

LUMMI NATION FLOODPLAIN MANAGEMENT PLAN: 2023 PROGRESS REPORT

Developed Pursuant to Community Rating System (CRS) Activity 510



Prepared for:

Lummi Indian Business Council
(LIBC)

Prepared by:

Water Resources Division
Lummi Natural Resources Department

Date:

September 15, 2023

1. Purpose

The purpose of this report is to evaluate the Lummi Nation's (Community No. 530331) progress toward implementing the floodplain related mitigation measures and priority action items identified in the *Lummi Nation Multi-Hazard Mitigation Plan: 2020 Update* (MHMP). The 2020 MHMP supersedes the 2001 Lummi Nation Flood Damage Reduction Plan, the 2004 MHMP, the 2007 MHMP, 2010 MHMP, and the 2015 MHMP and is the floodplain management tool approved for the Lummi Nation Community Rating System (CRS) certification. The 2020 MHMP was adopted by the Lummi Indian Business Council (LIBC, the governing body of the Lummi Nation) on September 15, 2020 and approved by the Federal Emergency Management Agency (FEMA) October 1, 2020. An update to the 2020 MHMP is due by October 1, 2025. This progress report was prepared to meet the requirements of CRS – Activity 510 and covers the period from September 16, 2022 through September 15, 2023. The 2020 MHMP can be obtained from the LIBC's website (<https://www.lummi-nsn.gov/Website.php?PageID=72>).

2. Report Preparation and Distribution

This progress report was prepared by staff of the Lummi Natural Resources Department's (LNR) Water Resources Division with support from the Lummi Planning Department and the Lummi Nation Police Department.

This progress report was submitted to the Lummi Nation Multi-Hazard Mitigation Team (MHMT), which consists of the Natural Resources Department Executive Director, the Planning Department Director, the Chief of the Lummi Nation Police Department, the Lummi Cultural Resources Department Director, the LIBC Safety Officer, and assigned staff from the Natural Resources, Planning, and Cultural Resources. This report was made public through an article in the Lummi monthly newspaper (the *Squol Quol*), a posting on the Lummi Nation Communications Facebook page, and is available at the Lummi Natural Resources Department website (<https://www.lummi-nsn.gov/Website.php?PageID=72>).

3. Progress Evaluation: Proposed Mitigation Actions

The purpose of this section is to review the progress of the mitigation actions for flood hazards (FA1 through FA9) identified in Section 6.2.2.2 of the 2020 MHMP. Specifically, whether the project was implemented or not; why objectives were not reached, or implementation is behind schedule; and any revised recommendations. There are no recommendations for new projects.

FA1	
Identify funding to complete elevation certificates for pre-FIRM tribal residences and businesses located in the floodplain.	
Coordinating Organization:	Natural Resources and Planning departments
Timeline:	Ongoing
Plan Goals Addressed:	Reduce Vulnerability, Public Health and Safety
Funding:	Tribal, External
<i>Status Update 2023: Funding to develop elevation certificates for pre-FIRM tribal residences and businesses located in the floodplain has not been available. Next steps are to identify and obtain funding.</i>	

FA2

Identify funding to purchase flood insurance for LIBC buildings in or adjacent to the floodplain.

Coordinating Organization: Natural Resources and Planning departments
 Timeline: Ongoing
 Plan Goals Addressed: Reduce Vulnerability and Long-Term Costs, Public Health and Safety
 Funding: Tribal, External

Status Update 2023: All buildings, except one that is wholly owned by the LIBC in the floodplains of the Reservation are insured against flooding. The one additional building was brought into the SFHA with the publication of the January 18, 2019 FIRM. The task is complete pending further review.

FA3

Obtain funding for construction of 100-year setback levee along Ferndale Road.

Ideas for Implementation:

- Coordinate with FEMA and Whatcom County in pursuit of funding (e.g., Pre-Disaster Hazard Mitigation Grant Program, Flood Control Assistance Account Program).

Coordinating Organization: Multi-Hazard Mitigation Team
 Timeline: Ongoing
 Plan Goals Addressed: Reduce Vulnerability, Develop Partnerships, Public Health and Safety
 Funding: External

Status Update 2023: In coordination with Whatcom County, the Nooksack Indian Tribe, and the Washington State Department of Fish and Wildlife (WDFW), Lummi Natural Resources Department staff participated in the Puget Sound Nearshore Estuary Restoration Project (PSNERP) to ensure that this project was included in the Strategic Restoration Conceptual Engineering – Final Design Report (2012). The PSNERP is part of an ecosystem study of the Puget Sound being co-led by the U.S. Army Corps of Engineers (Corps) and WDFW to: (1) evaluate significant ecosystem degradation in the Puget Sound Basin; (2) to formulate, evaluate, and screen potential strategies to address identified problems; and (3) to identify actions and projects to restore and preserve critical nearshore habitat. This effort is aimed at securing substantial federal funding for projects that restore Puget Sound nearshore under the Water Resources Development Act. The 100-year setback levee along Ferndale Road is included as part of the Nooksack River Estuary action area (PSNERP Action ID No. 1055). Following development of conceptual design alternatives at 36 sites, the Nooksack River project was 1 of 3 sites recommended for restoration actions – the comment period for the Final Feasibility Report and Environmental Impact Statement for these three projects closed on August 15, 2016 and the Final Chief's Report was signed on September 16, 2016. By signing the report, the Corps gave their approval of PSNERP and made the three projects eligible for congressional authorization. On December 16, 2016 President Obama signed the Water Infrastructure Improvements for the Nation Act which included authorizing PSNERP and \$451 million worth of habitat restoration. These funds are not yet available, which has precluded implementing the project. Another potential problem with implementation is landowner willingness to participate due to placing of currently cultivated agricultural lands inside of the setback levee. The 1999 Whatcom County Comprehensive Flood Hazard Management Plan (CFHMP) recommends this project for the lower Nooksack River. The CFHMP is currently being updated and the Lummi Nation is participating in that process, in part to maintain the project's status. The next steps are to continue to work with Whatcom County on the CFHMP update, and to secure appropriations and obtain matching funds from PSNERP and other sources when available.

FA4

Obtain funding for raising Slater Road and providing for underflow.

Ideas for Implementation:

- Coordinate with FEMA and Whatcom County in pursuit of funding (e.g., Pre-Disaster Hazard Mitigation Grant Program, Flood Control Assistance Account Program). Also coordinate with industries at Cherry Point and the City of Ferndale.

Coordinating Organization: Multi-Hazard Mitigation Team

Timeline: Ongoing

Plan Goals Addressed: Reduce Vulnerability, Develop Partnerships, Public Health and Safety, Improve Fish and Wildlife Habitat

Funding: External

Status Update 2023: Efforts continued to fund the Slater Road Elevation Project through the Federal Highways Administration. In addition, in coordination with Whatcom County, the Nooksack Indian Tribe, and the WDFW, Lummi Natural Resources Department staff participated in the Puget Sound Nearshore Estuary Restoration Project (PSNERP) to ensure that this project was included in the Strategic Restoration Conceptual Engineering – Final Design Report (2012). The PSNERP is part of an ecosystem study of the Puget Sound being co-led by the Corps and WDFW to: (1) evaluate significant ecosystem degradation in the Puget Sound Basin; (2) to formulate, evaluate, and screen potential strategies to address identified problems; and (3) to identify actions and projects to restore and preserve critical nearshore habitat. This effort is aimed at securing substantial federal funding for projects that restore Puget Sound nearshore under the Water Resources Development Act. The Slater Road Elevation Project is included as part of the Nooksack River Estuary action area (PSNERP Action ID No. 1055). Following development of conceptual design alternatives at 36 sites, the Nooksack River project was 1 of 3 sites recommended for restoration actions – the comment period for the Final Feasibility Report and Environmental Impact Statement for these three projects closed on August 15, 2016 and the Final Chief's Report was signed on September 16, 2016. By signing the report, the Corps gave their approval of PSNERP and made the three projects eligible for congressional authorization. On December 16, 2016 President Obama signed the Water Infrastructure Improvements for the Nation Act which included authorizing PSNERP and \$451 million worth of habitat restoration. These funds are not yet available, hindering implementation of the project. However, work with Whatcom County to find a way to implement the project continues, and \$1 million was conditionally obligated to the Lummi Nation in the 2019-2021 Washington State budget to complete an updated design. An updated design has not been completed, but Whatcom County recently completed the hydraulic modeling necessary to complete a revised design and the obligated funds extended to the next biennium. The next steps are to resolve the unmet funding conditions and to develop a final design; and for appropriations to be secured and matching funds to be identified from PSNERP and other sources.

FA5

Obtain funding for construction and maintenance of a new culvert from the Nooksack River to the Lummi River.

Ideas for Implementation:

- Coordinate with FEMA and Whatcom County in pursuit of funding (e.g., Pre-Disaster Hazard Mitigation Grant Program, Flood Control Assistance Account Program).

Coordinating Organization: Multi-Hazard Mitigation Team

Timeline: Ongoing

Plan Goals Addressed: Reduce Vulnerability, Develop Partnerships; Public Health and Safety, Improve Fish and Wildlife Habitat

Funding: External

Status Update 2023: In coordination with Whatcom County, the Nooksack Indian Tribe, and the WDFW, Lummi Natural Resources Department staff participated in the Puget Sound Nearshore Estuary Restoration Project (PSNERP) to ensure that this project was included in the Strategic Restoration Conceptual Engineering – Final Design Report (2012). The PSNERP is part of an ecosystem study of the Puget Sound being co-led by the Corps and WDFW to: (1) evaluate significant ecosystem degradation in the Puget Sound Basin; (2) to formulate, evaluate, and screen potential strategies to address identified problems; and (3) to identify actions and projects to restore and preserve critical nearshore habitat. This effort is aimed at securing substantial federal funding for projects that restore Puget Sound nearshore under the Water Resources Development Act. The re-establishment of a migration corridor through the Lummi River channel is included as part of the Nooksack River Estuary action area (PSNERP Action ID No. 1055). Following development of conceptual design alternatives at 36 sites, the Nooksack River project was 1 of 3 sites recommended for restoration actions – the comment period for the Final Feasibility Report and Environmental Impact Statement for these three projects closed on August 15, 2016 and the Final Chief's Report was signed on September 16, 2016. By signing the report, the Corps gave their approval of PSNERP and made the three projects eligible for congressional authorization. On December 16, 2016 President Obama signed the Water Infrastructure Improvements for the Nation Act which included authorizing PSNERP and \$451 million worth of habitat restoration. These funds are not yet available, hindering implementation of the project. Additionally, current poor water quality in the Nooksack River (bacterial contamination) will need to be permanently corrected before the Nooksack River can be fully reconnected with the Lummi River, so as to prevent contamination of shellfish growing areas in Lummi Bay. The next steps will be for appropriations to be secured and matching funds to be identified from PSNERP and other sources.

FA6

Monitor condition of culverts, tide gates, and seawall and identify funding sources for potential maintenance or repairs.

Ideas for Implementation:

- Coordinate with FEMA and Whatcom County to address necessary pre- and post-disaster repairs.

Coordinating Organization: Multi-Hazard Mitigation Team

Timeline: Ongoing

Plan Goals Addressed: Reduce Vulnerability, Develop Partnerships, Public Health and Safety

Funding: External

Status Update 2023: Funding has been obtained over the last several years through FEMA to repair the seawall along the Lummi Seapond Aquaculture Facility Dike. In 2017, one thousand five hundred and fifty (1,550) feet of seawall was repaired. In addition, funding from FEMA and permits was obtained to repair six thousand one hundred and sixty four (6,164) feet of the outside of the seawall that was damaged by storms in 2017 and 2018. Funding has not been available for repair of the tidegates or other culverts for the seawall. Next steps are to secure funding to repair the tidegates and remaining culverts; and continue the work to obtain funding to repair the remaining unrepaired inside and outside sections of the dike that have been damaged since 2017. Of note, As part of the Smuggler's Slough Restoration Project, two culverts (Haxton Way and Lummi Shore Road) were upgraded to higher capacity box culverts along Smugglers slough in late 2017.

FA7

Obtain funding for raising Haxton Way and providing for underflow.

Ideas for Implementation:

- Coordinate with FEMA and Whatcom County in pursuit of funding (e.g., Pre-Disaster Hazard Mitigation Grant Program, Flood Control Assistance Account Program).

Coordinating Organization:	Multi-Hazard Mitigation Team
Timeline:	Ongoing
Plan Goals Addressed:	Reduce Vulnerability, Develop Partnerships, Public Health and Safety, Improve Fish and Wildlife Habitat
Funding:	External

Status Update 2023: In coordination with Whatcom County, the Nooksack Indian Tribe, and the WDFW, Lummi Natural Resources Department staff participated in the Puget Sound Nearshore Estuary Restoration Project (PSNERP) to ensure that this project was included in the Strategic Restoration Conceptual Engineering – Final Design Report (2012). The PSNERP is part of an ecosystem study of the Puget Sound being co-led by the Corps and WDFW to: (1) evaluate significant ecosystem degradation in the Puget Sound Basin; (2) to formulate, evaluate, and screen potential strategies to address identified problems; and (3) to identify actions and projects to restore and preserve critical nearshore habitat. This effort is aimed at securing substantial federal funding for projects that restore Puget Sound nearshore under the Water Resources Development Act. Elevating Haxton Way and installing two bridges to provide for underflow is included as part of the Nooksack River Estuary action area (PSNERP Action ID No. 1055). Following development of conceptual design alternatives at 36 sites, the Nooksack River project was 1 of 3 sites recommended for restoration actions – the comment period for the Final Feasibility Report and Environmental Impact Statement for these three projects closed on August 15, 2016 and the Final Chief's Report was signed on September 16, 2016. By signing the report, the Corps gave their approval of PSNERP and made the three projects eligible for congressional authorization. On December 16, 2016 President Obama signed the Water Infrastructure Improvements for the Nation Act which included authorizing PSNERP and \$451 million worth of habitat restoration. These funds are not yet available, precluding implementation of the project. The next steps will be for appropriations to be secured and matching funds to be identified from PSNERP and other sources.

FA8

After modeling of Nooksack River flooding is completed by Whatcom County, analyze flood levels under future conditions of land use and assess the benefits of more protective development standards.

Ideas for Implementation:

- Coordinate with Whatcom County to review models of Nooksack River flooding and to analyze the benefit-cost ratios of various development standards.

Coordinating Organization:	Multi-Hazard Mitigation Team
Timeline:	Ongoing
Plan Goals Addressed:	Reduce Vulnerability, Develop Partnerships, Public Health and Safety
Funding:	Tribal, External

Status Update 2023: Whatcom County completed updated flood modeling in the lower river in 2017 and flood modeling has recently been completed in the lower river that incorporates riverine sedimentation, sea level rise, and coastal storm surge impacts on riverine flooding. The latter builds on the previous modeling efforts and is a part of their Lower Nooksack Restoration Project, which is intended to provide a coordinated management approach to address existing flood risks and salmon habitat degradation between Ferndale and the mouth of the river (see Lower Nooksack River Project: Alternatives Analysis, 2015). Although several alternatives for flood risk reduction and habitat restoration have been identified, many of these alternatives, unless modified or supported by further study, would likely be considered unacceptable to the Lummi Nation due to potential impacts on fishing opportunities in the Nooksack River and/or impacts on the transportation corridors utilized by Reservation residents. The alternatives developed as part of the Lower Nooksack Restoration Project will be reassessed over the coming years, as the multi-year update to the 1999 Whatcom County Comprehensive Flood Hazard Management Plan (CFHMP) advances. As potential projects in the lower Nooksack River are pursued, the Lummi Natural Resources Department remains engaged in

Whatcom County's River and Flood Division floodplain management planning efforts and will continue to assess the impacts of flood management and land use changes on and near the Reservation, and evaluate flood management and habitat restoration alternatives.

FA9

Enforce the provisions of LCL Title 15A for new development in the coastal floodplain and continue to pursue acquisitions of existing vulnerable structures.

Ideas for Implementation:

- Obtain funding for acquisition and removal or relocation.

Coordinating Organization: Multi-Hazard Mitigation Team

Timeline: Ongoing

Plan Goals Addressed: Reduce Vulnerability, Public Health and Safety

Funding: Tribal, External

Status Update 2023: Provisions of LCL Title 15A continued to be implemented through the tribal land use permitting process and associated Technical Review Committee. No additional structures located in the coastal or riverine floodplains were acquired or relocated during the current reporting period.

Next steps are to identify suitable and available structures for acquisition or relocation; and to identify and obtain funding to acquire or relocate the identified structures.