



## Building a resilient floodplain

### A community-driven approach to floodplain management

The Nooksack River: Floodplains That Work is a multi-phase, integrated approach to floodplain management that reduces flood hazards while supporting salmon recovery, agriculture, and other land uses within the Nooksack River watershed. Phase 1 is currently being implemented. Phase 2 will advance project components from Phase 1 and build on a broadly-supported suite of actions identified in the Floodplain Integrated Planning (FLIP) process currently underway. The Whatcom County Flood Control Zone District is leading this effort, bringing diverse interests together to find solutions that work for the community and achieve project goals.

### Project Components:

- **Ferndale Levee Improvement Project – 100% Design:** provide 100-year flood protection for critical water and wastewater facilities, over 200 residences, 1,900 acres of farmland, roads, and parks; re-establish riparian vegetation; improve recreational opportunities
- **Jones Creek Debris Flow Risk Reduction Project – Construction:** build a setback deflection berm to reduce risks associated with debris flows; protect life and infrastructure and reduce flood hazards in the Acme community; maximize habitat-forming processes and provide sediment and debris storage
- **Fish Camp (*Ts'eq*) Integrated Fish-Flood Project – Design/Construction Phase 1:** reduce flood risk in the Acme area and improve critical salmon habitat; implement a collaborative reach-scale integrated project in partnership with the Nooksack Tribe; pilot broader integration of salmon recovery and floodplain management in WRIA 1
- **Glacier-Gallup Creeks Alluvial Fan Restoration Project – 90-100% Design:** protect life and safety in the Glacier community; reduce flood hazards to SR 542; restore habitat-forming processes
- **Floodplain Land Acquisition:** target key lands identified through the FLIP process for future project implementation and removal of residential structures from the floodway
- **Agricultural Integration and Tribal Capacity Building:** provide support to ensure participation from the agricultural community, the Lummi Nation, and Nooksack Tribe in the FLIP Steering Committee
- **FLIP Early Action Project(s):** implement projects during the 2021-2023 biennium endorsed by the FLIP Steering Committee and WRIA 1 Watershed Management Board

### PROJECT BENEFITS

#### Protect critical infrastructure:

- 2 water treatment plants
- 1 wastewater treatment plant
- 1 elementary school

#### Reduce risk of loss of life & property:

- Mitigate debris flows
- Restore alluvial fan functions
- Protect rural communities
- Protect valuable agricultural lands



#### Improve critical habitat:

- Restore riparian vegetation
- Restore in-stream habitat & habitat-forming processes
- Support salmon & Puget Sound recovery

### PROJECT PARTNERS

Acme Farming, LLC  
City of Ferndale  
Glacier Water District  
Lummi Nation Natural Resources  
Mount Baker School District  
National Marine Fisheries Serv.  
Nooksack Indian Tribe  
Public Utility No. 1  
WA Dept. of Fish & Wildlife  
WA Dept. of Transportation  
Whatcom Conservation Dist.  
Whatcom Co. Ag Water Board  
Whatcom Co. Diking Dist. #1  
Whatcom Co. Fire Dist. #16  
Whatcom Co. Flood Control Zone Dist.  
WRIA 1 Management Board




 Reach break  
 Project component



**Nooksack River: Floodplains that Work  
2021 - 2023 Biennium (Phase 2)**

**Figure 1  
Project Component Vicinity Map**


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