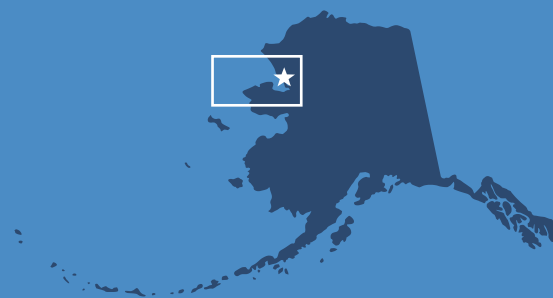


Kotzebue Area Coastal Floods



Overview

On October 22-23, 2024 and October 8, 2025, communities in Kotzebue Sound experienced two coastal flooding events with widespread damage to roads, homes, docks, fish camps, and sewage systems. In 2024, the Kotzebue airport closed for 48 hours and in 2025, the city was placed under mandatory evacuation. Both events occurred during the fall to winter transition, creating urgency to clean up the communities before waterlogged debris froze. This high frequency recurrence of October floods in Kotzebue Sound is unprecedented, raising concerns about future coastal flooding events in northwestern Alaska.

Disaster Declared (twice)

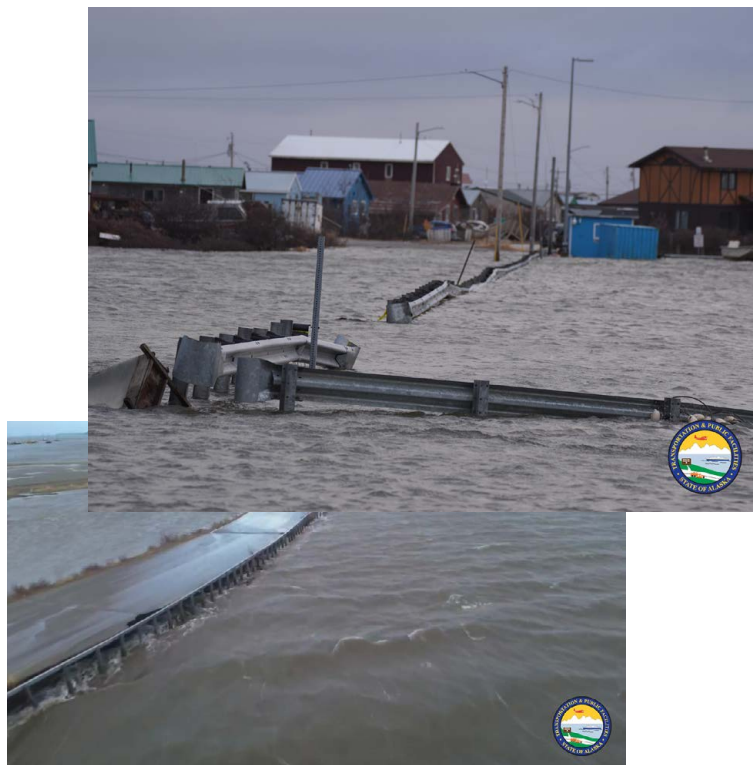
Oct. 22, 2024 Governor Dunleavy issued disaster declaration

Jan. 16, 2025 President Biden approved federal disaster declaration

In 2024, FEMA approved \$264,312 in public assistance for the Northwest Arctic Borough

Oct. 9, 2025 Governor Dunleavy issued disaster declaration

Oct. 23, 2025 President Trump approved federal disaster declaration



Kotzebue October 8, 2025, photo by Alaska DOT & PF

Weather Woes

The storms' severe flooding in October 2024 and 2025 were quite different in character. In 2024, the storm formed northwest of Kotzebue over the Chukchi Sea, a rare occurrence. In 2025, the storm moved through the northern Bering Sea before moving into the Chukchi Sea, a much more typical route. Despite their different tracks, both storms elevated ocean levels over the southern Chukchi Sea. The winds then turned to the west, pushing the high water into the Baldwin Peninsula and producing coastal flooding throughout Kotzebue Sound.

Community Specific Impacts

Kotzebue

Oct. 22–23, 2024: Water 6.0 feet above MHHW*, 55mph wind gusts; at least 80 people evacuated, one family air rescued from cabin; two houses destroyed and many others flooded; roads impassable due to blown debris from high winds, airport closed for two days due to flooded runways and ice accumulation from high winds; schools and businesses closed; sewage lagoon impacted; tents at subsistence fish camp washed away; dock washed away; significant beach erosion; one sled dog team displaced

Oct. 8, 2025: Water 6.0 feet above MHHW*; city placed under mandatory evacuation; 103 people sheltered overnight and six people displaced long-term; 52 homes with water damage, \$1.20 million estimated in property damage; schools and non-essential businesses closed; sewage lagoon damaged; severe erosion near Ted Stevens Way

Kivalina: 2025 storm, the city evacuated and 287 residents sheltered overnight

Diomede: 2024 storm, widespread coastal flooding; island lost power; two shipping containers floated away in the storm

*MHHW is equivalent to "above the normal daily highest high tide line"

Shishmaref: 2024 storm, worst high water in living memory, severe shoreline erosion; protective berm damaged, roads and landfill damaged, archeological site lost with erosion, graves swept away; outbuilding floated away

Deering: 2024 storm road to airport and runway flooded; 2025 storm, erosion near clinic

Timely Response

Both the 2024 and 2025 floods occurred during the fall to winter transition, a critical period in northwestern Alaska when temperatures begin to fall below freezing. Waterlogged materials like debris, soaked insulation, or even wet floors were at risk of freezing for the entire winter and turning houses into "ice boxes." After both storms, the Northwest Arctic Borough communicated the urgency to de-water, dehumidify, and dry out houses and clear debris in order to survive the winter, a storm recovery factor truly unique to the Alaska coast.

Debris cover the streets of Kotzebue, photo by Alaska DOT & PF

Explore other extreme events at uaf-accap.org/projects/extreme-events-library

Sources: Alaska Division of Geological & Geophysical Surveys, Alaska Division of Homeland Security and Emergency Management, Alaska Public Media, FEMA Disaster Declarations, KOTZ, KTUU Alaska's News Source, NOAA Storm Reports

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