrive. In the summer, the Snoqualmie River frequently goes below flows established in 1979 by an Instream Resource Protection Process<sup>23</sup> Climate change models project that conditions like those in the summer of 2015 will occur more frequently in the future.</p> <p>The fish committee members want greater understanding of the human driven causes and the relative contribution of the different causes to low flows. Low flows reduce the overall rearing habitat available to juvenile salmon and potentially strand fish in floodplain habitats, concentrate any pollution in the water, and in summer exacerbate high temperatures (which has many secondary negative impacts on water quality).</p> <p>Low flow concerns for farming include an overarching concern that there are not enough water rights currently available to support the changing agricultural landscape (shift toward more irrigated food production), and that some water rights may have been lost through lack of use or change in use. The Watershed Improvement District and Snoqualmie Valley Preservation Alliance have been pursuing solutions by looking at different options around water right purchases and water banking. While each interest group's concerns come from different</p>	<p>Lead: KC WLRD (multiple units) Snoqualmie WID</p> <p>Partners: KC WLRD (multiple units) SVPA KCD Sno-Valley Tilth KC Ag Commission WDOE WDFW Snoqualmie Forum Snohomish Forum Technical Committee Tulalip Tribes Wild Fish Conservancy Snoqualmie Tribe</p>	None identified	

<sup>23</sup> see Washington Administrative Code (173-507 WAC).

No.	Agreement Ref.	Title (short)	Context summary	Lead and Partners (draft)	Funding	Status/Notes
			directions, there is mutual interest in making more water available for fish and crop irrigation.			
34	Fish 4	Move forward one or two pilot tributary restoration projects that combine drainage waterways.	The Wild Fish Conservancy undertook the Waterwheel Creek project on WDFW land which combined several channelized (straightened) drainage channels and one channelized stream channel into one larger meandering channel. This project increased overall drainage capacity, improved aquatic habitat, added large woody material to the new channel, and created functional riparian buffers. By combining waterways, it reduced the overall area that would be necessary to dedicate to a functioning riparian buffer. The project showed that it is possible to create multi-objective projects by combining waterways in a way that should improve drainage and farmability while also improving riparian and aquatic habitat. However, the project occurred on public land that is not farmed for food production and thus the improvements to farmability are harder to assess. There was concern by some of the agricultural representatives that this multi-objective approach would not actually improve drainage for adjacent fields and at the same time be very costly. Given the uncertainty of benefits to agriculture, some of the agricultural committee members wanted to make sure that the pilot projects did not divert funding from standard drainage projects. Since this restoration approach has not been proven yet to the farming community, there was a request to monitor the projects to verify that they work as expected. The approach may also be adapted to explore innovative approaches that combine drain tiles with surface drainage and habitat restoration.	Lead: KC WLRD (ERES & Stormwater)  Partners: Wild Fish Conservancy KC WLRD (RPU & Ag) WDFW WDOE Tulalip Tribes Snoqualmie Tribe Snoqualmie WID SVPA KCD Sno-Valley Tilth KC Ag Commission	None identified	

## **Appendix IV**

Focused Schedule for Snoqualmie Valley FFF Agreement Implementation  
(Preliminary Draft)



DRAFT Focused Schedule for Snoqualmie Valley Fish Farm Flood Agreement Implementation *Last revised: 2016-09-19*

Item	Report #	2016	Progress	2017	Progress	2018	Progress	2019	Progress	2020-2022	Progress	Notes
<b>EXAMPLE</b> 1.1 Farm (citing task force documents in Appendix I.)	12											
<b>FARM</b>												
2. Drainage Recovery Plan	21c			Start				Complete				Relies on <a href="#">Ag Strategic Plan</a> .
2. Increased funding to expanded drainage services and implementation	23			Ongoing		Ongoing		Ongoing				See chart in agreement, but includes new project type & new waterways.
2. Create streamline processes for expanded ADAP project types/waterways	21											Includes floodgates, flood pumps, large tributaries, tile replacement, beaver management.
2. Floodgate project	21b			Identify the road map/process by end of year		Determine/evaluate the effectiveness of existing/historical infrastructure by end of year; Launch pilot project by end of year		(Provide step by step how-to process)				
2. Alluvial Fan projects	21d			2 pilot projects completed by end of year: design, permits		Determine a clear, programmatic path to 5 year HPAs with a step by step process by end of year						Note part of this moved to <a href="#">Regulatory Task Force</a> below.
2. Pumps (flood control)	21b			Identify existing pumps and pump infrastructure by end of year		Determine/evaluate the effectiveness of existing/historical infrastructure by end of year		Complete pump pilot project				
2. Tiles New	21b			Complete existing new tile project by end of year		Track new tile pilot; Take issues identified to Reg Task Force by end of year		Map a path with Reg Task Force by end of year				Note part of this moved to <a href="#">Regulatory Task Force</a> below.
2. Tiles replacement	21b			Plan ready by end of year for artificial and modified waterways large and small								
2. Beaver Management Plan	21d	Start		Plan ready by end of year for smaller waterways		Management plan ready by end of year for larger waterways						Some aspects of timeline language not clear in the notes.
2. Dredging and Culverts	21							Complete a pilot project				

Item	Report #	2016	Progress	2017	Progress	2018	Progress	2019	Progress	2020-2022	Progress	Notes
[daylighting?]								on a modified channel >4" pump waterway by end of year				
3. Low Flow Assessment and Irrigation Supply	33											Same as <a href="#">Fish3</a> ; relies upon completion of <a href="#">Farm2 TileReplacement 2017</a>
4. Ag Land and Habitat Land needs	32									When task forces are complete, engage working group to assess needed acreage		
5. Mitigation	24, 25			out of time, step-by-step: process with DPER mapped by end of year		Off-site and out-of-time: Establish system with WDFW and Ecology by end of year						
<b>FISH</b>												
1. Apply for and get Grants	17	Start										
1. Pre-design	17	Start										
1. Modeling	17	Start								Look at impacts		
1. Community Outreach	17	Start				ongoing				ongoing		
1. Acquisition	17					Start						
1. Design Process	17					Start						
1. Permits	17					Start						
1. Hire 3 <sup>rd</sup> Party	12, 17					Start				Complete 3 <sup>rd</sup> party review		
1. Existing project ready - Break Ground	17					Start						<a href="#">Farm2</a>
1. Construct	17									Start		<a href="#">Farm2</a>
2. All steps as above	18	Timeline to be developed. See text for pace of implementation										
3. Low Flow Assessment and Irrigation Supply	33	Start										<a href="#">Farm3</a> ; relies upon completion of <a href="#">Farm2 TileReplacement 2017</a>
4. One or Two Pilots Combined Waterways	34							Start				

Item	Report #	2016	Progress	2017	Progress	2018	Progress	2019	Progress	2020-2022	Progress	Notes
5. Fish Bio participates in ADAP	21a	Start		Ongoing		Ongoing		Ongoing				
6. Buffer Implementation Plan	20							Start				
<b>FLOOD</b>												
1. Elevate 90 homes in 10 years	2					Start						
2.1 Outreach to community on flood issues/solutions	5			Start								
2.2 Expand Pilot Project in Constrained Reaches	6							Start				
3. Assess Flood Safe Roads	8									Start		
4. Farmworker housing outside floodplain	9									Start		
<b>TASK FORCES</b>	TF											
<b>BUFFER</b>	TF	See scope of work										
<b>REGULATORY</b>	TF											
5 year Programmatic HPA for Alluvial Fans	22			Start		Complete						
Lower the cost of Drainage	22a			Start		Complete						
Evaluate Turbidity Standard	22b					Start		Complete				
Mitigation-Repeat dredging	22c			Start		Complete						
Mitigation-Off-site &/or out of time	24, 25			Start				Complete				
Tiles (new)	22					Start after pilot work identifies issues						
Discussion at county, state and federal levels	26					Ongoing						

Item	Report #	2016	Progress	2017	Progress	2018	Progress	2019	Progress	2020-2022	Progress	Notes
Recommendations	TF					Ongoing						
Priority List	TF					Ongoing		Complete				
<b>AG STRATEGIC PLAN</b>												
Identify farmland assets/challenges (beaver dams, tile needs, flood gates, pumps, drainage, irrigation)	TF			Start								
Map and Assess info collected	TF					Start		Complete				
Implement recommendations to improve challenges	TF					Start		Complete				
Funding mechanisms	TF							Start				

Note: All timelines described above are considered “draft”. Detailed implementation timelines to be developed as individual work plans are drafted. These timelines will be reviewed and approved by the “FFF 2.0 Implementation Review Committee”. Not all recommendations were included on initial timeline exercise – thus, there is not a direct match for all items described in the document with those in the table.

## **Appendix V**

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### Task Force Scopes

1. Addressing Snoqualmie Riparian Buffers
2. Addressing Regulatory Barriers to Agriculture
3. Snoqualmie Valley Agricultural Land Resource Strategic Plan

## **Task Force: Addressing Snoqualmie Riparian Buffers**

### **Statement of Purpose**

The buffer task force goal is to provide the foundation and guidance for a scientifically credible, context-sensitive, locally derived riparian buffer implementation strategy that will have been developed with the participation of parties represented by the FFF advisory committee, and any needed additional representation, and that will provide positive outcomes for both fish and farms. The task force has also been assigned a role in implementing other specific committee recommendations related to riparian areas.

Objectives include:

1. Establish a buffer task force to help implement the tasks and timeline in this SOW that is supported by decision-makers
2. Ensure robust conversations with land owners, the agricultural community and restoration interests occur through the agricultural alliance to ensure nuanced recommendations that strive for uplift for both fish and farms
3. Assemble a literature review of Best Available Science (BAS) related to the functions of riparian buffers, with emphasis on literature on buffers in low gradient river floodplains, smaller stream channels, and agricultural areas
4. Create an Agricultural Riparian Issues Technical Memo that describes the benefits and challenges associated with planting riparian buffers within agricultural areas. The issue paper will be informed by a review of literature specific to identified benefits and challenges (e.g., contamination of crops by wildlife that utilize buffers; benefits of shade for livestock).
5. Identify data gaps that, if filled, could substantially affect task force recommendations.
6. Recommend riparian restoration prioritization approaches that incorporate landscape conditions including:
  - a. Solar aspect and channel orientation (e.g., east to west vs. north to south)
  - b. Alluvial Reaches
  - c. Catchment sizes
  - d. Stream widths
  - e. Fish use
  - f. Groundwater influences
7. Recommend innovative riparian planting approaches to address site specific constraints and opportunities associated with existing land uses, with a primary focus on impacts and benefits to agricultural uses:
  - a. Drainage maintenance
  - b. Crop type and needs

- c. Livestock
  - d. Harvestable or 'working' buffers of various kinds (berry, restoration plants, etc.)
  - e. Grazeable buffers
  - f. Beavers
  - g. Existing revetments
  - h. Existing farm access roads
  - i. High ground adjacent to river banks
  - j. Agricultural land productivity (potentially derived from the Agricultural Land Resource Strategic Plan)
  - k. Lands with agricultural easements that limit revegetation
8. Evaluate analytical tools for use in analysis of alternatives and outreach efforts with the larger public.
  9. Create a logic model, supported by the advisory committee, which incorporates BAS, landscape features, and site constraints to determine: buffer width targets and appropriate buffer designs.
  10. Apply the logic model to the SVAPD landscape and create a geodatabase that identifies and maps variable width and type of buffers throughout SVAPD. Estimate the amount and type of agricultural lands that would be displaced by riparian buffers, or potential gains in long-term agricultural productivity as a result of strategically placed buffers.
  11. Participate in the implementation of other Committee recommendations, including the modeling of flood impacts associated with large tree plantings (recommendation #15), development of mitigation planting solutions that reduce the loss of farmable acreage to mitigation requirements (#24, #25), and informing the development of acreage targets for permanently protected farmland and acreage for restoration (#32).

**Note:** *The buffer solutions that were developed throughout the FFF process generally fall into two categories: 1) how to prioritize what and where to plant and understanding the associated impacts to the agricultural land base, and 2) how to implement planting projects (e.g. mitigation credits, conservation easements, landowner compensation). This SOW does not include the development of an implementation plan, but creates an approach for reaching agreement around how to prioritize buffer configurations (e.g. size, location, species composition). Once this SOW is completed, a follow-up effort would be needed to create an implementation plan that would incorporate the other FFF solutions that address implementation issues.*

### **Membership**

Ideally the Task Force would be comprised of 12-15 members. It is anticipated that the Task Force will meet at least monthly and possibly more, as necessary, for 18-24 months. The Task Force will review and adopt supporting documentation and consider input from jurisdictional and stakeholder outreach. Each Task Force Member will be expected to

represent the work of the committee to their representative bodies and reflect input of their representative bodies back to the Task Force. Task Force members may include representation from the following entities:

- a. Tulalip and Snoqualmie Tribes
- b. Snoqualmie Valley city
- c. King Conservation District
- d. FFF Ag Advisory Committee members or
- e. Agricultural alliance (AC, SVPA, SVT, PCC)
- f. Snoqualmie Watershed Improvement District
- g. Environmental (WEC, FW, WFC, MTSG, Stewardship Partners, Adopt-A-Stream)
- h. King County Local Food Initiative
- i. King County Public Health
- j. Washington Department of Ecology
- k. Washington Department of Fish/Wildlife
- l. Washington State Department of Agriculture
- m. Washington State Conservation Commission
- n. Washington Recreation and Conservation Office
- o. Seattle City Light
- p. Snohomish County
- q. Snohomish Conservation District
- r. Snoqualmie Watershed Forum
- s. Snohomish Basin Salmonid Recovery Technical Committee
- t. Puget Sound Partnership
- u. WSU (Researchers and Ag agents)
- v. National Marine Fisheries Service

### **Timeline**

- 2016** Apply for funding, establish Task Force and Technical Team membership, create detailed work schedule, and report to FFF on progress to date.
- 2017** Receive funding, fine-tune scope with Task Force direction, start implementation of Tasks 1 through 4, and report to FFF on progress to date.
- 2018** Complete all tasks and report to FFF on progress to date.

### **Resources Needed**

- Estimated Project Team (2.5 FTEs: 0.5 FTE WLRD project manager, 1.5 FTE composed of several WLRD technical and ag staff, 0.5 FTE KCD partnership)
- Budget
  - Staffing (see project team bullet above)
  - \$20,000 facilitation



## **Background and Problem Statement**

Salmon recovery has been a King County priority for over a decade and the 2005 Snohomish River Basin Salmon Conservation Plan (Salmon Plan) signified a strong commitment to that effort. A primary recommendation of the Salmon Plan is to restore and enhance streams and rivers with substantial riparian buffers to improve water quality and restore natural habitat processes for salmon. In addition to the Salmon Plan, the state has two Total Maximum Daily Load (TMDL)<sup>24</sup> water quality clean up plans, one covering temperature and another covering several other water quality parameters, and many federal and state grant funding sources for salmon recovery and water quality projects emphasize the need for large-width buffers.

In King County's ongoing Snoqualmie Fish, Farm, Flood initiative, the potential of riparian restoration actions to possibly displace hundreds or even thousands of acres of agricultural land has raised questions about the ability to implement restoration in a way that supports salmon recovery, without cumulatively resulting in a dramatic reduction in the available acres for growing food or otherwise damaging agricultural productivity. In addition to the loss of farmable acres, riparian buffers can also: complicate field drainage maintenance, harbor wildlife that may damage crops, create obstructions to flood flows, and shade crops. Riparian buffers also provide benefits to agriculture, such as shade for livestock, controlling bank erosion; and creating habitat for pollinators.

The Salmon Plan calls for buffers to be planted along streams and rivers to restore riparian functions and improve degraded water quality, and recommends a width of 150 feet on all salmon bearing waterways. The Snoqualmie Valley Agricultural Production District (SVAPD) contains well over 100 miles of waterways, all of which are likely used by anadromous fish to some degree, but roughly half of that length is provided by small tributaries, many of which have been highly modified for agricultural drainage. In the SVAPD, 57% of the land that lies within 150 feet of waterways is in active agricultural use, the vast majority associated with very small tributaries rather than larger streams or rivers. As in many other agricultural areas, riparian conditions in the SVAPD are heavily degraded, but securing 150- foot buffers on privately owned working lands has proven difficult. Also, roughly 80% of the floodplain is in private, agricultural ownership.

To date, many of the riparian restoration projects establishing buffers have been voluntary and primarily funded by a mix of grants from local, state, and federal agencies. Many of those grant programs have recently changed their criteria and require riparian restoration projects to meet science-based minimum requirements, such as minimum buffer widths that exceed 100 feet. Although the Salmon Plan promotes 150-foot buffers on salmon bearing

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<sup>24</sup> As an example, the summer of 2015 drought produced alarming low flows and elevated temperatures which in many instances were the lowest flows and highest temperatures on record.

streams, the largely opportunistic approach to working with land owners often results in much narrower buffers than the Salmon Plan recommends (generally less than 35 feet in width). While 35 feet is generally an inadequate buffer width to restore habitat for salmon as well as meet water quality standards, concern over the loss of farmland with even a 35-foot width buffer continues to be expressed in the agricultural community.

The concern about the loss of farmland is fueled in part by the lack of a credible, science-based approach that is more nuanced than “one size fits all” 100 or 150-foot buffers on all salmonid streams. Absent a plan that is crafted with the local context in mind, meaningful progress toward the overall riparian restoration goals in the Salmon Plan and Ecology’s TMDLs seems unlikely. Conversely, if this effort results in a scientifically credible analysis that demonstrates meaningful ecological gains from narrower buffers in specific sites and circumstances, more riparian restoration projects in the Snoqualmie may become eligible for funding sources that are currently limited to larger width plantings. Goals towards preservation of farmland and water quality protection might also be more expeditiously achieved. Whatever the outcome, reaching agreement among the tribes, farmers, regulators and stakeholders such as local cities and the environmental community in the development of a watershed-specific riparian management plan will be critical to task force success.

### **Scope of Work**

The following is a list of the tasks, which are described below in more detail.

- |         |   |
|---------|---|
| Task 1. | Project Team and Task Force Formation   |
| Task 2. | Stakeholder Outreach  |
| Task 3. | Literature Review of Best Available Science for Riparian Areas in Agricultural Landscapes |
| Task 4. | Create an Agricultural Riparian Issues Technical Memo                                     |
| Task 5. | Alternative Analysis  |
| Task 6. | Report, Near Term Action Plan, and Adaptive Management                                    |
| Task 7. | Project Management  |

### **Task 1. Project Team and Task Force Formation**

The King County Executive or delegate will convene a Task Force that includes members of the FFF Advisory Committee and other organizations (as noted above) to develop Task Force recommendations.

Staffing of the Task Force will be provided through a Technical Team provided by the Water and Land Resources Division (WLRD), including WLRD’s Science and Technical Unit, Agriculture Unit, and the Snoqualmie Watershed Forum staff, and the King Conservation District. WLRD will also explore expanding the project team based on the availability of tribal,

regulatory, and stakeholder staff. The Technical Team will produce the primary documents for the project, collaborate with the Task Force and participate in stakeholder outreach. The Technical Team will include a facilitator to help design and execute the Task Force's process/meetings.

**Deliverables:**

- *Task Force is formed*
- *Technical team is formed*
- *Facilitator is hired*

**Task 2. Broader Stakeholder Outreach**

The Technical Team will prepare an outreach plan for input from the Task Force prior to outreach plan implementation. The plan will specifically address purpose and audience for outreach efforts and the related approach (including schedule, venue, notification, required staff support, meeting focus). The outreach plan will include consideration for the various entities listed in Task 1 (whether or not the entity sits on the Task Force) as well as outreach to the general public. The outreach effort will likely include a field trip to look at local examples of different buffer designs and approaches.

**Deliverables:**

- *Draft outreach plan for Task Force Review*
- *Final outreach plan addressing Task Force comments*
- *Hold outreach meetings to implement plan*

**Task 3. Literature Review of Best Available Science for Riparian Areas in Agricultural Landscapes**

Establishing an understanding of any changes to the previously documented Best Available Science (BAS) for riparian habitat restoration (~2005) is the critical starting point to inform the appropriate buffer targets including widths and composition for various stream sizes and land uses.

**Task 3.1** Review WDFW's soon to be updated and released literature review for its Management Recommendations for Washington's Priority Riparian Habitats and compare against KC's existing riparian Best Available Science documents that support KC's existing regulatory framework for critical areas. Undertake a literature search for very recent papers that may have been missed by previous efforts and review them. The review should use peer reviewed literature wherever possible, and focus on research related to the functions provided by different buffer widths, species compositions, vegetation densities, differences between relatively small stream sizes, versus larger streams and rivers, and primary water quality and ecological functions (e.g., water temperature/shading, leaf litter fall, instream cover) in agricultural areas and.

**Task 3.2** Prepare a BAS synthesis that incorporates the WDFW and KC BAS documents, as well as additional peer-reviewed studies, that focuses on buffers functions and benefits associated with various widths of buffers. This effort will be summarized in the format of an annotated bibliography.

**Task 3.3** Based on the annotated bibliography, the Technical Team will produce a report that summarizes the pertinent findings of the literature review. The report will include an assessment of the strengths and weaknesses of existing science, identify data or knowledge gaps, and if needed, recommend additional research needs. This will serve as the scientific foundation for the rest of this project.

**Task 3.4** The Draft BAS will be provided to a peer review team for review and comment. The peer review team will provide feedback to the Technical Team.

**Task 3.5** The Technical Team will present the findings to the Task Force and, based on questions and comments received, may revise the document for clarity or to provide additional substance.

**Deliverables:**

- *Annotated Bibliography of BAS*
- *BAS Technical Report summarizing findings*

**Task 4. Create an Agricultural Riparian Issues Technical Memo**

Based on the BAS Technical Report, the Technical Team--with significant input from the Task Force-- will prepare a Technical Memorandum on the agricultural benefits and challenges of buffer plantings in the agricultural areas of King County, including potential on-site and off-site effects of riparian plantings. The paper will draw significantly from the work of the Snoqualmie Fish, Farm, Flood Advisory Committee in identifying and framing key issues. The paper will also be informed by a BAS style review of pertinent literature related to agricultural issues pertaining to buffers (e.g., studies of food security risks related to fecal contamination of crops by wildlife or changes to water surface elevation caused by mature forests in the floodplain). The Technical Memo will also describe how a decision model that integrates landscape and site specific characteristics of buffers in agricultural areas would be useful for analyzing and exploring alternatives for applying variable size buffers.

**Task 4.1** The Technical Team will create a draft Agriculture Riparian Issues Technical Memorandum. This memo will describe the benefits and the potential negative effects of riparian buffers with respect to agricultural land use. This paper will also identify considerations for specific challenges related to agricultural activities into the design of riparian areas.

**Task 4.2** The Draft Agriculture Riparian Issues Technical Memorandum will be provided to the Task Force for review and comment. The Taskforce will provide feedback on any additional benefits and/or challenges as well as areas that might benefit from additional literature review.

**Task 4.3** The Technical Team will incorporate comments from the Task Force and a final version of the Memo will be distributed to the Task Force. A comment/response tracking format will be used so that commenters will know how their comments were addressed.

**Deliverables:**

- *Draft Agricultural Issues Technical Memo*
- *Comment/Tracking response document*
- *Final Agricultural Issues Technical Memo*

**Task 5. Alternative Analysis**

**Task 5.1** The Technical Team will identify analytical tools to compare and contrast alternative approaches (logic models) to the development of variable buffer widths that have the greatest potential for salmon and aquatic species conservation and preservation of a robust farmland/soils base in the Snoqualmie Valley. Analytical tools will be reviewed for their technical strength as well their transparency for use in decision making processes.

**Task 5.2** Develop a logic model and that integrates the BAS Technical Report findings, the Agricultural Riparian Issues document, as well as the local context and on-the-ground practicalities to develop a range of potential future buffer conditions (including widths, composition, height, other factors) for all stream types in the SVAPD. The logic model should be able to characterize to what extent the different future buffer characteristics fully meet ecologically functioning conditions for aquatic species preservation, and if not fully functioning, the rationale for not achieving full ecological functionality. The logic model should also demonstrate the loss or gain of agricultural productivity as a result of various buffer characteristics.

**Task 5.3** The Technical Team will compile the draft output from the analytical work into tabular, graphic, and map formats comparison of alternatives. The areas and types of areas affected by the various future buffer conditions will be quantified using measures such as affected acreage in total, acres in FPP, acres in actively used agriculture under alternative approaches to buffers. Similarly, estimated gains in water quality and fish conservation will be reflected in formats that allow for comparison of alternative approaches and asses if there are alternatives that provide equal or better ecological functions than current buffer recommendations. The Technical Team will present the draft results to the Task Force. The Technical Team will work with the Task Force to refine the alternative analysis.

**Deliverables:**

- Draft Alternatives Analysis Technical Memo. Includes initial documentation of the logic model, with descriptions of the riparian functions met under various buffer widths and stream types, effects on agricultural uses, and comparative analysis of several alternative approaches including mitigation banking.
- A compilation of input received and action taken as a result of input.
- Final Alternatives Analysis Technical Memo. Includes documentation of the draft and final logic model with descriptions of the riparian functions met under various buffer widths and stream types and the rationale for each decision in the model and any changes made between the draft and final model. The analysis related to effects on agricultural lands and considerations for each alternative will also be shown. Geospatial results (tables, graphs and maps) of applying the logic model to the SVAPD will be included.

#### **Task 6. Report, Near Term Action Plan and Adaptive Management**

Develop a summary report that captures the work of the Task Force and landowner conversations/outreach, data analyses, alternatives and recommendations. Include an Executive Summary and detailed near term implementation plan. Include measures that will be used to track plan process and changing conditions in the watershed relative to future scenarios.

##### **Deliverables:**

- *Three drafts and one final report*

#### **Task 7. Project Management**

Develop and manage a project plan that will detail the scope of work, roles and responsibilities, milestones, schedule, deliverables, communication plan, decision process, budgets and other elements required to keep a project of this scale on track.

##### **Deliverables:**

- *Detailed project plan, and ongoing project management throughout the project.*

## **Task force: Addressing Regulatory Barriers to Agriculture**

### **Statement of Purpose**

Address the regulatory constraints to agricultural production that were identified by the FFF committee in their 2016 agreement. The task force has also been assigned a role in implementing other specific committee recommendations that include regulatory components.

### **Timeline**

January 2017 (possible sooner) – December 2019

### **Resources Needed**

Dedicated project manager in King County Water and Land Resources Division (WLRD) Agriculture Program (1.0 FTE) with expertise in regulations to research and present the issues, suggest possible solutions, and draft products. The project team will also include subject matter experts from WLRD, Department of Permitting and Environmental Review (DPER), and King Conservation District (KCD). The work will also require dedicated staff time as needed from other agencies. The project manager will convene interested members of the FFF committee as needed to work on specific issues.

### **Background/Problem Statement**

Addressing regulatory constraints to agriculture is an ongoing process in King County. In addition to the issues that surfaced in the FFF process, regulatory and permit issues have been identified by the Agriculture Commission, the King County FARMS Report, the Local Food Initiative, the recently completed report “Farmers’ Perceptions of Regulatory Constraints to Farming in King County,” and through examples brought forward by customers at DPER. The Agriculture Permit Team and several topic-area subcommittees of that team have worked over time to refine processes, propose regulatory changes, clarify interpretations, and improve understanding of and communication about regulatory issues across county departments and with state and federal permit agencies.

Some of the regulatory constraints to agriculture are closely associated with salmon habitat protection (including water quality) and flood management. These regulations are in place to protect valued resources or public health and safety, and it is not the purpose of this task force effort to diminish that protection. Addressing the regulatory constraints to agriculture might include permit process improvements, interpretation or clarification of the requirements, or technical or financial assistance in compliance. Changes to the regulations themselves might be proposed for regulations that are inappropriate or ineffective in an agricultural landscape or where the goal of the regulation could be achieved through an approach that has less of an

impact on agriculture. Generally, the county codes that address these issues are driven by state or federal regulations, and thus this effort will require collaboration with external agencies. Furthermore, any proposed changes will have to be informed and supported by stakeholders representing fish and flood management interests. Therefore, members of the FFF committee will be called upon to assist in recommending solutions and supporting them through negotiations or legislative processes.

### **Scope of Work**

#### **Task 1. Hire Project Manager and Convene Interdisciplinary Project Teams**

Hire a project manager. Identify funding and obtain commitments for staff support from Rivers, Science, DPER and KCD, and assign appropriate staff for each of the topics to be addressed.

#### **Task 2. Prepare Technical Analysis**

The project manager will convene a group of FFF stakeholders to help clearly articulate a problem statement for each of the regulatory priorities that emerge from the FFF process. The project manager will then work with the interdisciplinary project teams to analyze each issue from the farm, flood and fish perspectives: refine the problem/conflict; purpose and effect of the regulation; how the regulation constrains agriculture; who needs to be part of the discussion; which agencies have jurisdiction; possible approaches; level of complexity.

Highest priority regulatory issues as identified at the Feb 10 FFF meeting:

- Drainage regulations that make maintenance expensive or time-consuming or otherwise restrict the ability to improve drainage of farm fields (see recommendations #21 and #22)
- Zero Rise limitations on constructing farm pads, buildings and other farm improvements (see recommendation #5)
- Mitigation required when farmers maintain drainage ditches or build a farm pad or other structure in a wetland or a buffer of a wetland or stream (see recommendations #24 and #25)

#### **Task 3. Convene FFF stakeholders to assist in developing solutions**

For each issue, once initial analysis is written up, the Project Manager will reconvene the group of FFF stakeholders along with the issue analysts to work through the issue in more depth.

Step 1. Make sure the appropriate agencies are included in the discussions and review process.

Step 2. Review the analysis and come to agreement on what the problem is.



Step 3. Brainstorm possible ways to address the problem, e.g., process change, negotiated agreement with other agencies, interpretation, public rule change, proposed change to how standards are applied, proposed change to standards, technical or financial assistance in compliance, landscape level agreements, etc.

Step 4. Discuss pros and cons of possible approaches, including feasibility, and develop preferred solution.

Step 5. Solicit review by all applicable agencies, interested members of the FFF Advisory Committee, and the Agriculture Commission Regulatory Committee, and take comments into account.

Step 6. Reach agreement on a solution and willingness to support the concept through implementation.

Step 7. Agree on implementation strategy; project team works to implement; FFF stakeholders review project team's work and products as needed.

**Task 4. Develop a Process for Future Collaboration on Regulatory Conflicts**

The project manager will work with the FFF stakeholders to recommend a process to resolve future regulatory conflicts efficiently through collaboration among the stakeholders

Priority Topics and Participation			
Topic	Possible Elements	King County Internal Team	Participants
Drainage	<ul style="list-style-type: none"> <li>• Clarify when artificial ditches need permit</li> <li>• Maintenance of larger waterways</li> <li>• Bypass requirements for small waterways</li> <li>• Turbidity standard – when and where measured</li> <li>• New drain tiles</li> <li>• Off-site mitigation (related to Mitigation topic)</li> <li>• Maintenance associated with alluvial fans</li> <li>• Beaver management</li> <li>• Cultural resources review requirements</li> <li>• De-fishing requirements and methods</li> <li>• Multi-year permitting</li> <li>• Ability to redo maintenance in future years</li> <li>• Pursue ESA take coverage?</li> <li>• Replacing aging/failing flap/flood gates</li> </ul>	Agriculture Team ADAP DPER Ecologist Rivers	KCD Ecology WDFW Tribes Corps NMFS FEMA
Zero Rise	<ul style="list-style-type: none"> <li>• Additional flexibility in zero rise threshold</li> <li>• New way of calculating or accounting for zero rise</li> <li>• Participate in evaluation of the effect of tree planting on zero rise (see recommendation #15)</li> <li>• Ongoing program to assist with non-fill options</li> </ul>	Agriculture Team Rivers DPER	Ecology FEMA KCD
Mitigation for impacts to Critical Areas	<ul style="list-style-type: none"> <li>• Need mitigation strategies that minimize impact on farmable land</li> <li>• Credit for mitigation done in advance</li> <li>• Off-site mitigation</li> <li>• Area-wide mitigation strategy – large projects count as mitigation for ag activities elsewhere</li> </ul>	Agriculture Team DPER Ecologist Interagency Review Team and grant agencies Snoqualmie Forum Snohomish Technical Committee	Ecology Corps Tribes WDFW

## **Task Force: Snoqualmie Valley Agricultural Land Resource Strategic Plan**

### **Statement of Purpose**

***This document is a scope of work for producing an Agricultural Strategic Plan for the Snoqualmie Valley Agricultural Production District (APD).***

The purpose of the agriculture strategic plan is to improve the long-term productivity of farmland, bring more acres into production, especially food production, and increase opportunities for farmers to develop the necessary infrastructure to support or increase their farm businesses. This will happen through assessment of specific farmland resource property needs and assets in the SVAPD and creating an implementation plan for project improvements to land (e.g., drainage) and water access. It will complement other related efforts, such as King County's Local Food Initiative which is an economic development and marketing plan for food and agriculture in the region.

The strategic plan for Snoqualmie Valley agriculture will represent the agricultural needs in future Fish Farm Flood (FFF)-related decision-making, similar to how the Salmon Recovery Plans and the Flood Plan represent the needs for salmon recovery and flood risk reduction, respectively. The plan will also specifically inform the development of acreage targets for permanently protected farmland and acreage for restoration (recommendation #32).

### **Membership**

The Advisory Committee will be a committee of the Agriculture Commission and comprise representatives from the Kitchen Cabinet, KCD, Agriculture Alliance (Snoqualmie Valley Preservation Alliance [SVPA], SnoValley Tilth [SVT], and the Watershed Improvement District [WID]), FFF Advisory Committee members, Agriculture Commission, King County staff, a fish biologist, and others. The advisory committee members will be able to take action on behalf of their agency or entities as issues arise in the development and implementation of the Plan. The Advisory Committee:

- will provide guidance to the Project Management Team
- approve the detailed scope and review and approve elements of the plan as they are developed, and
- approve the final plan for consideration by the Agriculture Commission, the King Conservation Board and the King County Council.

### **Timeline**

**2016**      Establish membership, convene meetings, apply for funding, and report to FFF on progress to date.

**2017** Receive funding, hire project management team, fine-tune scope with membership and advisory committee's direction, start implementation of Task 1 and 2, and report to FFF on progress to date.

**2018-2021** Implementation of Tasks 1-6; report to FFF on progress to date.

### **Resources Needed**

- Project Management Team: 1 FTE WLRD project manager and 2 - 3 field staff, including KCD participation, non-profit partner (will require funding).
- Budget
  - Staffing (see project team bullet above)
  - \$40,000 annually for materials, supplies, meeting room rental, transportation, GIS, data management, etc.

### **Problem Statement**

The Snoqualmie Valley does not have a strategic plan for agriculture. In the Fish Farm Flood (FFF) process, it has become clear that agriculture needs a strategic plan for increasing farmland productivity on par with the Salmon Recovery Plan and the Flood Plan, which identify specific goals and projects in the Snoqualmie Valley to meet the needs for fish recovery and flood risk reduction. The SVAPD Strategic Plan will provide data and analysis, contain specific proposals for projects, funding strategies, and a timeline for implementation needed for equitable negotiation and problem-solving in current and future multi-objective planning processes like the ongoing FFF process.

### **Background**

#### **Foundational principles:**

- Farmland is a limited resource that should be protected.
- King County has a strong policy basis, and a mandate under the Growth Management Act, to protect farmland.
  - Designation of APDs; strong Comprehensive Plan policies
  - Farmland Preservation Program
  - Local Food Initiative
- Population growth will continue to put pressure on farmland, while at the same time increasing the importance of farmland to provide food.
- SV farm production is diverse including pasture, specialty crops (fruits, vegetables, honey, herbs, turf grass, nuts), grains, and livestock. Different crops may require different infrastructure such as season-extension hoop houses or farm pads.
- Climate change will likely present challenges related to water availability, flooding and impacts from diseases and pests.

However, research to date indicates that this region's agriculture has a tremendous capacity to adapt through management options and new crops. Relative to other important farming regions, Northwest agriculture may be more successful in adapting to climate change, thereby increasing the importance to protect the land. More research is needed, and should be pursued, but that is not within the scope of this plan.

**Existing policy and studies that complement and drive this work:**

- Survey and report developed for King County by University of Washington graduate students in spring of 2015 on regulatory impediments to farming [some of these will inform the work of the Regulatory Task Force]
- Local Food Initiative recommendations
- King County Food and Farm Roundtable recommendations
- KCD and King County drainage survey conducted in spring 2015
- King County's Snoqualmie River Hydrologic and Hydraulic study results
- WSDA and WSU research and other work on regional climate change impacts to agriculture
- King County mapping of agricultural crops – 2013
- King County mapping of farm pads and homes in the Snoqualmie floodplain
- Landowner conversations led by the Agriculture Alliance in 4<sup>th</sup> Q of 2015 and 1<sup>st</sup> Q of 2016

**Scope of Work**

This scope of work is laid out as a plan for the entire APD to be done all at once. An alternative approach could be completing the planning process for sub-areas of the APD sequentially, thereby allowing for implementation in completed areas while planning continues in remaining areas.

In either case, the planning process should contain the following elements (See Figure 1):

- Task 1. Designate a Project Management Team and select an Advisory Committee
- Task 2. Compile all existing mapped information
- Task 3. Develop and implement landowner outreach
- Task 4. Assemble landowner information into data categories
- Task 5. Prioritize items for implementation plan and funding
- Task 6. Share implementation plan with Snoqualmie Valley APD landowners and FFFAC for support

**Task 1. Designate Project Management Team and Select Advisory Committee**

King County will select a Project Management Team and an Advisory Committee. The Project Management Team will develop the specific project management plan that will detail the scope of work, roles and responsibilities, milestones, schedule, deliverables, communication plan, decision process, budgets and other elements required to keep a project of this scale on track. The Team will also be responsible for carrying out planning and compiling all the elements into the Agriculture Strategic Plan.

The Advisory Committee will be a committee of the Agriculture Commission and comprise representatives from the Kitchen Cabinet, KCD, Agriculture Alliance, FFF farmers, Agriculture Commission, King County staff and others. The advisory committee members will be able to take action on behalf of their agency or entities as issues arise in the development and implementation of the Plan. The Advisory Committee will provide guidance to the Project Management Team, approve the detailed scope, review and approve elements of the plan as they are developed, and approve the final plan.

**Deliverables:**

- *Detailed project plan, ongoing project management throughout the project, and effective communications plan*

**Task 2. Compile All Existing Mapped Information**

Compile existing maps and data. This may include the location and condition of, or other information about, agricultural infrastructure.

1. Drainage
  - a. ditches
  - b. tiles
  - c. flap/flood control gates
  - d. pump stations
  - e. revetments
2. Property improvements and assets
  - a. farm pads
  - b. farm access roads
  - c. high tunnels
  - d. irrigation systems
  - e. water rights
  - f. homes, and whether they are elevated above BFE [draw upon the Lower Valley Needs Assessment recently completed by King County]
3. FPP Properties
4. Primary agricultural transportation corridors
5. Active commercial farms in the Snoqualmie Valley APD (*estimate around 180?*)
6. Riparian buffers, restoration and mitigation projects

7. Leased farmland
8. Existing wildlife corridors or other known habitat areas
9. Existing beaver activity and areas of potential future beaver activity
10. Areas of high quality agricultural soils that are not currently farmed
11. Areas that have low agriculture potential and thus could be kept out of ag production permanently with little impact to current or future farm operations
12. Known patterns of flooding
13. Field level changes regarding zero rise (How much organic matter is added annually? Is field level lower than it used to be due to subsidence? GPS field level.)
14. Other as determined by Advisory Committee

**Deliverables:**

- *Compilation of available data; base maps that can be used in meeting with farmers and community groups for further collection of information*

**Task 3. Landowner Engagement**

The Project Management Team will develop and implement a landowner engagement strategy with the Agricultural Alliance, building on the work that the Agriculture Alliance does in the fall of 2015.

A) Collect information from farmers about agricultural assets, obstacles and existing conditions and characteristics of farms and farmland in the SVAPD.

Using the maps created in Task 2, collect additional information from farmers on all of the elements listed in Task 2, and also collect information on landowner needs, such as assistance with permits or leasing. Review information with landowners or tenants and Snoqualmie Valley FFF Advisory Committee members.

B) Engage in discussion about FFF and the Agriculture Strategic Planning process to give people a chance to be heard and to learn what they think about the issues identified in FFF.

**Deliverables:**

- *Meeting with King County, KCD, advisory board, and Agricultural Alliance leaders*
- *Landowner outreach strategy developed and implemented including outreach timelines, Agricultural Alliance meetings, advisory board meetings, public meetings*
- *Individual discussions or small group meetings held with landowners in different subareas of the APD*

#### **Task 4. Assemble Landowner Information into Data Categories**

Data collected will be catalogued and mapped by APD subarea and/or by shared need (e.g., tiles, water, buffers). In this way, needs can be easily assessed by type of problem and by area in order to facilitate ease in planning implementation of improvements and seeking funding. For example, if ditch cleaning is the problem on seven surrounding properties, a project to tackle all properties at once may be recommended.

##### **Deliverables:**

- *Catalogued information*
- *Maps of layered data by need and area*
- *Summary of data analyzed*

#### **Task 5. Analysis and Recommendations**

The Project Management Team will analyze the information collected and develop recommendations for specific on-the-ground actions (such as multi-property drainage projects) and for actions to improve processes (such as specific regulatory changes). The team will also produce a prioritized implementation plan including timeline, funding, roles and responsibilities.

The Strategic Plan will be reviewed by the Advisory Committee, the Agricultural Commission, KCD, King County, and the Agriculture Alliance. Comments will be incorporated and the plan endorsed by these parties.

##### **Deliverables:**

- *Draft report reviewed and endorsed by King County, KCD, Advisory Committee, Agriculture Commission and Agricultural Alliance*

#### **Task 6. Share Strategic Plan with SVAPD Landowners and FFFAC for Support**

Public meetings will be held to share the plan and gather public feedback from farmers and landowners in the SVAPD. After gathering feedback and making needed adjustments, the Strategic Plan will be finalized and published.

##### **Deliverables:**

- *Agricultural Strategic Plan reviewed by Snoqualmie Valley APD farmers and landowners, revised, finalized and published. Approved by King County Council?*



## **Appendix VI**

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Memorandum of Mutual Understanding  
(Conclusion of Phase I, May 2015)

## **Fish, Farm, and Flood (FFF) Advisory Committee Memorandum of Mutual Understanding May 21, 2015**

The Snoqualmie Fish, Farm, Flood (FFF) Advisory Committee has made enormous progress over the past eighteen months, building trust and understanding among all participants. Because of the early spring in the Snoqualmie Valley, and the demands that places on the landowner representatives on the Advisory Committee, the four landowners, the King County Agriculture Commission, and Sno-Valley Tilth have formally requested that the FFF Advisory Committee suspend meetings until November 2015. At this point in the process, the stakeholders believe it is important to document areas of mutual understanding among participants, establish a work-plan for summer/fall of 2015, and lay out a timeline that will yield solution at the scale of the Snoqualmie Agricultural Production District (APD) to the policy conflicts inherent in the FFF problems identified.

### **Introduction – Problem Statement**

The Snoqualmie River Valley has incredibly rich agriculture soils, highly valuable salmon habitat and reaches of river with the potential for restoration of natural floodplain processes. Within the Valley, King County has statutory responsibilities to designate and protect farmland under the Growth Management Act (GMA) and implemented through the King County Comprehensive Plan. The GMA also requires the designation and protection of critical areas, such as streams and wetlands, implemented through the county's Critical Areas Ordinance. The County must also facilitate the restoration of salmonid habitat under the Snohomish Basin (WRIA 7) Salmon Conservation Plan, the Endangered Species Act, and more broadly under the federal Clean Water Act, which in turn drives local water quality action. Federal, state and local law also require the county to limit the impacts of and risks to development within floodplains, and give the county and the King County Flood Control District the authority to protect the public and property from flood hazards on the Snoqualmie River. At times, these distinct statutory obligations and responsibilities are in conflict and require the County to undertake flood and salmon restoration projects that temporarily or permanently remove prime agricultural soils from production, and may reduce the productive potential of adjoining agricultural lands.

The Snoqualmie River Valley represents some of the richest farmland remaining in King County and is a critical long-term agricultural resource for King County. The value of northwest agricultural land is likely to increase as climate change decreases the agricultural productivity of some other areas of the world. Over 14,500 acres of the Snoqualmie River Valley is designated as an Agricultural Production District (APD) to protect diminishing farmland in the county for long-term commercial agriculture, thereby preventing conversion to other uses. Along with the other APDs in the County, the Snoqualmie APD was designated as Agriculture Land of Long-term Commercial Significance under the GMA.

The decline in salmon and salmon habitat has significantly affected cultural and community enjoyment of the species and has resulted in severe economic impacts to the commercial and recreational fisheries economy as well. As a result of the federal listing of Chinook salmon as a threatened species, King County is obligated to take actions to protect and restore Chinook habitat

in our watersheds.<sup>1</sup> The losses of habitat due to land conversion, the removal of buffers, and alterations to our rivers and streams have been key factors in the loss of salmonids throughout the county and in the Snoqualmie river system. It is therefore critical for the county to implement habitat restoration projects in portions of each of our rivers, including within the Snoqualmie APD, which contains some of the highest quality salmon habitat and area with restoration potential in King County. Also, widespread use of vegetated buffers along the river as well as tributary creeks and ditches help manage temperature and water quality, but may reduce arable land.

King County participates in the National Flood Insurance Program (NFIP) which results in commitments to floodplain programs and regulations. By participating in the NFIP and adopting related programs and regulations, King County reduces risks to people and infrastructure in the floodplain, and participation has made it possible for County floodplain residents to incur some of the lowest flood insurance rates in the nation. The King County Flood Control District (FCD) was formed to provide funding to protect the life and safety of residents along King County's river corridors. Increasingly, the FCD is applying a multi-objective lens to FCD projects, with support for advancing hybrid habitat restoration/levee setback approaches to capital projects. While the high-quality agricultural soils of the Snoqualmie Valley are a direct result of long-term floodplain processes, setting back levees may negatively impact some prime agricultural lands. In some circumstances habitat restoration/ floodplain management projects will result in the irrevocable loss of prime agricultural soils.

The problem at the heart of the FFF stakeholder process is that there are inherent conflicts between multiple valid societal needs within an area currently developed primarily for agricultural production and these inherent values and conflicts are in turn reflected in conflicting county policies and programs.

**Mutually Agreed Upon Principles.** The members of the Snoqualmie Fish, Farm and Flood Advisory Committee mutually agree that agricultural viability and fishery recovery efforts are limited by coinciding societal needs that cannot be fully resolved through the FFF effort. Both agriculture and salmon recovery are limited by factors well beyond the scope of the APD or the FFF effort. In an effort to document the mutual understanding the FFF Advisory committee has gained, we fully support the following principles:

1. The Committee recognizes the importance of a viable agricultural community, ecosystem and salmon recovery, and flood safety. Planning, actions, and management in the Snoqualmie Agricultural Production District (APD) should promote without priority:
  - a. Agricultural viability
  - b. Ecological restoration

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<sup>1</sup> The federal Clean Water Act further requires "fishable, swimmable" water quality which further expands the obligation for aquatic species protection and recovery. Tribal treaty rights also shape federal and state agency actions on behalf of salmon habitat.

c. Flood safety

2. King County has a legal obligation to protect farmland, support the restoration of salmonids, and protect residents and infrastructure from flood risks and impacts.
3. The King County Flood Control District has the authority to protect life and property from flood risks and funds capital project in the Snoqualmie valley as part of its strategy to do so.
4. The prime agricultural soils encompassed by the Snoqualmie Valley APD are an irreplaceable natural resource that is important to the community and economy of King County.
5. Salmonids are an irreplaceable natural resource of high value to the community, and have profound cultural significance to the Snoqualmie and Tulalip Tribes.
6. The APD is largely within the floodplain and floodway, an area of extensive flooding and in some locations, deep and fast erosive flows. Farmers need county support in taking actions to reduce flood risk to their homes and agricultural operations in a manner that doesn't transfer risk to other property owners.
7. To meet the County's legal obligation to protect and restore salmonid habitat and protect residents and infrastructure from flood risk, at times it may be necessary to undertake projects or programs that result in the loss of farmland.
8. Losses and gains of habitat, farmland and flood risks need to be tracked and reported.
9. Buffer plantings provide multiple benefits for salmonids, including food and habitat, as well as better water quality (such as cooler temperature and reduction of pollutants reaching the stream through direct runoff). Buffers reduce the impacts of farming on water bodies, but the necessary size and composition of buffers to balance agricultural needs and constraints, salmon recovery, and water quality improvement requires additional analysis and discussion.
10. There are a limited number of available acres to substitute for the loss of high-quality long-growing season agricultural land in the APD.
11. There is no substitute for prime salmon spawning/rearing areas, especially the alluvial areas below the Raging and Tolt River confluences.
12. Both advocates for salmon recovery projects (large capital and buffers), and advocates for Snoqualmie Valley agriculture need the support and collaboration of each other for these efforts to succeed over the long-term.
13. The productivity of agricultural lands can and should be increased through capital actions as well as through potential regulatory changes.
14. Land conversion and development in upland areas has had negative effects on agriculture as well as salmon habitat on the valley floor.

**Examples of remaining questions/issues where we are still working toward solutions.**

1. How do we best achieve ecosystem and salmon habitat restoration, agricultural viability and productivity, and flood safety? Definition of specific solutions, actions, policies, etc.
  - a. How do we improve agricultural drainage (including regulatory changes) without having adverse impacts on salmon habitat and water quality?
  - b. Excluding higher elevation land adjacent to the river from buffer plantings can protect sites for important agricultural infrastructure on some farms, but doing so reduces opportunities to address elevated water temperatures.
  - c. How do we maintain and improve certain water infrastructure (pumps, gates, revetments, constructed drainage features) to improve agricultural production while advancing salmon recovery and water quality improvement efforts?
  - d. How do we strike a balance between voluntary buffer plantings and increased agricultural production?
    - a. Riparian buffer plantings may improve water temperature and salmon habitat, but they may take valuable farmland out of production.
    - b. Is there a buffer size that constitutes a “best management practice” for farm operations?
    - c. How many total acres of buffers are salmon recovery interests seeking to plant in Snoqualmie APD? What are the potential impacts to the productivity of the APD from those plantings?
    - d. What are the impacts to farmland and food safety from increased wildlife use in future buffer plantings?
  - e. What are the four year and longer-term habitat restoration goals for the APD in the larger salmon recovery community?
  - f. Habitat restoration-driven regulatory reform discussions are also taking place in the region. What is the relationship of these efforts to the Regulatory Taskforce?
  - g. What are the implications of the KCFC Hydrologic/Hydraulic studies for FFF recommendations and large habitat restoration project design?
  - h. What is the long-term vision for agriculture in the Snoqualmie Valley APD to better inform the FFF conversation and recommendations?

### **Fish, Farm, and Flood Taskforce Next Steps/Timeline**

In the interest of keeping the FFF process moving forward and ensuring that the gains made by the participants in this process are not lost, the Advisory Committee is recommending the following Summer and Fall/Winter Work Plans:

#### **Summer Work Plan**

While the full FFF Advisory Committee supports the proposal to suspend meetings for the duration of the summer and fall, in order to ensure that the summer/fall hiatus is used productively the Advisory Committee is recommending the following summer work-plan for King County staff, in collaboration with available and interested FFF Advisory Committee and community members. The objective of the summer work plan is to lay an analytical foundation that the agricultural community can use to identify key interests and desired outcomes for the FFF process, and understanding that any work advanced over the summer will need full FFF Advisory Committee review, discussion and consensus to be successful. The full FFF Advisory Committee would not reconvene before Monday, January 4, 2016.

During the summer (June to October) of 2015 King County, working with KCD, available FFF Advisory Committee and community members, will undertake the following actions:

- 1. Develop a Landowner Engagement Plan (June-Sept 2015) to be implemented in Fall/Winter 2015.** A consistent message from the Agriculture Commission, Sno-Valley Tilth, and residents of the valley is that the FFF process needs a more comprehensive approach to community engagement and informal conversations regarding the FFF work. King County will collaborate with the King Conservation District (KCD) to convene a Snoqualmie Agricultural Alliance and develop a farmer-driven, comprehensive and effective engagement plan. With support from King County, the King Conservation District will work with the Agriculture Commission, Snoqualmie Valley Preservation Alliance (SVPA), Sno-Valley Tilth, and the Kitchen Cabinet to create an ad hoc group hereafter called the Snoqualmie Agricultural Alliance (the Alliance), which can provide support to the four FFF agricultural representatives in the adoption of agricultural positions and agreements to support the FFF process. The KCD has generously offered its assistance; however the leadership structure of the Alliance is still to be determined in conversation with the agricultural community. Because KCD is a trusted representative of the agricultural community, it is assumed that they will take the lead on convening this group. The KCD will help identify the appropriate members of the Alliance, and will begin to convene the group over the summer for discussions/action in the fall after the harvest.

The Alliance would identify and help to conduct the types of agricultural outreach and engagement during Fall/Winter 2015 that would most benefit the FFF stakeholder process.

- 2. Initial Scope for Regulatory Task Force (June-September 2015).** County staff will use the regulatory survey recently completed by King County/UW Evans School, and recommendations from the FARMS Report and the Local Food Initiative, as a starting point

to prioritize regulatory challenges to farmers, identify county staff resources for a task force, and develop a task force framework and timeline. In the near term, the UW Evans School regulatory survey will be shared with committee members when it becomes available.

The draft task force framework and timeline will be available for review by FFF Advisory Committee members by October 2015, with the goal of refining the scope and composition of the Task Force by December 2015; and before a possible December 2015 subgroup meeting of interested FFF Advisory Committee members. The Regulatory Task Force will be focused on achieving permanent, meaningful change to regulations, where appropriate, and on developing to strategies and resources by which to move forward while complying with existing regulations.

- 3. Initial Scope for Snoqualmie APD Agricultural Strategic Plan (June-September 2015).** This summer King County will develop the outline (purpose and boundaries) for a Snoqualmie APD comprehensive strategic plan and scope out how it might be developed for consideration by the agricultural community in October-December 2015. By December 2015, the County, in consultation with the Alliance, KCD, and FFF landowners, will have identified the key components, methodology, and recommended timeline to develop a strategic plan for the Snoqualmie APD. In January the FFF Advisory Committee will consider the scope in its recommendations.
- 4. Initial Scope for Buffer Task Force (June-September 2015).** This summer King County will outline a scope of work and key issues to be addressed by a Buffers Taskforce. This scope of work and timeline will be reviewed by all members of the FFF Advisory Committee, and by December 2015, the County will have a draft scope of work and timeline for consideration in the FFF Advisory Committee recommendations in January 2016.
- 5. Agricultural Crop/Soil Scientist (June – September 2015).** King County and King Conservation District staff will meet to explore options for securing the needed crop and soils technical support as unanimously supported by the Advisory Committee at its March 2015 meeting. By December 2015, staff will have developed a scope of work and description of functions/services. This position will be included for consideration in the recommendations of the FFF Advisory Committee in January 2016.

### **Fall/Winter Work Plan**

Prior to reconvening the Advisory Committee in January, working with the newly formed Alliance, select FFF Advisory Committee and community members, King County will undertake the following actions:

- 1. Snoqualmie Agricultural Alliance Landowner Engagement (October 2015 – March 2016).** The goal of convening the Alliance and of the landowner engagement process is to arrive at a broadly supported articulation of the interests of the agricultural community in the Snoqualmie APD to guide the FFF landowner representatives when the FFF process

commences again in January-March 2016. It is understood that the Alliance may not arrive at consensus on identification of priority problems and solutions during this timeframe, however additional outreach and input from the broader agricultural community will help inform FFF landowners understand the various perspectives in the valley.

- 2. H/H Studies Completion (Now-April 2016).** County staff involved in FFF will track the work and findings of the H/H (hydraulics/hydrology) studies to identify implications for Advisory Committee consideration in advance of the reconvening of the full FFF committee in January 2016. They will communicate any study findings to the FFF Advisory Committee as soon as they are made available.
- 3. Complete Lower Valley Needs Assessment (Fall 2015) & Scope Expanded Program.** Farm buildings (e.g., barns, loafing sheds, milking parlors, etc.) in the floodplain are currently subject to flooding, which can cause significant damage to infrastructure, animals, and equipment. Elevating farm structures can be very expensive, and therefore not an option for many farmers. The county has a pilot program underway to cost share (up to 87%) the design and construction costs of elevating agricultural buildings; a needs assessment is underway to better quantify the need. County staff will complete the assessment that is currently underway to identify total number of farm houses in the floodplain and the relative priority for elevating. A scope will be created for a timeline and budget for an expanded long term elevation program for existing farmhouses and farm buildings
- 4. Scope the Drain Tile Valve Concept (June – December 2015).** While drain tiles can drain water from fields, allowing for cultivation earlier in the spring, they also move water towards the river more quickly than would otherwise occur. This can reduce available subsurface water in the fields later in the summer for agriculture as well as cool water recharge of adjacent waterways. The County will work in coordination with SVPA to scope an investigation of the installation of valves on drain tiles that would allow for greater control of the drainage of agricultural fields in a manner to support agriculture and strengthening ecological functions. Valves may help ensure proper filtering, adsorption, and biological processing of nutrients that might escape the root zone. This may help to address the water quality problems frequently associated with tiles. This is an evaluation of the drain tile valve concept.
- 5. Scope Habitat Protection /Restoration Plan Update (September – December 2015).** In collaboration with the Snohomish (WRIA 7) Forum and related fisheries and aquatic habitat stakeholders, King County staff will articulate a scope of work and schedule for identifying habitat restoration and protection actions. This will incorporate efforts by multiple entities working in the Snoqualmie and will reflect a 4-year time horizon, as part of updating the Snohomish Forum's 4-Year Work plan and developing a 10-year update to the Salmon Recovery Plan.



### **Summary FFF Timeline 2015/2016**

- **June to September 2015.**
  - Work with KCD to convene Alliance and plan fall landowner engagement
  - KC develops initial scopes for taskforces, the Snoqualmie APD Agricultural Strategic Plan, and explores options for securing Crop/Soil Specialist with KCD.
- **October – December 2015 (and likely continuing through March 2016).**
  - King County, the KCD, FFF Advisory Committee landowner members and the Snoqualmie Agriculture Alliance will develop and undertake a community engagement strategy to develop Snoqualmie Valley agricultural community priorities and solutions reflective of broad agricultural input.
  - In the interest of launching some task forces as early as reasonably possible, the County will circulate to the FFF Advisory Committee via e-mail draft Task Force scopes of work. Committee members can comment on and approve these documents via e-mail, thereby allowing the County staff to begin convening meetings as soon as the proposed members are available.
- **January -March 2016.**
  - FFF Advisory Committee will work to develop a final report and recommendations building on the work to-date through spring 2015 and informed by the work of the Snoqualmie Agriculture Alliance during fall 2015. In addition to recommended capital and policy actions, the recommendations will include description of an APD Scale Annual FFF Reporting Framework.

Recommendations may also include further scopes of work to develop policy solutions and actions within the next three years. Examples of potential areas of focus are:

  - Buffers Task Force (Scope/Composition/Timeline)
  - Regulatory Task Force (Scope/Composition/Timeline)
  - Strategic Plan for Snoqualmie APD (Scope/Composition/Timeline)
  - Long-term Large Capital/Buffer Plan for Snoqualmie APD (Scope/Composition/ Timeline)
  - The Advisory Committee will also develop draft policy language to be considered by the County Executive and Council for inclusion in the 2016 Comprehensive Plan update that resolves current FFF-related policy conflicts in the Comprehensive Plan. King County staff may prepare draft language for consideration in advance to expedite the committee's work given the tight timeline for proposed revisions to the Comprehensive Plan in early 2016.

- **June 2016.** Adoption of King County FFF Comprehensive Plan Policies.

## **FFF Advisory Committee Members**

Lawrence Carlson, farmer & Snoqualmie Valley Preservation Alliance  
Siri Erickson-Brown, farmer & King County Agriculture Commission  
Jarvis Keller, farmer  
Bobbi Lindemulder, farmer  
Josh Monaghan, King Conservation District  
Scott Powell, Seattle City Light and Snohomish Forum  
David Radabaugh, Department of Ecology, Floodplain management  
Cindy Spiry, Snoqualmie Tribe  
Lara Thomas, City of Duvall  
Heather Trim, Futurewise  
Micah Wait, Wild Fish Conservancy  
Jason Walker, Snoqualmie Watershed Forum Chair & City of Duvall  
Daryl Williams, Tulalip Tribes  
King County Flood Control District

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## Appendix VII

### Letters from Participating Entities

Agriculture Commission

City of Duvall\*

Department of Ecology - April 2017

Department of Ecology - November 2016\*

Futurewise\*

Snohomish Basin Salmon Recovery Forum\*

Snoqualmie Indian Tribe\*

Snoqualmie Watershed Forum\*

Wild Fish Conservancy\*

*\*Note regarding letters of support: These letters of support are related to a draft report that was prepared by County staff in August of 2016. The Transmittal Letter that forms the basis of this package reflects many of the elements that were in the draft report, but key language related to the composition of the Phase II Fish, Farm, and Flood Advisory Committee and “bundling” of commitments recommendations was added to the Transmittal Letter. Two of the letters of support relate to the revised Transmittal Letter - the Department of Ecology April 20, 2017 and King County Agriculture Commission May 11, 2017 letters. All other letters were in support of the draft report, but all of the individuals or organizations who provided letters have indicated that the earlier letters should be included in this appendix, as the essential spirit of the agreement inherent in both documents is sufficiently similar.*



**King County**  
**Agriculture Commission**  
**Water and Land Resources Division**  
**Department of Natural Resources and Parks**

**King Street Center**

201 South Jackson Street, Suite 600  
Seattle, WA 98104-3855  
206.477-4800

May 11, 2017

Ms. Christie True, Director  
King County Department of Natural Resources and Parks  
King Street Center  
201 South Jackson Street, Suite 700  
Seattle, WA 98104-3855

**Re: Support for our Representative to Sign Farm, Fish, Flood Letter and Agreement**

Dear Director True:

The King County Agriculture Commission supports the Farm, Fish, Flood Agreement in principle. This plan will bring farmland back into production through increased drainage and reduce regulatory barriers to farming while increasing benefits for flood safety and salmon habitat recovery. However, the agreement did not adequately address two primary concerns of the Commission so we were pleased that each were included in the transmittal letter. The two key issues that were not adequately addressed in the FFF report but were incorporated into the transmittal letter were the concept of “bundling” and the composition of future advisory and task force members who will be charged with implementing “FFF 2.0.” The Commission’s full body unanimously voted in April 2017 to support the agreement and transmittal letter.

The Commission and the FFF “farm caucus” were concerned that some of the priority fish and flood strategies might move forward at an expedited rate while priority farm issues languished due to implementation barriers. That concern led to the concept of “bundling,” whereby there was a commitment among the caucus groups to support a suite of priorities and ensure that there was satisfactory progress on all fronts. The commission strongly believed that until there had been tangible progress to address drainage challenges, no more agricultural production district land can be lost to habitat projects. Specifically, we now anticipate 1) expansion of the Agricultural Drainage Assistance Program, 2) regulatory change to streamline drainage projects, 3) pilot projects to generate information for how landowners can solve drainage challenges and the costs to do so, and 4) minimizing barriers to routine drainage maintenance before breaking ground on a new major habitat restoration project. The bundling of priority recommendations and a timeline for implementation of those recommendations was key to solidifying Commission support for the agreement. We see bundling as a means that provides fairness for all three FFF parties.

Christie True, Director DNRP

May 11, 2017

Page 2

The second issue of utmost concern for the commission, is the make-up of the FFF 2.0 implementation and oversight groups. The commission wants to ensure that agriculture representation in FFF 2.0 is more robust and on par with the other two F's, which had the decided advantage during the initial FFF process of being able to assign paid staff. The commission has recommendations for staffing from key agricultural organizations to that end.

The King County Agriculture Commission has been supportive of the FFF process since its inception and we appreciate how the process has fostered a much greater degree of trust and respect among the FFF committee members. Although all Commission members have been engaged in the process, we are especially indebted to Siri Erickson-Brown, who has participated on the Farm, Fish, Flood advisory committee for more than three years. The Commission established a committee in fall 2016 to review the agreement and the suggestions that resulted from that review are largely incorporated into the transmittal letter.

The Agriculture Commission is committed to supporting farmers throughout King County, and you can depend upon the Commission to continue its active role on the advisory or oversight group as well as in the task forces and pilot projects in FFF 2.0.

Sincerely,



Leann Krainick, Chair Pro Tem  
King County Agriculture Commission

cc: King County Council

ecc: Josh Baldi, Division Director, Water and Land Resources Division (WLRD),  
DNRP

John Taylor, Assistant Division Director, WLRD, DNRP  
King County Agriculture Commission

ATTN: Patrice Barrentine, Liaison, King County Agriculture Commission, RRSS,  
WLRD, DNRP

Richard Martin, Manager, Agriculture, Forestry and Incentives, RRSS, WLRD, DNRP

**CITY OF DUVALL  
WASHINGTON**

**RESOLUTION NO. 16-20**

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**A RESOLUTION OF THE CITY COUNCIL OF THE CITY  
OF DUVALL, WASHINGTON, SUPPORTING THE  
IMPLEMENTATION OF RECOMMENDATIONS  
DEVELOPED BY THE SNOQUALMIE FISH, FARM,  
FLOOD ADVISORY COMMITTEE.**

WHEREAS, King County convened the Snoqualmie Fish, Farm, Flood Advisory Committee (Committee) in 2013 to develop recommendations for accelerating progress toward salmon recovery, strengthening the agricultural sector, and reducing flood risks in the Snoqualmie Valley; and

WHEREAS, the City of Duvall has actively participated on the Committee and has brought the City's interests forward in the Committee's discussions, including concern for the impacts of flooding on the Snoqualmie Valley road network; and

WHEREAS, the City of Duvall values the longstanding contribution of farmers and farming to the local economy and culture; and

WHEREAS, the ability to grow food locally is vital to the security and future of our region in light of population growth and a changing climate; and

WHEREAS, healthy ecosystems and thriving farms in the Snoqualmie Valley enhance the quality of life for the residents of the City of Duvall; and

WHEREAS, flooding restores fertile floodplain soils but also poses significant risks to life and property as well as significant transportation disruptions for the agricultural sector, the City of Duvall, and the surrounding communities; and

WHEREAS, the City of Duvall acknowledges and respects the importance of restoring salmon runs and protecting water quality for the Tulalip Tribes and the Snoqualmie Tribe for whom salmon are vital for their cultural significance and as sources of sustenance; and

WHEREAS, the City of Duvall participated in the development of the Snohomish Basin Salmon Conservation Plan and indicated its approval and support of the plan by City of Duvall Resolution No. 05-10 in 2005; and

WHEREAS, the City of Duvall participates actively in salmon recovery efforts through its participation in the Snoqualmie Watershed Forum and through the implementation of projects to restore habitat and protect water quality within its jurisdiction; and



WHEREAS, the Snohomish Basin Salmon Conservation Plan recognizes multiple resource values and stakeholders, and the Committee has provided an opportunity to work directly with agricultural landowners and flood managers to address concerns and pursue common interests; and

WHEREAS, the Committee's recommendations highlight the importance of making progress in a balanced way across fish, farm, and flood priorities; and

WHEREAS, the City of Duvall supports watershed scale cooperation to set priorities for action among partners and the efficient use of resources and investments; and

WHEREAS, collaboration between stakeholders will lead to stronger outcomes for all interests than engaging in conflict, and the Committee recommendations create a successor venue for continuing engagement.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF DUVALL, WASHINGTON, DOES RESOLVE AS FOLLOWS:

The Duvall City Council hereby indicates its approval of and support for the implementation of recommendations developed by the Snoqualmie Fish, Farm, Flood Advisory Committee for the purposes of accelerating the restoration of habitat for imperiled native salmon, strengthening the local agricultural sector, and reducing flood risks and the impacts of flooding on the residents and businesses of the Snoqualmie Valley.

18<sup>th</sup> PASSED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF ON THE DAY OF October, 2016.

CITY OF DUVALL

  
\_\_\_\_\_  
Mayor Will Ibershof

Approved as to form:

\_\_\_\_\_  
Rachel Turpin, City Attorney

ATTEST/AUTHENTICATED:

  
\_\_\_\_\_  
Jodi Wycoff, City Clerk



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

*Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000  
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341*

April 20, 2017

Ms. Christie True, Director  
King County Department of Natural Resources and Parks  
King Street Center  
201 South Jackson Street, Room 700  
Seattle, WA 98104-3855

**Re: Statement on Signature of Snoqualmie Fish, Farm, Flood Advisory Committee Letter**

Dear Ms. True:

The Washington Department of Ecology (Ecology) offers the following statement in regards to our forthcoming signature and qualified support of the Snoqualmie Fish, Farm and Flood Advisory Committee's (committee) transmittal letter, recommending continued coordination through a Phase II effort. In our November 23, 2016, letter of qualified support, we addressed regulatory, legal, policy, and staffing challenges associated with this effort. This letter is intended to voice our concern with a position conveyed in the draft transmittal letter, which we feel may have not been adequately discussed within the Phase I committee process. We also want to maintain a long-term perspective and support for this important effort.

We are concerned with a potentially restrictive statement in the letter related to "bundling" of restoration projects with achievement of undefined milestones on drainage improvements. Specifically, we are concerned that this restriction could have unintended consequences limiting opportunities for ecological restoration projects in the Snoqualmie Valley. Ecology is not opposed to the concept of "bundling" of these top-priority efforts. We would, however, recommend that the Phase II committee define meaningful milestones for both restoration and drainage improvement efforts, through a collaborative process involving the range of perspectives represented on the committee.

I would like to convey our appreciation for the important work being done by King County and members of the committee in building important relationships between the agricultural community and restoration interests within the Snoqualmie Valley. This work is challenging, but extremely important in establishing a foundation and trust that we believe is necessary to ensure the long term success of both interests.

We hope that a focus on mutual problem solving will facilitate success of the Phase II Committee. We can foresee many regional benefits stemming from a successful Fish, Farm, and





Ms. Christie True, Director  
April 20, 2017  
Page 2

Flood process well beyond the Snoqualmie Valley, potentially contributing to similar efforts in Skagit and Snohomish Counties.

Thank you for your consideration and we look forward to continuing to support King County's efforts to restore salmon habitat, preserve farmland, and reduce flood risk in the Snoqualmie Valley.

Sincerely,

A handwritten signature in dark ink, appearing to read 'T. Buroker', with a stylized, flowing script.

Tom Buroker  
Interim Regional Director

cc: King County Council

ecc: Josh Baldi, King County  
John Taylor, King County  
Gordon White, Ecology  
Ria Berns, Ecology  
Joe Burcar, Ecology  
Mark Henley, Ecology  
Ralph Svrjcek, Ecology  
David Radabaugh, Ecology



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341*

November 23, 2016

Ms. Christie True, Director  
King County Department of Natural Resources and Parks  
King Street Center  
201 South Jackson Street, Room 700  
Seattle, WA 98104-3855

Re: **Qualified Support for Snoqualmie Fish, Farm and Flood**

Dear Ms. True:

The Washington Department of Ecology (Ecology) offers qualified support for the recommendations of the Lower Snoqualmie Fish, Farm, and Flood (Snoqualmie FFF) Advisory Committee. We believe the Snoqualmie FFF has made great strides forward, and Ecology representatives David Radabaugh and Ralph Svrjcek have felt honored to participate in and contribute to the effort.

The final report recommends continued involvement on the Advisory Committee by existing members, and the planned scope of work will involve a variety of technical issues of which Ecology has expertise. While budget and staffing constraints will require us to consider the work on a case-by-case basis, Ecology has strong interest in continued engagement in the Snoqualmie FFF.

Our planned engagement in the process complements other Ecology efforts to support agricultural viability and environmental quality in the Snoqualmie Valley. For example, in addition to our numerous regulatory responsibilities to protect water and habitat, we recently issued a Water Resources grant to enhance irrigation in the Lower Snoqualmie Valley and are overseeing National Estuary Program grants for voluntary conservation easements that support riparian objectives.

Our continued interest in the Snoqualmie FFF is grounded in its key objectives, including:

- The commitment to salmon restoration;
- The commitment to improve flood safety and resiliency for communities and agriculture;
- The need to reconcile adequate land for both a viable agricultural and needed ecological restoration, including the right-sizing of buffers;



- The need to improve agricultural drainage in a more efficient and environmentally protective manner; and,
- Support for a low flow water quantity assessment to improve both ecological and agricultural conditions.

In addition to capacity concerns, Ecology's cautionary approach is in recognition that agreement in several areas of the Snoqualmie FFF scope will be challenging given our regulatory responsibilities. As you know, Ecology administers many federal requirements, such as those in the National Flood Insurance Program and the Clean Water Act. We are not at liberty to lessen such standards, but we do have limited administrative discretion, providing our actions remain consistent with the law. We are hopeful that innovative solutions will continue to allow forward progress while adhering to our regulatory responsibilities.

The Snoqualmie FFF process will establish three committees to work out details of the recommendations and address how to move forward with implementation. It is extremely important that the pertinent regulatory interests, as well as organizations with expertise, be involved in the committee work. Early consideration of regulatory requirements will provide the greatest opportunity for these agencies to support innovative solutions.

The concern about the legal constraints extend beyond regulatory programs, such as the recommendation supporting the integration of private mitigation with publicly funded restoration projects. This may be difficult given Washington State's prohibition on use of state resources for private gain. Our experience with fee in lieu programs and wetland banks will inform our perspective on this policy discussion.

An additional concern is the King County position that lands encumbered by certain agricultural land preservation easements cannot be utilized for ecological restoration – even when the property owners with affected properties wish to participate in the program. We would like to work with the County and committee to provide the flexibility for priority restoration sites and clarify that open space uses, such as ecological restoration and management of land in a natural condition, are acceptable uses of land enrolled in the Farmlands Preservation Program.

To help increase the likelihood of mutual success, we encourage King County and interests in the Lower Snoqualmie Valley to pursue projects that would qualify for Floodplains by Design, a grant program that supports projects that simultaneously promote long-term flood resiliency, ecological restoration and agricultural viability. Current efforts in the Lower Snoqualmie Valley could be a great fit for this type of funding. Development of such projects could serve as an implementation activity demonstrating the multi-benefit approach. Ecology is happy to help interested parties in pursuing such project opportunities, as well as related grant programs we administer, such as our Water Quality Combined Financial Assistance Program.

King County is to be commended for the effort that it has made in the success of Snoqualmie FFF to date. A level of trust and working relationships have been achieved. The long-term effectiveness of the effort will need to build on those achievements and ensure that equitable progress is made for salmon recovery, agricultural viability and flood resiliency.

Ms. Christie True, Director  
November 23, 2016  
Page 3

Again, thank you for your time and commitment to reconciling and advancing the key community values in the Snoqualmie Valley. With the qualifications outlined in this letter, Ecology supports the Snoqualmie FFF recommendations. If you have questions, please contact me at (425) 649-7010 or [josh.baldi@ecy.wa.gov](mailto:josh.baldi@ecy.wa.gov) or David Radabaugh at (425) 649-4260 or [david.radabaugh@ecy.wa.gov](mailto:david.radabaugh@ecy.wa.gov).

Sincerely,



Josh Baldi  
Regional Director  
Northwest Regional Office

ecc: John Taylor, Assistant Director, King County Water and Land Resources Division  
Joan Lee, Rural and Resources Section Manager, King County  
Janne Kaje, Snoqualmie Watershed Coordinator, King County  
Gordon White, Shorelands Program Manager, Ecology  
Joe Burcar, Shorelands Section Supervisor, Ecology  
Tom Buroker, Water Resources Section Supervisor, Ecology  
Mark Henley, Water Quality Section Supervisor, Ecology



816 Second Ave  
Suite 200  
Seattle, WA 98104



(206) 343-0681 Ext. 118  
fax (206) 709-8218  
[futurewise.org](http://futurewise.org)

October 26, 2016

Christie True, Director  
King County Department of Natural Resources and Parks  
201 South Jackson Street, Suite 700  
Seattle, Washington 98104

**Re: Recommendations of the Snoqualmie Fish, Farm and Flood Advisory Committee**

Dear Ms. True,

Futurewise is writing to express our endorsement of the recommendations of the Snoqualmie Fish, Farm and Flood Advisory Committee. The work of this committee mirrors the mission of our organization and we appreciate the thoughtful and inclusive process led by King County, starting in 2013.

For more than 25 years, Futurewise has worked to prevent sprawl in order to protect our State's resources and make our urban areas livable for and available to all. We focus on preventing the conversion of wildlife habitat, open space, farmland, and working forests to subdivisions and development, while directing most growth into our urbanized areas.

It is important for all of us to recognize that the Snoqualmie Valley resources – salmon populations and agricultural lands – are resources at risk, and that the path to success must be based on collaboration and mutual support. With an agreement in place, we believe that all of the committee's interests – fish, farm and flood – will be exceptionally well positioned to attract multi-objective funding from state and federal sources.

In sum, Futurewise supports the implementation of recommendations developed by the committee for the purposes of accelerating the restoration of habitat for imperiled native salmon, strengthening the local agricultural sector, and reducing flood risks and the impacts of flooding on the residents and businesses of the Snoqualmie Valley. We strongly encourage King County to make the implementation of these recommendations a high priority and we look forward to participating in this effort in the years to come.

Sincerely,

Chris Wierzbicki  
Interim Executive Director



## SNOHOMISH BASIN SALMON RECOVERY FORUM

October 6, 2016

Christie True, Director  
King County Department of Natural Resources and Parks  
201 South Jackson Street, Suite 700  
Seattle, Washington 98104

RE: Snohomish Basin Salmon Recovery Forum endorsement of the Snoqualmie Fish, Farm, and Flood Advisory Committee's recommendations

Dear Ms. True,

We write this letter to convey the Snohomish Basin Salmon Recovery Forum's (Forum) support for King County's Snoqualmie Fish Farm Flood effort and the recommendations put forward by its Advisory Committee.

The Forum is a 41-member voluntary group of citizens, businesses, tribal representatives, farmers, and elected officials, who guide conservation efforts in the Snohomish River Basin. The Forum provides an opportunity for local governments and organizations to coordinate and communicate about watershed issues. Member governments include the Tulalip Tribes, King County, Snohomish County, and the cities of Carnation, North Bend, Snoqualmie, Mukilteo, Marysville, Seattle, Snohomish, and Everett.

Since its creation, the Forum's mission has been *"to protect and restore the ecological health of the Snohomish River Basin including biodiversity, hydrology and water quality to enhance the productivity of all wild salmon stocks to a level that will sustain fisheries and non-consumptive salmon-related cultural and ecological values"*. In fulfilling this mission, the Forum's Snohomish Basin Recovery Plan and updated Snohomish Basin Protection Plan recognize multiple resource values and promote activities that include working with stakeholders to integrate local interests with broader basin-wide salmon recovery actions. This includes outreach to and improving coordination with a wide range of interests including flood managers and the agricultural community.

The Forum would like to commend King County for its initiative in assembling the FFF Advisory Committee, as well as for allowing the Forum to participate in a crucial conversation that will impact the way salmon recovery is conducted in the Snoqualmie Valley and likely in other floodplains of the Snohomish Basin. Having a Forum representative on the Advisory Committee ensured that the Forum stayed informed as the conversation progressed and gave Forum members the opportunity to offer comments along the way. We have full confidence that King County staff coordinated a robust and thoughtful planning process that benefited greatly from input from Agencies, Tribes and NGO's as well as support from King County technical staff.

The Snoqualmie River mainstem and floodplain are critically important to ESA-listed Snoqualmie Chinook and other salmon populations addressed in our multi-species recovery plan. Within the Agricultural Production District, two key tributaries - the Tolt and Raging Rivers - supply the majority of the salmon spawning gravels that are found in the Snoqualmie mainstem. As a result, these tributary confluences and the reaches downstream of each of them are the most critical locations for Chinook spawning as well as early juvenile



## SNOHOMISH BASIN SALMON RECOVERY FORUM

rearing. Benefits to salmon in the FFF agreement hinge on the continued implementation of large capital habitat restoration projects and we are pleased to see recommendations to accelerate projects in these areas. Additionally, paths toward mutually beneficial approaches to agricultural drainage and riparian buffers established in the recommendations will certainly help us achieve our restoration and protection goals. Though not a specific focus of the agreement, we feel that our common interest in preserving the Snoqualmie Valley land base in both agriculture and open space are essential to protecting habitat values moving forward.

These benefits will only be realized to the extent that King County, the Snoqualmie Watershed Forum, the Snohomish Basin Forum and other habitat project sponsors follow through to implement the agreement as developed. We look forward to continued involvement by the Forum in the implementation phase of the agreement.

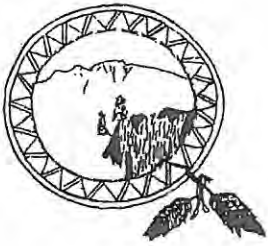
With these thoughts in mind, the Forum congratulates the FFF Advisory Committee on its accomplishment and endorses the agreement.

Sincerely,

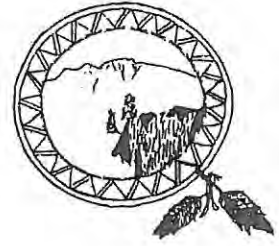
Terry Williams  
Forum Chair  
Tulalip Tribes

Jim Miller  
Forum Vice-Chair  
City of Everett

Cc: Snohomish Watershed Salmon Recovery Forum members and alternates



# SNOQUALMIE INDIAN TRIBE RESOLUTION # 183-2016



## **Resolution Approving Snoqualmie Farm, Fish, Flood Advisory Committee Recommendations Support**

WHEREAS, the Snoqualmie Indian Tribe is the sovereign entity recognized as a signatory Tribe to the Point Elliott Treaty of 1855; and

WHEREAS, the Snoqualmie Tribal Council is the governing body of the Snoqualmie Indian Tribe by authority of its Constitution; and

WHEREAS, the Snoqualmie Tribal Council is the duly elected council of the General Membership and is responsible for the protection of the health, safety, and welfare of the members of the Snoqualmie Indian Tribe; and

WHEREAS, King County convened the Snoqualmie Fish, Farm and Flood Advisory Committee (Committee) in 2013 to develop recommendations for accelerating progress toward salmon recovery, strengthening the agricultural sector, and reducing flood risks in the Snoqualmie Valley; and

WHEREAS, the Snoqualmie Tribe has actively participated on the Committee and has brought the Tribe's interests forward in the Committee's discussions, including concern for improving habitat Salmon Recovery in the Snoqualmie River system; and

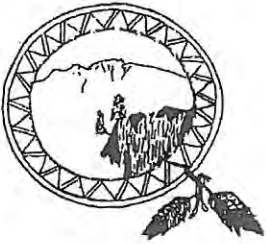
WHEREAS, healthy ecosystems and thriving farms in the Snoqualmie Valley enhance the quality of life for Tribal members; and

WHEREAS, restoring salmon runs and protecting water quality are vital pieces of Tribal culture and as sources of sustenance for Tribal members; and

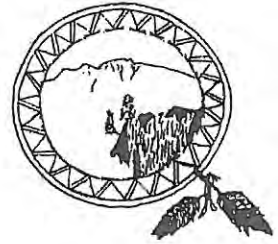
WHEREAS, the Snoqualmie Tribe participates actively in salmon recovery efforts through its participation in the Snoqualmie Watershed Forum and through the implementation of projects to restore habitat and protect water quality throughout the Snoqualmie River Watershed; and

WHEREAS, the Snoqualmie Tribe supports watershed scale cooperation to set priorities for action among partners and the efficient use of resources and investments; and





# SNOQUALMIE INDIAN TRIBE RESOLUTION # 183-2016



NOW, THEREFORE BE IT RESOLVED,

The Snoqualmie Tribal Council hereby indicates its approval of and support for the implementation of recommendations developed by the Snoqualmie Fish, Farm and Flood Advisory Committee for the purposes of accelerating the restoration of habitat for imperiled native salmon, strengthening the local agricultural sector, and reducing flood risks and the impacts of flooding on the residents and businesses of the Snoqualmie Valley.

## CERTIFICATION

Voted on this 13<sup>th</sup> day of October, 2016 in Snoqualmie, WA at a duly called meeting of the Snoqualmie Tribal Council, with a quorum present and voting.

For \_\_\_\_ 6 \_\_\_\_, Against \_\_\_\_ 0 \_\_\_\_, Abstaining \_\_\_\_ 0 \_\_\_\_.

  
Alisa M. Burley, Tribal Secretary, Acting Chair

  
Steve De Los Angeles, Deputy Secretary



Working together  
for salmon  
recovery and  
watershed health.

Carnation

Duvall

King County

North Bend

Skykomish

Snoqualmie

Snoqualmie Tribe

Tulip Tribes

# SNOQUALMIE WATERSHED FORUM

October 3, 2016

To: Christie True, Director  
King County Department of Natural Resources and Parks  
201 South Jackson Street, Suite 700  
Seattle, Washington 98104



Re: Snoqualmie Watershed Forum endorses the recommendations of the  
Snoqualmie Fish, Farm and Flood Advisory Committee

Dear Ms. True,

The Snoqualmie Watershed Forum (Forum) would like to thank King County for its leadership in convening the Snoqualmie Fish, Farm and Flood Advisory Committee (Committee), and for inviting the Forum to participate in these vital discussions about the future of the Snoqualmie Valley. The Forum is a partnership of elected officials, citizens and representatives from conservation organizations working toward salmon recovery and ecological health in the Snoqualmie and South Fork Skykomish Watersheds. Member governments include the Snoqualmie Tribe, Tulip Tribes, King County, the cities of Duvall, Carnation, North Bend and Snoqualmie, and the Town of Skykomish.

Since 1998, the Forum has worked to protect and restore salmon habitat and improve watershed health through coordination and collaboration between our member jurisdictions and our many partner organizations. We have been fortunate to work with many agricultural landowners in the valley to implement habitat projects and are well aware of the conflicts that can at times arise between restoration efforts, water quality protection, and the agricultural community.

In 2011, as part of reporting on the status of our salmon recovery efforts, we identified this emerging conflict as one of the biggest impediments to successful salmon recovery in the Snoqualmie basin. We see the Committee's recommendation package and the trust that was built around the Committee table as huge steps forward in addressing that challenge. It is important for all of us to recognize that both of these resources – salmon populations and agricultural lands – are resources at risk, and that the path to success must be based on collaboration and mutual support.

As residents of the Snoqualmie Watershed, each of us is keenly aware of the impact of flooding on our safety, our transportation network, and our homes and properties. The Forum continues its strong support for reducing flood risk in ecologically friendly ways, especially the reconnection of floodplains in the alluvial reaches of the Snoqualmie River, as well as in the Tolt and Raging Rivers. These risk reduction approaches – which restore natural processes to alleviate flood risk – are also highly supportive of salmon habitat needs and are top tier priorities in the salmon plan. Through the Committee process, we have also come to appreciate the unique and significant impacts of flooding and floodplain regulations on agricultural lands and operations in the lower valley and support the recommendations that have been developed to begin to address those challenges.

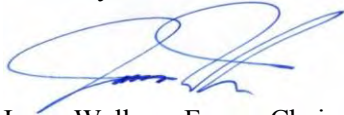
With an agreement in place, we believe that all of these interests – fish, farm and flood – will be exceptionally well positioned to attract multi-objective funding from state and federal sources, such as Floodplains by Design. More and more, decision makers and funders are recognizing the fact that floodplain management and restoration require a holistic view and are shaping their funding models accordingly, as evidenced by the bi-partisan support for Floodplains by Design in the State Legislature, coming at a time when partisan divisions tend to be the rule, rather than the exception.

The Forum believes that the Committee's recommendations strike the right balance between the interests at the table. We pledge to do our part as implementing partners by participating in the Task

Force efforts identified in the recommendations, as well as on the future Fish, Farm and Flood implementation review committee. Moreover, through our work with project sponsors and our role in directing investments under the Cooperative Watershed Management grant program, we will strive to support activities that further the spirit and on-the-ground recommendations that are reflected in the Committee agreement.

In our view, this agreement is a beginning, not an end. While significant details and work plans remain to be developed in the future, it establishes expectations and a framework for continuing collaboration and accountability among all stakeholders in the valley. We strongly encourage King County to make the implementation of these recommendations a very high priority and we look forward to participating in this effort in the years to come.

Sincerely,



Jason Walker - Forum Chair  
City of Duvall Councilmember



Lee Grumman – Forum Vice-Chair  
City of Carnation Councilmember

Cc: Snoqualmie Watershed Forum members  
John Taylor, Interim Director, King County Water and Land Resources Division, DNRP  
Kjris Lund, Executive Director, King County Flood Control District



## Wild Fish Conservancy

N O R T H W E S T

S C I E N C E   E D U C A T I O N   A D V O C A C Y

January 31, 2017

To: Christie True, Director  
King County Department of Natural Resources and Parks

Re: Wild Fish Conservancy supports the recommendations made by the Snoqualmie Fish, Farm, and Flood Advisory Committee.

Wild Fish Conservancy staff participated on the Snoqualmie Fish, Farm, Flood Advisory Committee and we are supportive of the recommendations produced by the Committee. We are encouraged to see the county take an active leadership role in multi-stakeholder environmental decision-making processes, and we are looking forward to tracking progress on this important endeavor.

Wild Fish Conservancy is a 501C(3) non-profit conservation organization based in Duvall, we are dedicated to the recovery and conservation of the region's wild fish ecosystems. Our organization was founded in 1989, and we have a dedicated staff of over 20 professional scientists, advocates, and educators. While our organization works all over the Pacific Northwest region, we have always been headquartered in the Snoqualmie Valley and have actively participated in the salmon recovery process in the basin.

Salmon in Washington State are in trouble; particularly ESA listed Puget Sound Chinook, whose habitat requirements intersect with prime urban and agricultural land in the floodplains and estuaries of Puget Sound. We know that the recovery of Puget Sound Chinook will only occur with the restoration of critical lowland floodplains and wetlands that have been converted to agricultural uses in the past century. We also know that, although there are continuing and ongoing ecological impacts associated with agriculture, locally based family owned agriculture is vital part of our community.

The Committee recommendations lay out a clear path for the continued restoration of important landscape scale habitat features in the Snoqualmie Valley, and if implemented, would constitute a significant step towards salmon recovery in the

basin. We are fortunate to have a large agricultural base in the Snoqualmie Valley, as former wetland and riparian areas that have been converted to agricultural use can be still be restored, while not significantly affecting the overall agricultural base.

This effort will only succeed if there is will at King County to follow through with the actions recommended by the Committee, and the measure of its success will be determined by the extent to which the Committee's recommendations are acted upon. Additionally, it will be necessary for King County to more effectively enforce existing regulations that protect sensitive aquatic habitats and their riparian buffers throughout the agricultural production district. As we have seen, there is substantial room for improvement on this front.

The task of implementing the Committee's recommendations lies ahead, and in particular we will be closely watching developments with two of the action themes: the acceleration of habitat restoration progress in key areas, and the development of a comprehensive agricultural drainage program.

Thank you for your continued efforts toward responsible planning and your interest in protecting and restoring the health of wild fish populations in the Snoqualmie watershed.

Sincerely,

A handwritten signature in black ink, appearing to read "Kurt Beardslee", with a stylized, flowing script.

Kurt Beardslee  
Executive Director  
Wild Fish Conservancy  
[www.wildfishconservancy.org](http://www.wildfishconservancy.org)

## **Appendix VIII**

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Other Phase 1 Committee Materials  
(Not included)

1. Phase 1 Report
2. Proposed Solutions