



Alaska Department of Commerce, Community, and Economic Development  
Division of Community and Regional Affairs

**Public Review Draft Action Plan Executive Summary 2025**

Community Development Block Grant – Disaster Recovery (CDBG-DR)

2022 Typhoon Merbok

FEMA Disaster No. 4672

## Table of Contents

<b>Record of Amendments.....</b>	<b>1</b>
<b>1. Executive Summary .....</b>	<b>2</b>
1.1. Overview .....	2
1.2. Disaster Specific Overview .....	2
1.3. Summary .....	6
1.4. Unmet Need and Proposed Allocation .....	6

## List of Figures

Figure 1. Typhoon Merbok Spins off the Coast of Western Alaska .....	2
Figure 2. Track of Merbok, September 11-18, 2022 – August 2022 Sea Surface Temperature Ranks Relative to 1900-2021 .....	3
Figure 3. Flooding and Debris in Golovin due to Typhoon Merbok.....	4
Figure 4. Typhoon Merbok Timeline of Events (2022).....	5

## List of Tables

Table 1. Unmet Need and Proposed Allocation, Typhoon Merbok 2022 CDBG-DR (June 2025) ....	6
---	---

## Record of Amendments

The following table summarizes amendments to the CDBG-DR Public Action Plan for 2022 Typhoon Merbok, FEMA Disaster No. 4672.

Date Action Plan was initially approved by HUD:
TBD

Date Amendment Approved by HUD	Amendment Number	Description of Amendment

# 1. Executive Summary

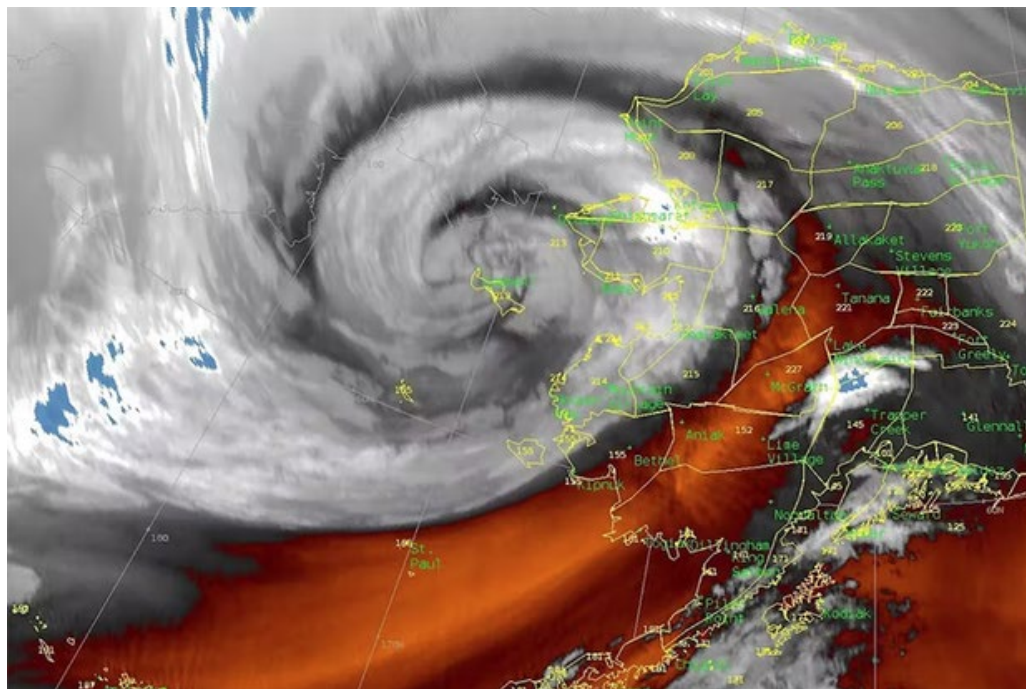
## 1.1. Overview

The U.S. Department of Housing and Urban Development (HUD) announced that the State of Alaska will receive \$38,493,000 in funding to support long-term recovery efforts following FEMA DR-AK-4672 Typhoon Merbok in 2022, through the State of Alaska Department of Commerce, Community, and Economic Development (DCCED), Division of Community and Regional Affairs. HUD allocated \$38,493,000 in CDBG-DR funds to the State of Alaska in response to FEMA DR-AK-4672 through the publication of Federal Register Notice Vol. 88, No. 96, published on May 18, 2023 (FR -6393-N-01). This allocation was made available through Public Laws 117-180 and 117-328. Community Development Block Grant – Disaster Recovery (CDBG-DR) funding is designed to address needs that remain after all other assistance has been exhausted. This plan details how funds will be allocated to address the remaining unmet need in over 50 communities in Western Alaska.

## 1.2. Disaster Specific Overview

From September 15 – 20, 2022, Typhoon Merbok impacted approximately 1,300 miles of the Western and Northwestern Alaska coastline, affecting over 50 communities in the Bering Strait, Lower Yukon, Lower Kuskokwim, Kashunamiut, Yupiit, and Pribilof Islands Regional Education Attendance Areas (REAAAs). The storm began as a typhoon in the north-central Pacific Ocean, in atypically warm waters, and arrived in Alaska early in the autumn storm season when there was no sea ice to protect coastal communities.

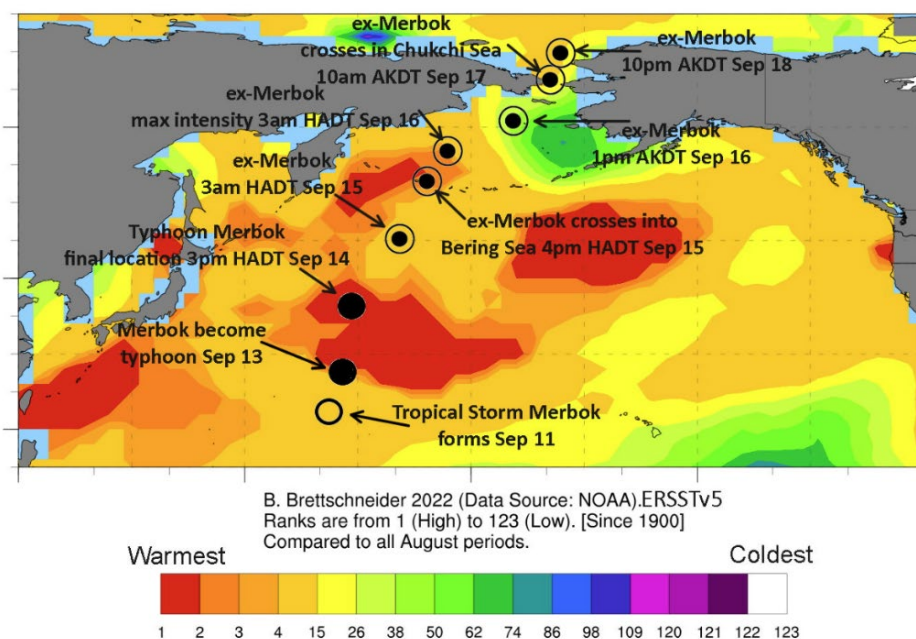
Figure 1. Typhoon Merbok Spins off the Coast of Western Alaska



Source: National Weather Service

The storm produced hurricane-force winds, higher-than-normal tidal ranges, and storm surges of up to 10 feet above mean sea level. Coastal and riverine flooding, wind damage, and severe erosion were reported throughout the region. Buoy station 46035, located 310 nautical miles north of Adak, recorded wind gusts of 76 miles per hour (mph) and seas of 52 feet. The storm's minimum central pressure was recorded at 937 millibars (mb) – the lowest pressure recorded in the Bering Sea in September since 1950. While storms are not unusual in the Bering Sea, Typhoon Merbok was unusual due to its formation early in the season and far east of Japan, where sea surface temperatures are historically too cold for tropical cyclone formation. In 2022, the area saw the highest recorded temperatures since 1900.

Figure 2. Track of Merbok, September 11-18, 2022 – August 2022 Sea Surface Temperature Ranks Relative to 1900-2021

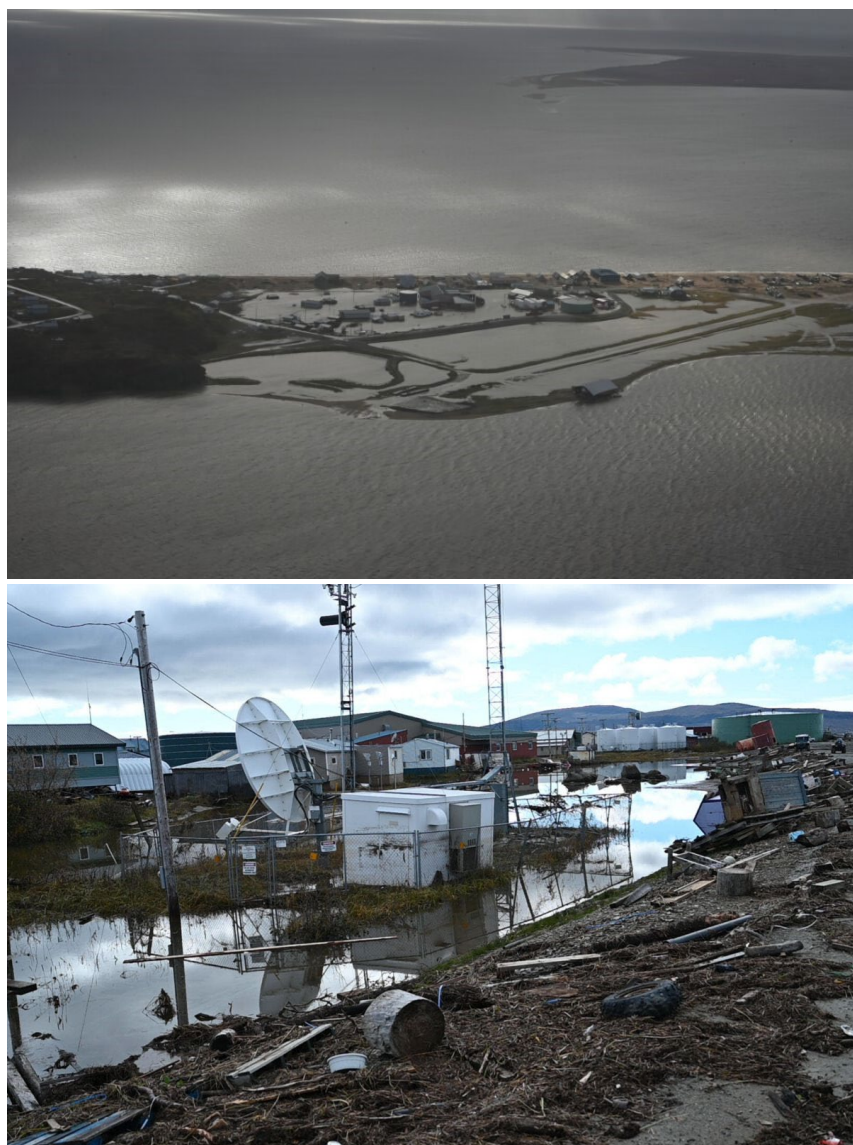


Source: Brettschneider, B. with data from NOAA

Initial impacts were reported in the Western and Central Aleutians and the Pribilof Islands, with damaging winds over 70 mph in some communities. The storm then moved into the Yukon-Kuskokwim Delta, where winds gusted over 60 mph and storm surges caused significant coastal flooding. Inland areas along the Yukon River also experienced flooding. As the storm reached Norton Sound and the southern Seward Peninsula, it caused the worst flooding in nearly 50 years. Water levels rose 8 to 13 feet above the normal high tide line, with the highest flood depths reported in Golovin at over 17 feet. Impacts continued as the weakening system moved into the Chukchi Sea, where additional flooding and erosion occurred.

Communities across the Bering Strait, Lower Yukon, Lower Kuskokwim, Kashunamiut, Yupiit, and Pribilof Islands REAAs experiences damage to homes, critical infrastructure, and culturally significant sites. Coastal and riverine flooding damaged roads, airstrips, power systems, barge landings, and water and wastewater facilities. Many communities lost essential public services and floodwater protection infrastructure such as berms and seawalls. Debris were scattered across the coastline. Personal property and subsistence resources – boats, drying racks, fish camps, and traditional hunting and gathering areas – were impacted in the middle of the fall subsistence season.

Figure 3. Flooding and Debris in Golovin due to Typhoon Merbok



Source: 1) U.S. Coast Guard; 2) Jeremy Edwards, FEMA

The State of Alaska activated its Emergency Operations Center on September 14, and the Governor declared a state disaster on September 17. The Governor formally requested a federal major disaster declaration on September 20, citing severe threats to life and property. President Biden approved the declaration on September 23, authorizing Individual Assistance, Public Assistance (Categories A-G), and the Hazard Mitigation Grant Program under FEMA Disaster #4672. Further amendments expanded assistance to include debris removal and permanent work in additional REAAs.

Typhoon Merbok underscored the increasing frequency and severity of coastal hazards in Alaska and the urgent need for long-term recovery solutions, as described in *The Unmet Needs of Environmentally Threatened Alaska Native Villages* (ANTHC 2024). The communities impacted are predominantly Alaska Native, remote, and environmentally threatened. Many residents live at or below the federal poverty line, and private property insurance is often unavailable or cost prohibitive. Recovery efforts have been



compounded by the high cost of construction, supply chain limitations, and logistical challenges unique to rural Alaska.

Figure 4. Typhoon Merbok Timeline of Events (2022)

<b>Timeline of events</b>	<b>Response</b>
<b>September 2022</b>	
<b>September 13</b> The National Weather Service issues the first high wind and coastal flood.	<b>September 17</b> → Governor Dunleavy declares a state disaster and notified the legislature of response costs up to \$10,000,000 from the State Disaster Relief Fund.
<b>September 15</b> Buoy station 46035 records Typhoon Merbok wind gusts at 76 mph with 52-foot seas.	<b>September 20</b> → Governor Dunleavy requests a major disaster declaration.
<b>September 17</b> Merbok produces 92 mph wind gusts, 52-foot seas, and 10-foot storm surges along the Norton Sound. Nome records a record 8.99 feet above Mean Highest High Water.	<b>September 23</b> → President Biden signs a major disaster declaration.
<b>September 20</b> The NWS cancels wind and flood warnings related to Merbok.	
<b>May 2023</b>	
	<b>May 18</b> HUD allocates \$38,493,000 to the State of Alaska for unmet needs and CDBG-DR activities for the Typhoon Merbok disaster that occurred in 2022.
<b>July 2024</b>	
	<b>July 12</b> FEMA and the Alaska DHSEM approve nearly \$109 million to rebuild damaged infrastructure and public buildings.

## 1.3. Summary

Unmet needs are calculated for each of three sectors defined by HUD (Housing, Economic Revitalization and Infrastructure), following the HUD guidance in Federal Register Notice Vol. 88, No. 96, published on May 18, 2023. HUD defines unmet needs as the needed resources necessary to recover from a disaster after accounting for all obligated and dispersed funding for recovery efforts, including FEMA Individual and/or Public Assistance funds, insurance claims, Small Business Administration Disaster Recovery Loans and/or other funding. The primary objectives of this plan are to provide housing for low- and moderate-income (LMI) families impacted by Typhoon Merbok in the MID areas, as well as flood and erosion control.

## 1.4. Unmet Need and Proposed Allocation

The proposed allocation of funds aligns with identified needs of communities within the most impacted and distressed areas and prioritizes areas with significant housing vulnerability. The allocation reflects a data-driven approach with the best available data. Although many Housing, Infrastructure, Mitigation and Planning disaster recovery actions were documented in Interagency Recovery Coordination (IRC) data, the October 2023 Recovery Strategy (Federal/State) DR-4672-AK, October 2023 Recovery Needs Assessment (Federal/State), and/or other sources for the MID areas, this Action Recovery Plan focuses on mitigating unmet housing need in the MID areas. The CDBG-DR Mitigation set-aside focuses on flood and erosion control measures in MID areas, as these were the most frequently documented hazard mitigation action. Adjustments may be made in future based on feedback from citizen engagement in 2025-2026 and incorporated into a Substantial Amendment to this Action Recovery Plan.

Table 1. Unmet Need and Proposed Allocation, Typhoon Merbok 2022 CDBG-DR (June 2025)

Category	Remaining Unmet Need	% of Unmet Need	% of Funding to be Expended in HUD & State Identified MID	Program Allocation Amount	% of Program Allocation
Administration	n/a	n/a		\$1,924,650	5%
Planning	n/a	n/a		\$5,773,950	15%
Housing	\$3,125,565	4.5%		\$25,773,400	65.0%
Infrastructure	\$46,056,806	66.6%		\$0	0.0%
Economic Revitalization	\$7,500	0.0%		\$0	0.0%
Mitigation	\$20,000,000	28.9%		\$5,021,000	15%
<b>Total</b>	<b>\$1,941,800,000</b>	<b>100.00%</b>		<b>\$38,493,000</b>	<b>100.00%</b>

*Note: Allocation Amount for Housing, Infrastructure, Economic Revitalization, Public Services and Mitigation includes project delivery costs and does not include administration and planning costs.*