1974 Bering Sea Storm

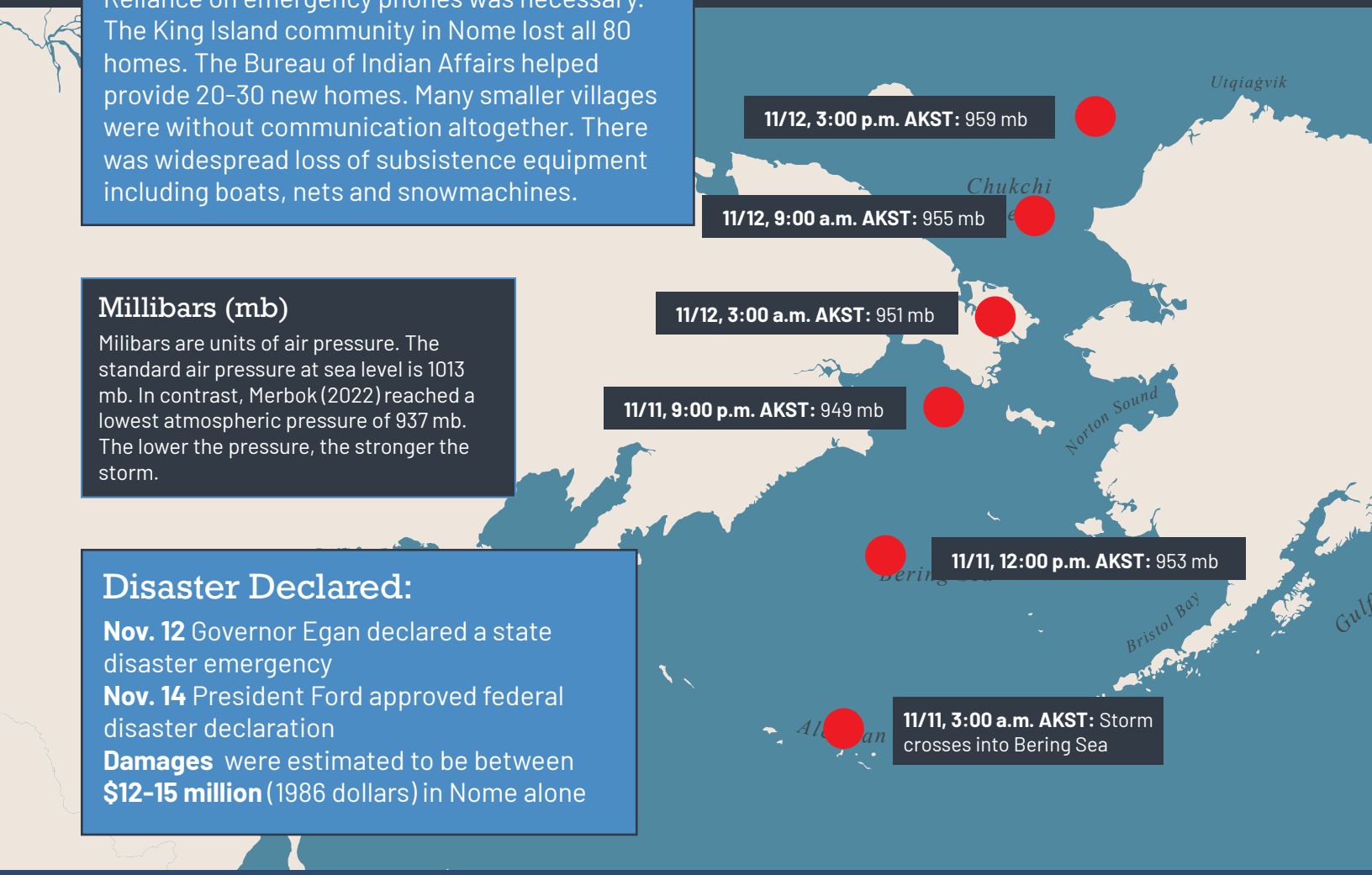
November 11-12, 1974

Overview

On November 11th 1974, a very strong storm brought coastal flooding, winds and damage across the coast of western Alaska. The communities of Nome and Teller were particularly impacted. Flood waters in Nome exceeded 1913 levels and as of 2024 remain the highest on record. There was a widespread loss of communication and electrical infrastructure. Reliance on emergency phones was necessary. The King Island community in Nome lost all 80 homes. The Bureau of Indian Affairs helped provide 20-30 new homes. Many smaller villages were without communication altogether. There was widespread loss of subsistence equipment including boats, nets and snowmachines.

Weather Woes

The storm moved from the Aleutians through the Bering Strait on Nov. 11 bringing winds of 55-80 mph. The timing of the maximum storm surge aligned with monthly maximum tides. The lowest pressure was 949 mb. Sea ice in Utqiaġvik reportedly lifted 1-2 ft due to the storm.



Millibars (mb)

Milibars are units of air pressure. The standard air pressure at sea level is 1013 mb. In contrast, Merbok (2022) reached a lowest atmospheric pressure of 937 mb. The lower the pressure, the stronger the storm.

Disaster Declared:

Nov. 12 Governor Egan declared a state disaster emergency
Nov. 14 President Ford approved federal disaster declaration
Damages were estimated to be between **$12-15 million** (1986 dollars) in Nome alone

International Arctic Research Center

ACCAP
Alaska Center for Climate Assessment and Policy
A NOAA CAP/RISA Team

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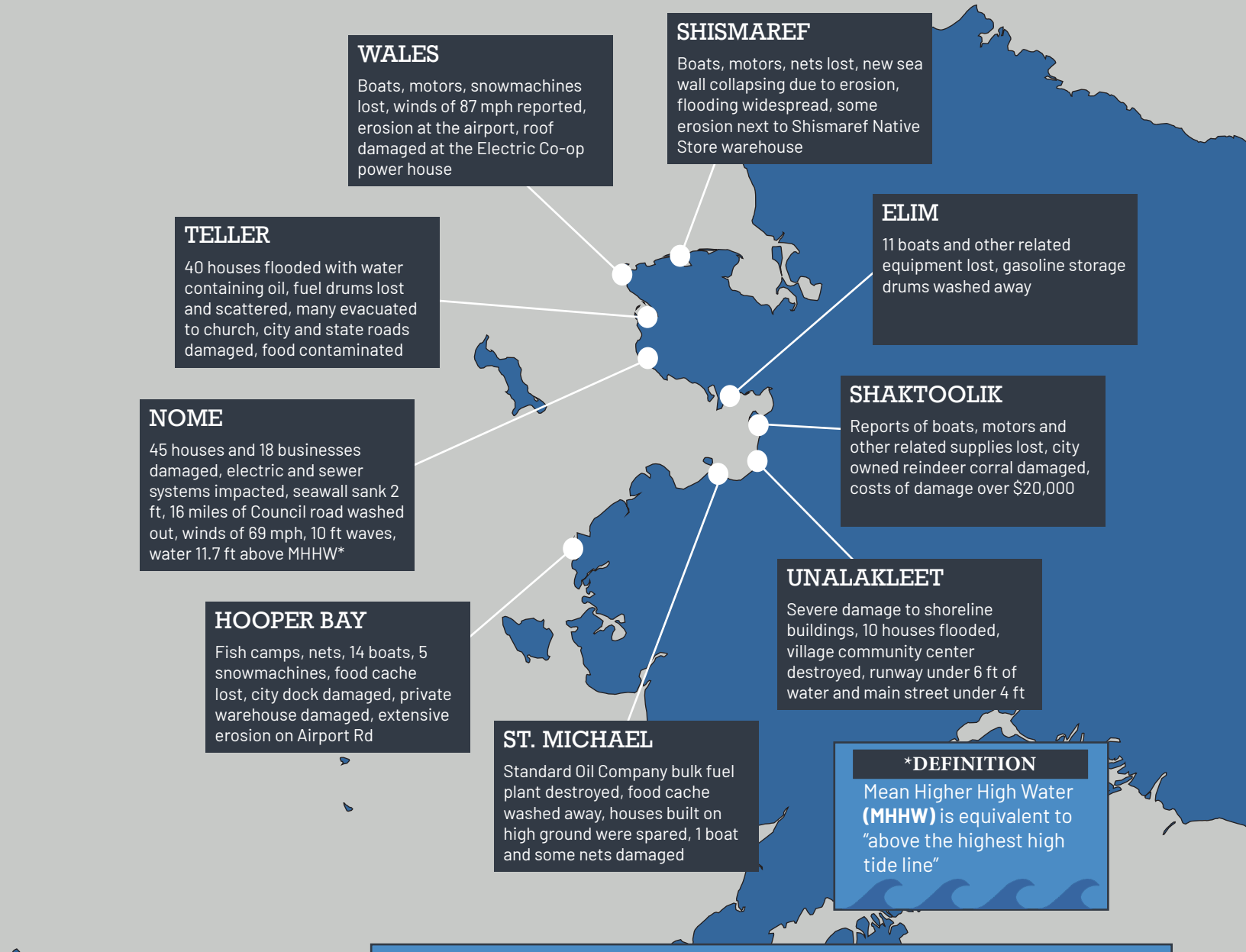
Community Specific Impacts



WALES
Boats, motors, snowmachines lost, winds of 87 mph reported, erosion at the airport, roof damaged at the Electric Co-op power house

SHISMAREF
Boats, motors, nets lost, new sea wall collapsing due to erosion, flooding widespread, some erosion next to Shismaref Native Store warehouse

TELLER
40 houses flooded with water containing oil, fuel drums lost and scattered, many evacuated to church, city and state roads damaged, food contaminated

ELIM
11 boats and other related equipment lost, gasoline storage drums washed away

NOME
45 houses and 18 businesses damaged, electric and sewer systems impacted, seawall sank 2 ft, 16 miles of Council road washed out, winds of 69 mph, 10 ft waves, water 11.7 ft above MHHW*

SHAKTOOLIK
Reports of boats, motors and other related supplies lost, city owned reindeer corral damaged, costs of damage over $20,000

UNALAKLEET
Severe damage to shoreline buildings, 10 houses flooded, village community center destroyed, runway under 6 ft of water and main street under 4 ft

HOOPER BAY
Fish camps, nets, 14 boats, 5 snowmachines, food cache lost, city dock damaged, private warehouse damaged, extensive erosion on Airport Rd

ST. MICHAEL
Standard Oil Company bulk fuel plant destroyed, food cache washed away, houses built on high ground were spared, 1 boat and some nets damaged

***DEFINITION**

Mean Higher High Water **(MHHW)** is equivalent to "above the highest high tide line"

Communication Catastrophe

Most communication was knocked out following the storm. In Nome, only some emergency phones powered by battery and less than 5 teletype circuits (machines used for sending and receiving text) were operational. The Civil Defense commandeered the emergency phones. The teletype circuits were used around the clock to convey damages as well as share messages of safety to family and friends. In many smaller communities, communication was not possible immediately after the storm.

To learn more visit us at: **uaf-accap.org/projects/extreme-events-library**

Sources: Nome Nugget, Anchorage Daily News, NOAA Storm Data Reports, Anchorage Daily Times, Fairbanks Daily News-Miner, Tundra Times, FEMA Disaster Declaration, Fathauer - The Great Bering Sea Storms of 9-12 November 1974 (1975), NOAA - A forecast Procedure for Coastal Floods in Alaska