

## Scott Boettcher

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**From:** Scott Boettcher  
**Sent:** Wednesday, July 8, 2020 4:59 PM  
**To:** Kris Koski  
**Cc:** Rick Sangder; Pete Schave  
**Subject:** RE: Aberdeen Flood Authority Recruitment Applications

Thank you Kris. Your two applications have been received.  
Scott

Scott Boettcher, Staff  
Chehalis River Basin Flood Authority  
360/480-6600  
[scottb@sbgh-partners.com](mailto:scottb@sbgh-partners.com)

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**From:** Kris Koski <[cityengineer@aberdeenwa.gov](mailto:cityengineer@aberdeenwa.gov)>  
**Sent:** Wednesday, July 8, 2020 4:56 PM  
**To:** Scott Boettcher <[scottb@sbgh-partners.com](mailto:scottb@sbgh-partners.com)>  
**Cc:** Rick Sangder <[rsangder@aberdeenwa.gov](mailto:rsangder@aberdeenwa.gov)>; Pete Schave <[mayor@aberdeenwa.gov](mailto:mayor@aberdeenwa.gov)>  
**Subject:** Aberdeen Flood Authority Recruitment Applications

Scott,

Please find Aberdeen's two applications for Flood Authority projects for fiscal year 21-23:

1. Farragut Street Pump Station Rebuild
2. Fry Creek Phase IIIa Predesign Planning & Alternatives Analysis

Happy to answer any questions or provide additional information if requested. Thank you.

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**KRIS KOSKI, PE | CITY ENGINEER**  
City of Aberdeen Public Works Department  
200 E Market St, Aberdeen, WA 98520  
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## **Part I**

# **2021-23 Local Projects Recruitment Process, Schedule** **FORM**

### **Instructions:**

1. Please submit project requests (via this recruitment form) to [scottb@sbgh-partners.com](mailto:scottb@sbgh-partners.com) no later than 5:00 p.m., 7/08/2020.
2. Please submit one recruitment form for each project proposed, even past projects previously or partially funded.
3. Note: Sections III and IV [marked by "(\*\*)"] will be scored for review/evaluation. Sections I, II, and V will not be scored.
4. Note: Section V is necessary to help the Chehalis River Basin Flood Authority, Office of Chehalis Basin and Chehalis Basin Board understand the scope and scale of Local Projects into the future.
5. See [https://www.ezview.wa.gov/site/alias\\_1492/37642/2021-23-local-projects-recruitment-process.aspx](https://www.ezview.wa.gov/site/alias_1492/37642/2021-23-local-projects-recruitment-process.aspx) for more information.

Section I General	
1. <b>Date:</b>	July 8, 2020
2. <b>Project Name and Project Phase/Stage:</b>	Fry Creek Restoration & Flood Reduction Phase IIIa: Sumner and Simpson Avenues Pre-Design Planning & Alternatives Analysis
3. <b>Project Location</b> -- Please provide location of project and latitude, longitude coordinates (e.g., 46.712222, -122.977811).	The project location corridor of Fry Creek between Simpson and Sumner Avenues (where the creek is currently piped underground). The project is located at approx. 46.975533 N, -123.850369 E.
4. <b>Project Manager/Contact</b> -- Please identify who will be responsible for overseeing, implementing the project on a day-to-day basis (i.e., name, organization, contact information).	Kris Koski, City Engineer City of Aberdeen Public Works 200 East Market Street Aberdeen, WA 98520-5207 (360) 537-3218 <a href="mailto:cityengineer@aberdeenwa.gov">cityengineer@aberdeenwa.gov</a>
5. <b>Project Sponsor and Key Partners</b> -- Please identify project sponsor and key partners who will assist in project delivery, implementation.	The City of Aberdeen will administer the project. The project study area is in the City of Aberdeen, near the border with the City of Hoquiam, and will provide benefits to both communities.

Section II Description, Timing and Cost	
6. <b>Project Description</b> -- Please describe the project, what is intended to be accomplished, flood hazard reduction benefits to be accrued to whom and when. Please identify what phase/stage of the project funding is sought (e.g., study phase/stage, planning phase/stage, design/engineering/permitting phase/stage, construction/implementation phase/stage). Please identify any local or state funding previously secured for this project.	<p>The project will advance the previous Fry Creek Restoration and Flood Reduction Project phases which have focused on 1) Preliminary analysis of the entire Fry Creek corridor from the headwaters to the confluence with the Chehalis River, and 2) Design and construction of the Simpson Avenue to Bay Avenue restoration and flood reduction segment, and design and construction of the planned pump station on Fry Creek.</p> <p>This phase of the project will focus on the next flood reduction priority within the Fry Creek corridor, the currently piped and highly flood-prone segment of Fry Creek that flows underground between Sumner and Simpson Avenues. This phase of the project will further determine potential environmental, infrastructure, and property ownership and access constraints and will select a conceptual design alternative for flood reduction within the Sumner and Simpson Avenue corridor (US Highway 101); one of the alternatives to be evaluated will include daylighting of the creek. The project is a planning phase/stage. Previous funding for the overall Fry</p>

Creek Restoration and Flood Reduction Project has been secured from the Washington Coast Restoration and Resiliency Initiative program and the Chehalis Basin Flood Authority. This project will build on the focused momentum and progress within the Fry Creek corridor, reducing chronic flooding concerns and amplifying multiple benefits to the community and natural environment by increasing public open space and improving fish and wildlife habitat.

Fry Creek passes through developed urban areas of Aberdeen and Hoquiam before discharging to Grays Harbor. (See attached Fry Creek Watershed Map.) The creek channel has been filled in, straightened, and constricted over time as the cities have developed, and today it is generally a narrow channel passing through many culverts and under roadway crossings. (See attached photos for current conditions.) During high rainfall events, the flow exceeds the capacity of the channel and the creek floods adjacent urban residential and commercial areas, affecting homes, businesses, roadways, and vital operations such as the Grays Harbor PUD and Pacific Care and Rehabilitation Center. In addition to direct flooding, several city storm sewers discharge to Fry Creek and, during high water events in Fry Creek, these storm sewers can surcharge contributing to significant flooding in low-lying areas not immediately adjacent to the creek along Sumner Avenue, Simpson Avenue, and Cherry Street.

In 2016, the Cities of Aberdeen and Hoquiam completed a comprehensive flood risk master plan – the “Timberworks Master Plan” – which identified restoration and flood reduction measures for Fry Creek. The purpose of this effort was to address chronic flooding impacting the community while also improving fish and wildlife habitat and provide public open space. The conceptual restoration alternatives identified by this plan and supported by the community include the construction of the North Shore Levee, the restoration of Fry Creek, and the upgrade of its outfall pump station.

The project deliverables for this Phase III will include:

	<ul style="list-style-type: none"> <li>• Environmental assessment of properties within the proposed restoration corridor.</li> <li>• Property owner outreach to understand potential constraints to conceptual design alternatives</li> <li>• Evaluation of conceptual design alternatives (e.g. cost, hydraulic efficiency) and selection of a preferred alternative.</li> </ul>
7. <b>Project Timeline</b> -- Please describe the timeline and phases/stages for completing the overall project and the timeline for completing the phase/stage to be funded by 2021-23 funding.	This phase of the project will begin in the summer of 2021 and be completed by Summer 2022. The final report and billing will be submitted by December 2022.
8. <b>Project Cost and Funding</b> -- What is the cost of the overall project (or anticipated cost)? What is the cost of the phase/stage to be funded by 2021-23 funding? What are the on-going maintenance and operation requirements and costs? Who will cover on-going maintenance and operation requirements and costs?	This application requests the \$145 thousand estimated to complete planning and an alternatives analysis. There are no on-going maintenance and operational requirements/costs associated with the planning and alternatives analysis. The City of Aberdeen will take on the ongoing maintenance of future phases of this project (when the Sumner and Simpson Avenues flood reduction solution is constructed). The City also remains committed to the maintenance and operational requirements of previous Fry Creek Corridor phases, including the Simpson Avenue to Bay Avenue corridor and the Fry Creek pump station.
9. <b>Other Funding</b> -- Please describe other funding sources and partners that have already contributed (or could contribute in the future) to this project and for what phase/stage.	This application augments \$2.215 million previously obtained from the Washington Coast Restoration and Resiliency Initiative program and \$500 thousand previously obtained through the Chehalis Basin Flood Authority for a total of \$2.715 million. These sums are applicable for the other, currently-ongoing phases of the Fry Creek Restoration and Flood Reduction project.

Section III (**) Completion, Doability, Alternatives, and Impacts	
10. <b>Project Completion</b> -- Does the funding requested complete, substantially complete, or continue a project already started? If so, please explain.	The funding requested will continue a project already started. Phase I of the Fry Creek Restoration and Flood Reduction project was completed in 2017 and evaluated hydraulic conditions within the overall Fry Creek corridor, identified potential flood reduction and habitat enhancement opportunities in

	<p>this corridor, and prioritized stream segments for future work. Phase II of the project consists of detailed design and construction of improvements between Simpson Avenue and the railroad right of way south of Bay Avenue. This phase is underway and has secured funding. The current request will provide additional evaluation of the next highest priority stream segment due to chronic flooding concerns —the Sumner-Simpson corridor.</p>
<p>11. <b>Project Doable</b> -- Can this project or the phase/stage for which funding is sought be completed by June 30, 2023? Please describe any circumstances with potential to impact the project's doability or timeline (e.g., permitting or regulatory unknowns, lack of availability of other funding resources, etc.). Please describe any advance coordination or vetting with agencies, tribes, other entities, etc. and the outcomes of that effort.</p>	<p>Yes, this project will be completed by June 30, 2023.</p> <p>The project is part of the overall Fry Creek Restoration and Flood Reduction project, which has received funding support from the Flood Authority and the Washington Coast Restoration and Resiliency Initiative program. Support for the overall project was secured during the Timberworks community stakeholder process and specific community outreach for earlier phases of the Fry Creek project. The Phase II portion of the overall Fry Creek project has been permitted by the U.S. Army Corps of Engineers (Section 404) and the Washington Department of Fish and Wildlife (Hydraulic Project Approval).</p>
<p>12. <b>Project Alternatives</b> -- Please describe alternatives to the project that were considered (including doing nothing), and the rationale for selecting the project described, proposed here.</p>	<p>Phase I of the overall Fry Creek Restoration and Flood Reduction Project identified the project corridor as the largest flood-producing bottleneck within the Fry Creek system. The initial analysis of the corridor performed with previous Flood Authority funding evaluated high-level alternatives and phasing of improvements. It found that doing nothing would both continue flooding at and above the project corridor and would minimize the potential benefits of downstream work undertaken as part of Phase II – the restoration and flood reduction work on Fry Creek south of Simpson Avenue to Bay Avenue.</p>
<p>13. <b>Project Impacts Avoided, Mitigated</b> -- Please identify how project impacts will be avoided and mitigated, and if that mitigation will be accomplished by June 30, 2023?</p>	<p>As the project proposes only environmental site assessment, property owner outreach, and conceptual design analysis, there will be no project impacts and associated mitigation.</p>

**Section IV (\*\*)**  
**Benefits Stated and Quantified**

<p><b>14. Emergency Response Benefits --</b> Please describe (and quantify) how this project enhances emergency response in a flood emergency (e.g., does it keep critical access roads and transportation facilities open/functional, does it enable easy movement of cattle, equipment and farm chemicals out of harm's way, is it part of a larger hazard mitigation plan, etc.).</p>	<p>This project will allow the City of Aberdeen to make further progress towards alleviating flooding in the vicinity of Fry Creek Phase I of the Fry Creek Restoration and Flood Reduction project identified the Sumner-Simpson (US Highway 101) corridor as the largest hydraulic "bottleneck" in the system. Reducing or eliminating flooding in this area will help keep this critical US Highway open/functional.</p>
<p><b>15. Essential Infrastructure Protection Benefits --</b> Please describe (and quantify) how this project protects essential infrastructure and the risks or consequences of not acting this funding cycle.</p>	<p>As described above, this project will allow the City of Aberdeen to make essential progress towards alleviating flooding at the US Highway 101 corridor. The consequences of not acting this funding cycle are to likely delay the eventual completion of this work for at least two more years until another funding source is identified as the City's annual budget does not have capacity for a project of this size and complexity.</p>
<p><b>16. Public Health, Safety and Welfare Benefits --</b> Please describe (and quantify) how this project protects public health, safety and welfare.</p>	<p>This portion of western Aberdeen and eastern Hoquiam have been subject to chronic flooding and rising flood insurance rates. This project will work towards removal of flood hazard from the Fry Creek corridor and, in conjunction with the North Shore Levee project, result in dramatically reduced flood risk. Because flooding also contributes to water quality problems, reducing the flooding of homes and businesses will decrease the likelihood of contaminants entering Fry Creek and Grays Harbor. This project will also work towards reducing flood risk at US Highway 101 – a vital transportation corridor.</p>
<p><b>17. Residential, Commercial and/or Agricultural Protection Benefits --</b> Please describe (and quantify) how this project protects residential communities, commercial and/or agricultural interests and benefits of acting (or consequences of not acting) this funding cycle. Consider factors like number of structures and people at risk, historic frequency of flood damage, magnitude of benefit for the cost, etc.</p>	<p>This project will directly benefit residential communities and commercial interests in the area by evaluating constraints to and selecting a preferred alternative for removal of a significant hydraulic constriction to Fry Creek. As identified during Phase I of the Fry Creek Restoration and Flood Reduction Project, the culverts through which Fry Creek flows between Sumner and Simpson Avenues are significantly undersized. During high flow, backwater effects from these culverts can cause flooding upstream through the Cherry Street crossing.</p>
<p><b>18. Habitat Benefits –</b> Please describe (and quantify) how this project benefits or improves existing or future habitat conditions.</p>	<p>This project is intended to further evaluate the feasibility of daylighting and/or enhancing fish passage through Fry Creek in the project corridor.</p>

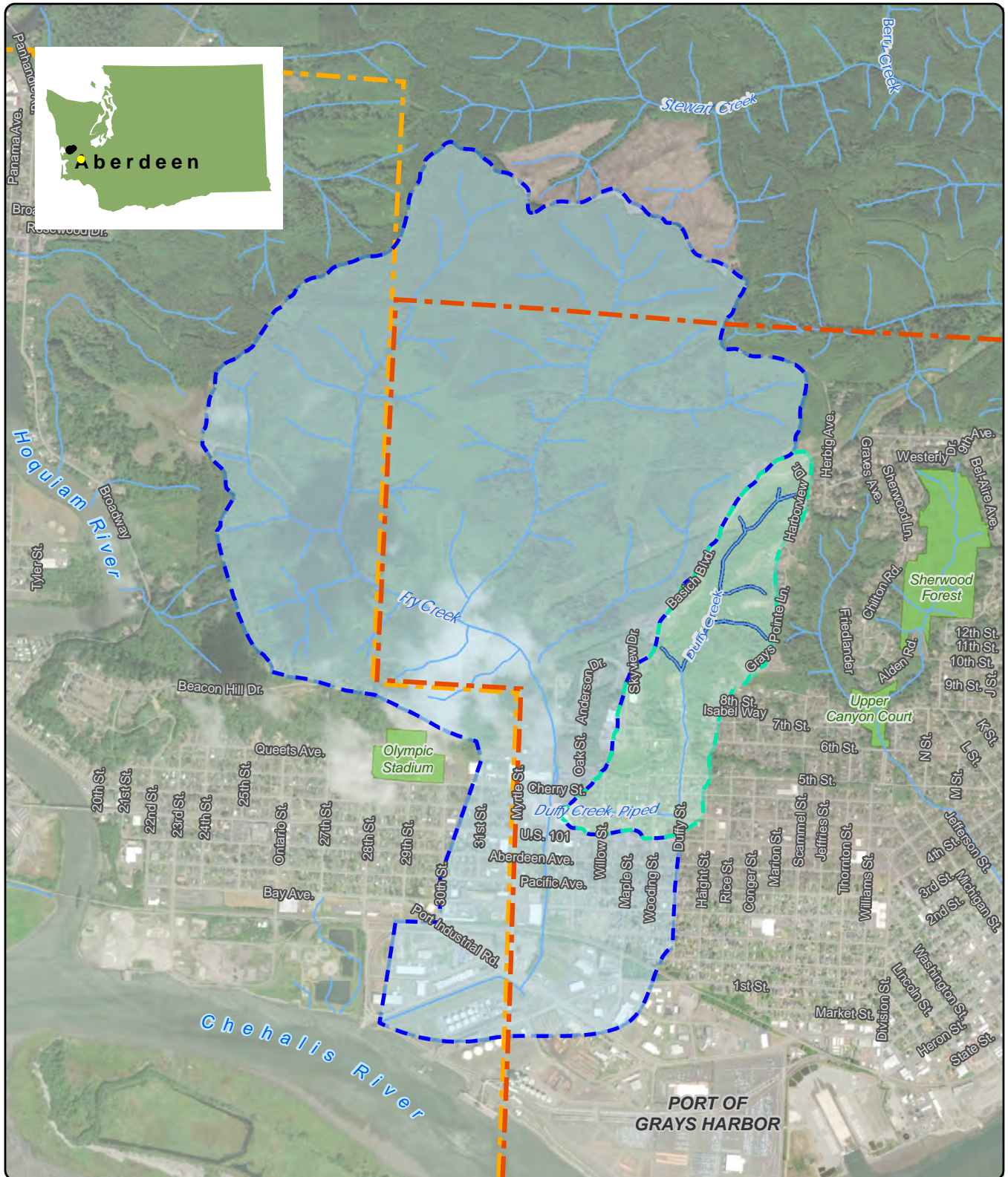
	The project will select a preferred design alternative and will set the stage for later detailed design development and implementation. The eventual constructed project is expected to provide significant benefits to habitat conditions.
<p>19. <b>Costs, Benefits, Impacts</b> – Please describe (quantify) anticipated:</p> <p>(a) <u>Costs</u> of this phase/stage of the project if funded, and if not funded? This would include any costs (beyond direct cost of the project) that might be incurred or avoided as a result of the project being funded (or not funded) and when.</p> <p>(b) <u>Benefits</u> of this phase/stage of the project if funded and when those benefits would be realized?</p> <p>(c) <u>Impacts</u> of this phase/stage of the project if funded, if not funded, and when those impacts would occur.</p>	<p>A) Costs - The estimated budget for this project is \$145,000. This funding will significantly further progress toward reduction of chronic flooding within the Fry Creek corridor. Investment in this corridor will cumulatively increase property values in West Aberdeen and East Hoquiam by reducing flood insurance rates, freeing up monies that can be reinvested at the community level. Investment in this corridor also improves and enhances salmonid and riparian health, providing long-term, enduring benefits.</p> <p>B) Benefits - The benefits of this project, as one component of the overall Fry Creek restoration and flood reduction corridor, coupled with the Fry Creek pump station, will work in unison to:</p> <ul style="list-style-type: none"> <li>• Protect more than 700 parcels from flooding in the Fry Creek sub-basin</li> <li>• Eliminate hundreds of thousands of dollars in mandatory flood insurance costs in the Fry Creek sub-basin</li> <li>• Protect commercial property generating hundreds of millions in annual economic impact</li> <li>• Decrease juvenile salmonid mortality in Fry Creek</li> </ul> <p>C) Positive Impacts - The investment will reduce flood risk in West Aberdeen/East Hoquiam, benefitting property values and reducing flood damage not typically covered by flood insurance policies. Additionally, the project will reduce salmonid mortality, providing greater opportunities for viewing wildlife in the area, providing outdoor education opportunities, and increasing recreation and commercial fishing opportunities in Grays Harbor.</p>
20. <b>Other Project Benefits</b> -- Please describe (and quantify) any other project benefits not already	Through the Timberworks Master Plan, the community has called for reducing flood risk in Fry

discussed. This could include how this project compliments, leverages, or implements another project or planning process already underway.	Creek in such a way that it would not only reduce flood insurance rates in this area but also benefit fish and wildlife (e.g. salmonid) species that inhabit the creek. This project aims to achieve those goals. Also, the City is currently in the process of completing the design for the restoration and flood reduction of the Simpson Avenue to Bay Avenue segment of Fry Creek, the North Shore Levee project, and the Fry Creek pump station—all of which will provide significant flood reduction within the Fry Creek corridor itself as well as broadly within the communities of Aberdeen and Hoquiam. Leveraging the momentum of projects already in play within the Fry Creek corridor is an effective tool in systematically reducing the chronic flooding issues faced by residents and business owners within Aberdeen and Hoquiam.
21. <b>Anything Else</b> -- Please offer any additional information (e.g., links, photos, maps, video, drawings, drone, etc.) that would help to better understand the scope, timing, and benefits of this project.	<p>The following are attached for reference:</p> <ul style="list-style-type: none"> <li>• Figure 1-1: Fry Creek Watershed</li> <li>• Figure 1-2: Overall Map</li> <li>• Figure: Simpson Avenue Perspective</li> <li>• Figure: Sumner Avenue Parking Lot Cross Section</li> <li>• Photos</li> </ul>

Section V Local Projects Beyond 2021-23	
22. <b>Project Name and Project Phases/Stage:</b>	<ul style="list-style-type: none"> <li>• Fry Creek Restoration and Flood Reduction Phase IIIb (Fry Creek Phase IIIb) – Detailed Design and Construction between Sumner and Simpson Avenues.</li> <li>• North Shore Levee – Project to address coastal flood risk and local drainage issues, including the Fry Creek Pump Station. However, the North Shore Levee does not directly address hydraulic constrictions within the Fry Creek corridor upstream from the pump station.</li> </ul>
23. <b>Project Location</b> -- Please provide location of project and latitude, longitude coordinates (e.g., 46.712222, -122.977811).	<ul style="list-style-type: none"> <li>• The Fry Creek Phase IIIb project area is the corridor of Fry Creek between Simpson and Sumner Avenues (where the creek is currently piped underground). The project is</li> </ul>

	<p>located at approx. 46.975533 N, -123.850369 E.</p> <ul style="list-style-type: none"> <li>The North Shore Levee project area starts in East Hoquiam (approx. 46.981490 N, -123.879032) and ends in West Aberdeen (approx. 46.984838 N, -123.810222).</li> </ul>
24. <b>Project Sponsor and Key Partners</b> -- Please identify who is sponsoring the project and key partners who will assist with project delivery, implementation.	<ul style="list-style-type: none"> <li>The City of Aberdeen will be the project sponsor for the Fry Creek Phase IIIb project.</li> <li>RCO is sponsoring the North Shore Levee project. Key partners assisting with project delivery and implementation include: KPFF Consulting Engineers, HDR, MFA, WSE, and GeoEngineers.</li> </ul>
25. <b>Project Description</b> -- Please describe the project, what is intended to be accomplished, the flood hazard reduction benefits to be accrued and to who and when. Please identify what phase/stage of the project funding is sought (e.g., study, planning, design/engineering/permitting, construction/implementation).	<ul style="list-style-type: none"> <li>The Fry Creek Phase IIIb project will be the detailed design and construction of flood reduction of the alternative selected in the current Phase IIIa (the project requesting funding on this application)</li> <li>The North Shore Levee project proposes an approximate 6 mile long levee that follows along the Hoquiam River, the Chehalis River, and the Wishkah River to protect the cities of Hoquiam and Aberdeen from flooding. The levee will consist of earthen berm, concrete floodwall, sheetpile, and stoplogs. The project has received permits and a Conditional Letter of Map Revision (CLOMR) from FEMA in October 2017. Construction for the project will be phased, dates are to be determined.</li> </ul>
26. <b>Costs</b> -- Please describe (quantify) anticipated project costs.	<ul style="list-style-type: none"> <li>The Fry Creek Phase IIIb project costs will be developed further by the current Phase IIIa project.</li> <li>The North Shore Levee project has previously allocated \$12,013,439 from RCO to support design, permitting efforts, and future construction for a few of the project areas.</li> </ul>
27. <b>Benefits</b> -- Please describe (quantify) anticipated project benefits.	<ul style="list-style-type: none"> <li>The benefits of the Fry Creek Phase IIIb project will be the same as for the current Phase IIIa project.</li> <li>The North Shore Levee anticipates many</li> </ul>

	benefits, including: removal of 3,500 parcels from the flood hazard Zone AE and placed in Zone X; removal of approximately \$2 million in annual flood insurance premiums from the community; and protection of over \$300 million in public and private investments.
28. <b>Impacts</b> -- Please describe (quantify) anticipated project impacts.	<ul style="list-style-type: none"> <li>• The impacts of the Fry Creek Phase IIIb project will be the same as for the current Phase IIIa project.</li> <li>• The North Shore Levee project will ultimately reduce flood risk but will avoid ecological impacts since the project is proposed above ordinary high-water mark and outside critical areas.</li> </ul>



Source: Aerial photograph obtained from Esri ArcGIS Online



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

### Legend

- Fry Creek
- Duffy Creek
- Streams
- Parks
- Aberdeen Boundary
- Hoquiam Boundary

### Fry Creek Watershed

Timberworks: Resiliency and Restoration Plan  
Aberdeen/Hoquiam, Washington

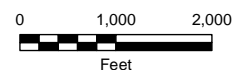
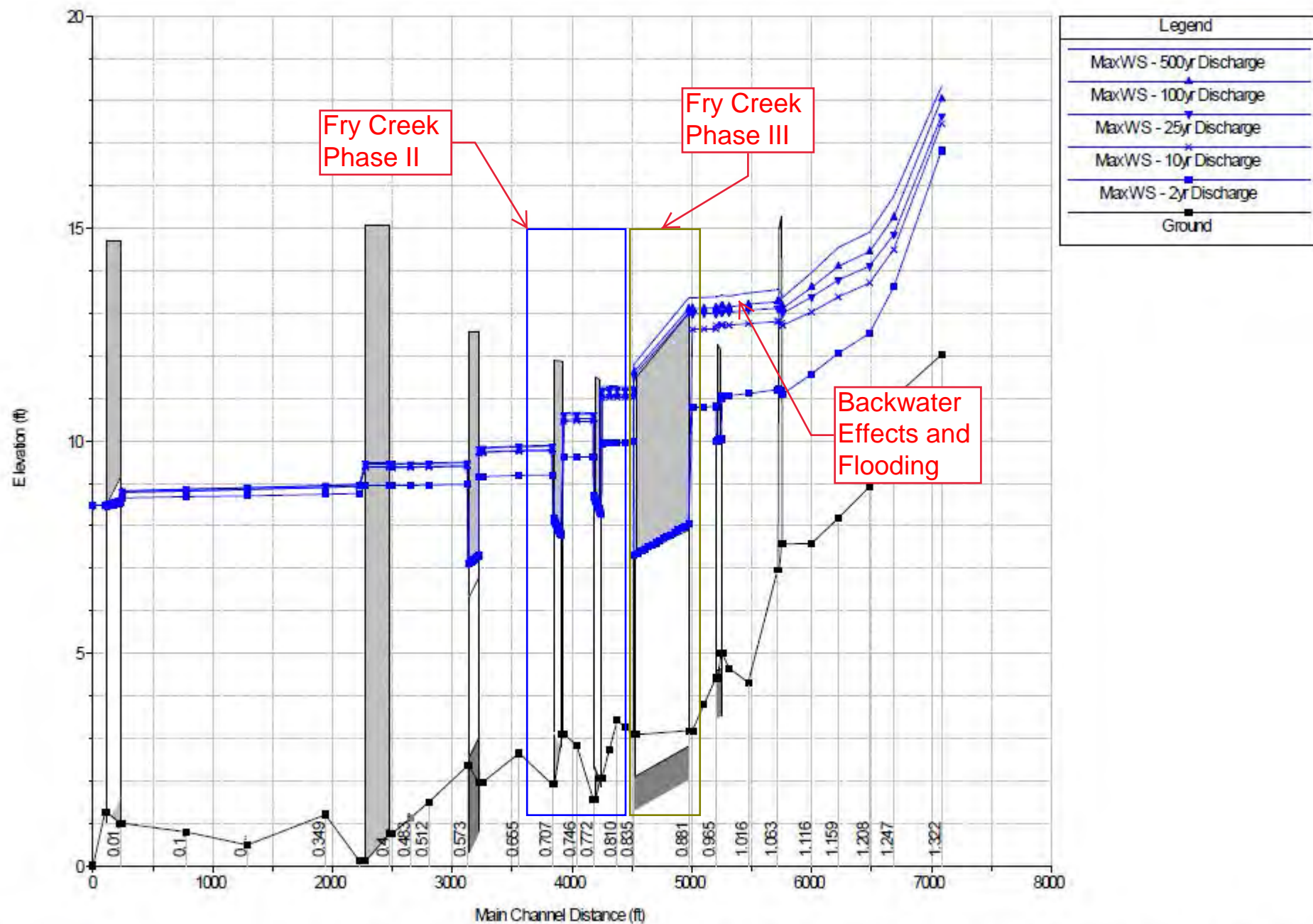




Photo 1: Fry Creek with Simpson Avenue to the north



Photo 2: Fry Creek emerging from Sumner-Simpson Avenue culverts



**Figure 6. Maximum modeled water surface elevations for 2-, 10-, 25-, 100-, and 500-year discharge in Fry Creek. The tidal boundary condition used for all runs was mean higher high water (MHHW).**

FIGURE 1-2



1

# SIMPSON AVE PERSPECTIVE

Fry Creek



2

# SUMNER AVE PARKING LOT CROSS SECTION

Fry Creek

