



LUMMI INDIAN BUSINESS COUNCIL

2665 KWINA ROAD BELLINGHAM, WASHINGTON 98226 (360) 312-2000

September 12, 2023

Dear Resident of the Lummi Indian Reservation:

As a Lummi Indian Reservation (Reservation) resident living in a flood zone you are probably aware of the frequent flood events that impact the area. The Lummi Nation would like to better assist and educate residents about living in flood zones and developing property in flood zones. To achieve this goal, the Lummi Planning Department, the Lummi Natural Resources Department, and the Lummi Nation Police Department are working on ways to improve the circulation and accessibility of information about Special Flood Hazard Areas (SFHAs) on the Reservation.

The purpose of this document is to provide you an overview of the flood hazards impacting lives and property on the Reservation, the National Flood Insurance Program (NFIP) and the flood insurance available to you, issues that arise from living in a floodplain, and safety tips in case of a flood event.

Please take the time to read this information. If you have further questions or would like additional information, please contact the Lummi Indian Business Council (LIBC) staff listed below.

Is my house in a flood zone?

What is the National Flood Insurance Program?

Where can I get flood insurance?

How high do I have to elevate my house in a flood zone?

Is my house in danger of being flooded?

Do I need a floodplain permit to develop my property?

How do I get a floodplain permit?

Lummi Indian Business Council (LIBC)

2665 Kwina Road
Bellingham, WA 98226
Switchboard: (360) 312-2000
Hours: 8:00 am – 4:30 pm, Monday – Friday

LIBC Planning Department

Peter Frye, Senior Land Use Planner
Telephone: (360) 312-2343
Email: PeterF@lummi-nsn.gov

LIBC Water Resources Division

Jamie Lynn Mattson, Water Resources Specialist III/Planner Telephone: (360) 312-2313
Email: JamieM@lummi-nsn.gov

LIBC GIS Division

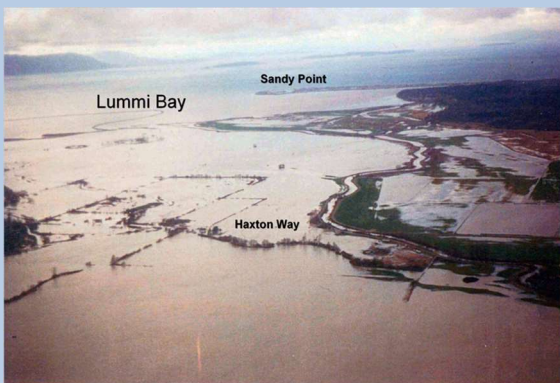
Gerald Gabrisch, GIS Manager
Telephone: (360) 312-2310
GeraldG@lummi-nsn.gov



Flooding: An Overview

The Reservation experiences both riverine and coastal flooding. Riverine flooding is caused by the Nooksack River, which drains a watershed of approximately 786 square miles and discharges to Bellingham Bay (and partially to Lummi Bay during high flows). A majority of the northern portion of the Reservation is part of the Nooksack River floodplain. Coastal flooding on the Reservation occurs along low-lying stretches of the Reservation shoreline – primarily along the Sandy Point Peninsula, Gooseberry Point, and Hermosa Beach.

Riverine Flooding: Most major floods recorded for the Nooksack River occur from late October through February. Every year, flooding during these times leads to the closure of one or both of the two major access routes to the Reservation: Marine Drive and Slater Road. The November 10, 1990 (Veteran’s Day) flood was typical for a severe Nooksack River flood (see picture below). This flood was the highest on record at the Ferndale river gage, located approximately two miles north of the Reservation. With a calculated flow of 57,000 cubic feet per second (cfs), it was estimated at the time to be a “59-year flood” (i.e., an occurrence [return interval] of once in 59 years, which translates to a 1.7 percent chance of occurring in any given year). While estimation of the return interval at Ferndale for the mid-November 2021 flood has not yet been determined, the calculated peak flow at Ferndale was 56,300 cfs, only 700 cfs below that of 1990 flood (of note, in both 1990 and 2021 there was a second flood event later in the month, though in 2021 the second flood was substantially smaller than the first). The 1990 flood caused the closure of several major roads (including Marine Drive, Slater Road, and Haxton Way), inundated approximately 4,100 acres of the Reservation, and damaged twenty private residences, two businesses, and two hatchery facilities. The 2021 flooding also closed several major roads, but because fewer local levees failed than in 1990, the local damage was less severe. Since 1945 there have been three “50-year”, two “40-year”, seven “10-year”, and eleven “5-year” floods on the Nooksack River.



Riverine Flooding on the Reservation in 1990



Riverine Flooding on and around the Reservation In 2021

Coastal Flooding: Most coastal flooding events on the Lummi Indian Reservation occur during the winter months, when the highest tides of the year combine with the storm surge and waves generated by winter windstorms. In the last 45-years, Sandy Point area has been flooded by storm events in 1975, 1982, 1993, 2000, 2001, 2003, 2005, 2006, 2010, 2011, 2014, 2016, 2020, and 2022 (and in some cases, more than once a year, as occurred in 2022). During the 2000 flood event, the combination of 70 mph sustained winds and a high tide of 10.5 feet was estimated to have caused approximately \$750,000 in damages (see picture below). Coastal flooding has occurred at Gooseberry Point most recently during December 2000, December 2001, January and November of 2003, February 2006, January 2010, December 2011, March 2016, and January and December 2022. Along the southeastern shoreline of the Lummi Peninsula, coastal flooding has inundated stretches of Lummi Shore Road and portions of some properties in the Hermosa Beach area that lie landward of the road.

Additional flood information can be found at: <https://www.lummi-nsn.gov/Website.php?PageID=692> and more information about historical flooding events can be found in the Lummi Nation’s Multi Hazard Mitigation Plan available at: <https://www.lummi-nsn.gov/Website.php?PageID=72>.



Coastal Flooding Damage at Sandy Point in 2000



Coastal Flooding at Gooseberry Point in 2022

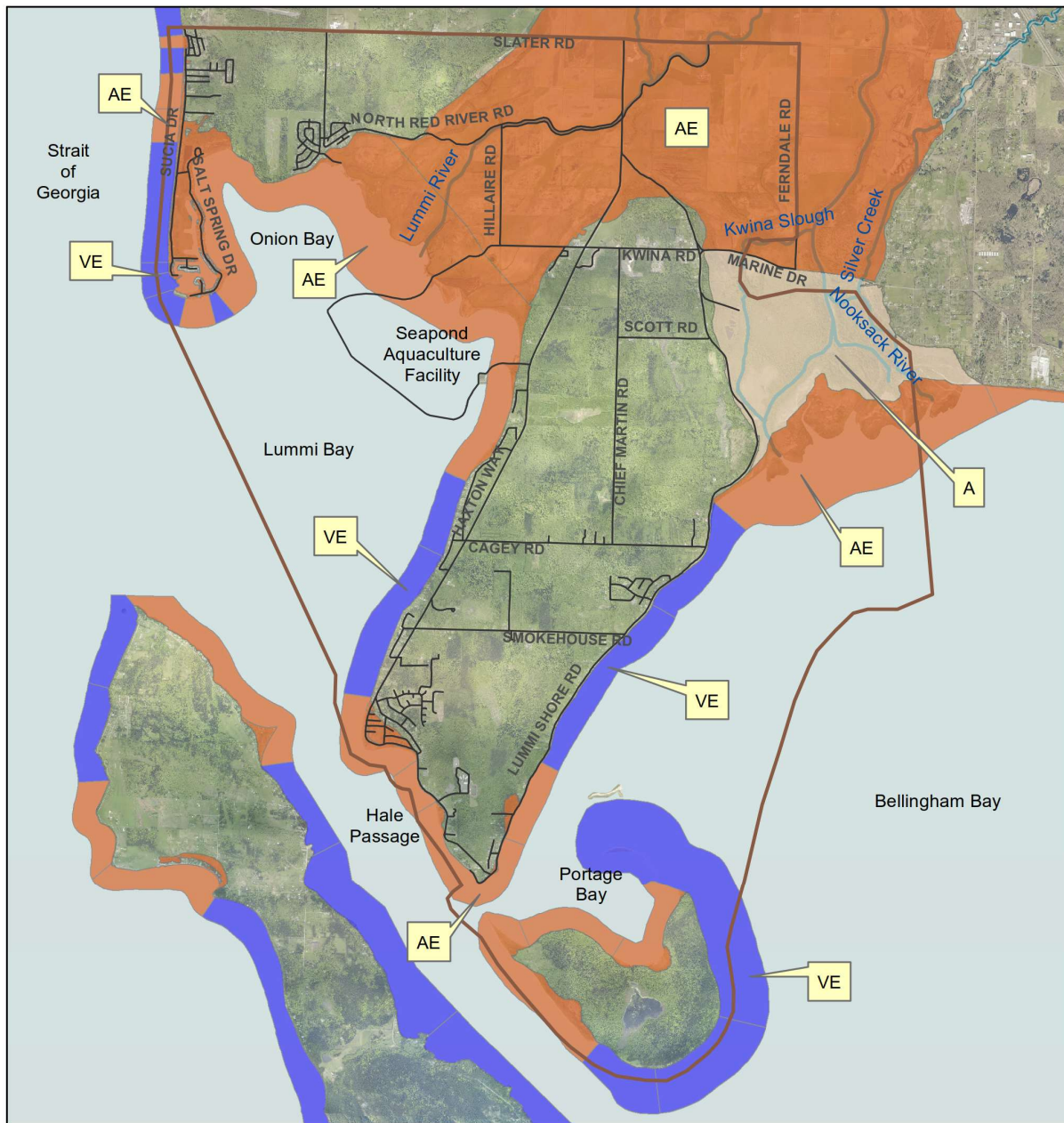
Flood Insurance Rate Maps

The Federal Emergency Management Agency (FEMA) has developed flood maps (Flood Insurance Rate Maps [FIRMs]) to show the locations of high-risk and moderate-to-low risk flood areas on the Lummi Indian Reservation.

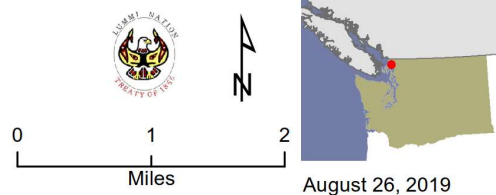
High-Risk Areas (Special Flood Hazard Area [SFHA]): High-risk areas have at least a 1 percent annual chance of flooding (a.k.a., “100-year flood”), which equates to a 26 percent chance of flooding over the life of a 30-year mortgage. All homeowners in these areas with mortgages from federally regulated or insured lenders are required to buy flood insurance. These high-risk areas are shown on the FIRMs as zones labeled with the letters A, AE, AO, V, or VE (see map below, not all zones occur on the Reservation).

Moderate-to-Low Risk Areas (Non-Special Flood Hazard Area): In moderate-to-low risk areas, the risk of being flooded is reduced, but not completely removed. These areas are outside the 1 percent annual flood risk floodplain areas, so flood insurance is not required, but it is still recommended.

Special Flood Hazard Areas on the Reservation as Mapped by FEMA



- Lummi Reservation Boundary
- FEMA Flood Hazard Zones (2019)**
- A, No Base Flood Elevations determined
- AE, Base Flood Elevations determined
- VE, Coastal Flood Zone with velocity hazard



Flood Insurance

Since standard homeowners insurance does not cover flooding, it is important to have additional insurance protection from floods. In 1968, Congress created the National Flood Insurance Program (NFIP) to help provide a means for property owners to financially protect themselves. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates in the NFIP. To remain eligible for the NFIP, participating communities like the Lummi Nation must adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding.

The NFIP insures buildings with two types of coverage: structural and contents. Structural coverage includes walls, floors, insulation, furnace, and other items permanently attached to the structure. Contents coverage may be purchased separately to cover the contents of an insurable building. Following the purchase of flood insurance, NFIP imposes a 30-day waiting period, so residents should purchase insurance before the onset of the rainy season to ensure coverage during the flooding season.

Federal financial assistance requires the purchase of flood insurance for buildings located within the SFHA — a requirement that affects nearly all mortgages financed through commercial lending institutions. This mandatory requirement stipulates that structural coverage be purchased equal to the amount of the loan, or other financial assistance, or for the maximum amount available, which is currently \$250,000 for a single family residence. While the mandatory flood insurance purchase requirement has been in effect for many years, not all lending institutions required flood insurance in the past. Today, however, most institutions require the purchase of flood insurance, and some are reviewing all mortgage loans to determine whether flood insurance is required and should have been required in the past.

The Lummi Nation participates in the NFIP making flood insurance available for all structures, whether or not they are located within a Special Flood Hazard Area (SFHA).

More than 25 percent of NFIP claims are filed by properties located outside the SFHA.

In addition, FEMA has implemented a new flood insurance rating methodology—Risk Rating 2.0—to provide more equitable flood insurance pricing. The new methodology is more comprehensive and will result in better estimation of flood damage risks. NFIP policy holders can contact their insurance providers to learn more about what the new methodology means to them. Risk Rating 2.0 was applied on October 1, 2021, to all new policies, and application to existing policy holders began on April 1, 2022, with some existing policy holders whose premiums increased being subject to a graduated annual rate increase until the full amount of the premium is reached.

More information about the NFIP can be found at the FEMA website: <http://www.floodsmart.gov> and <https://www.fema.gov/flood-insurance/risk-rating>.

Flood Insurance Discounts

Communities that enact floodplain management practices beyond the minimum requirements set by the National Flood Insurance Program (NFIP) can become members of the Community Rating System (CRS) program. Flood insurance premium rates are discounted for these communities to reflect the reduced flood risk resulting from the actions the communities take to meet the three goals of the CRS: (1) reduce flood losses, (2) facilitate accurate insurance rating, and (3) promote awareness of flood insurance.

The Lummi Nation has been a CRS member since May 1, 2010 and has a rating of Class 7. Under Risk Rating 2.0, members of a Class 7 CRS community receive a 15 percent insurance premium discount, regardless if their property is located within a Special Flood hazard Area (SFHA) or not.

Living in the Floodplain

The following is information about the ways that floodplains function and how the Lummi Nation regulates activities in the floodplain and other Special Flood Hazard Areas (SFHAs) to protect property and lives, while affording Reservation residents the ability to obtain flood insurance.

Protecting the Natural Functions of Floodplains Helps Reduce Flood Damage and Protect Resources:

Floodplains are a natural component of the Reservation environment. When flood water spreads out across the floodplain, its energy is dissipated, which results in lower flood flows downstream, reduced erosion of the stream bank and channel, and improved groundwater recharge. Floodplains are scenic, they provide valued wildlife habitat, and are suitable for farming. On the other hand, poorly planned development in floodplains can lead to loss of valuable property, stream bank erosion, increased risk of flooding to downstream properties, and degradation of water quality.

Do Not Dump or Throw Anything into Ditches or Streams: The Lummi Nation regulates activities in streams and wetlands through Title 17 of the Lummi Code of Laws, the Water Resources Protection Code. Title 17 prohibits discharges into Lummi Nation Waters without a permit authorizing such activities. Discharges include dumping trash, yard debris, or other obstructions like sediment or fill into a waterway. It is the intent of the Lummi Nation to achieve no net loss of streams and wetlands and their functions, including flood control. A plugged channel cannot carry water, and when it rains, the excess water must go somewhere. Trash, vegetation, sediment, and fill dumped into a stream degrades water quality of both the stream itself and its receiving waters, and every piece of debris contributes to flooding. Please report any observations of the dumping of debris into streams, drainage ways, or rivers to the Lummi Water Resources Division at (360) 312-2128.

Obtain a Floodplain Development Permit and/or Building Permit: The Lummi Nation regulates development in the floodplain through Title 15A of the Lummi Code of Laws, the Flood Damage Prevention Code. Title 15A requires a floodplain permit for all development in the floodplain, including structures, filling, grading, paving, excavation, and drilling operations. To minimize damage to structures during flood events, the Lummi Nation requires that all new construction in the floodplain be anchored to prevent flotation, collapse, or lateral movement of the structure; be constructed with materials and utility equipment resistant to flood damage; be constructed using methods and practices that minimize flood damage; and have the lowest floor, including the basement, elevated at least one foot above the base flood elevation. These standards apply to new structures and to substantial improvements or reconstructions of existing structures. LIBC staff available to make site visits to review flood, drainage, and sewer issues. Please contact the Lummi Planning Department at (360) 312-2343 for further information and prior to undertaking any development activity within the floodplain.

Reduce Risk of Damage to Homes: Practical and cost-effective methods for reducing or eliminating the risk of flooding are available to property owners whose homes have experienced damage from flooding in the past, or may experience damage in the future. Such techniques include constructing floodwalls or berms, flood-proofing and protecting utilities, elevating the home, or relocating the home to higher ground. If requested, LIBC staff are available to provide site visits and make recommendations specific to your property – for more information, contact the Lummi Planning Department at (360) 312-2343 or the Lummi Water Resources Division at (360) 312-2128.

Lummi Nation Floodplain Information Services: The Lummi Nation can determine the relationship of a particular property to the floodplain, including: (1) whether the property is located within the Special

Flood Hazard Area, (2) the Flood Insurance Rate Map (FIRM) zone for the property, and (3) the base flood elevation for the property, if available. Contact the Lummi Geographic Information Systems (GIS) Division at (360) 312-2310 for further information.

Flood Safety Tips

The Lummi Nation Police Department (LNPD) monitors several sources for real-time flood information. If you are instructed by the LNPD to evacuate your home, please follow directions. Also, keep in mind the following flood safety tips.

Prepare an Evacuation Plan: Before the floodwaters hit, develop an evacuation plan among all members of your household that includes a meeting place outside of the house, as well as an escape route out of the floodplain and away from floodwaters. Be prepared in advance because warning of an impending flood may provide little time for preparation prior to evacuation.

Do Not Walk Through Flowing Water: Drowning is the number one cause of flood deaths, mostly during flash floods. Water currents can be deceptive, and six inches of moving water can knock you off your feet. If you must walk in standing water, use a pole or stick to ensure that the ground is still there before you step.

Do Not Drive Through a Flooded Area: More people drown in their cars than anywhere else during a flood. Do not drive around road barriers, the road or bridge may be washed out. Turn around, do not drown.

Stay Away from Power Lines and Electrical Wires: The number two flood killer after drowning is electrocution. Electrical current can travel through water. Be equipped to shut off the electricity in your home and report downed power lines to Puget Sound Energy at (888) 225-5773 and the Lummi Nation Police Department at (360) 312-2274 or 911.

Shut Off Gas and Be Alert for Gas Leaks: Be equipped to shut off gas in your home and do not smoke or use candles, lanterns, or open flames unless you know that the gas has been turned off and the area has been ventilated.

Additional Resources

Thank you for taking the time to read this information – if you have further questions or would like additional information, please contact the LIBC staff listed on the first page of this letter or see the online resources provided below.

- Lummi Natural Resources Department:
<https://www.lummi-nsn.gov/Website.php?PageID=1>
- Whatcom County Emergency Management Division:
<http://www.co.whatcom.wa.us/201/Emergency-Management>
- Federal Emergency Management Agency (FEMA):
<https://www.fema.gov/>
- The Official Site of the National Flood Insurance Program:
<http://www.floodsmart.gov/>

In the event of inclement weather, the LIBC Emergency Hotline provides closure information for LIBC employees – please call (360) 380-6998 for daily updates.

