

# THE NORMAL DISASTER SITUATION IN ALASKA

This section is intended to provide staff with an understanding of the disaster environment in Alaska, the local/borough entities the SECC interacts with, and a list of “hub” communities that the SECC hopes to develop into local or regional IMTs.

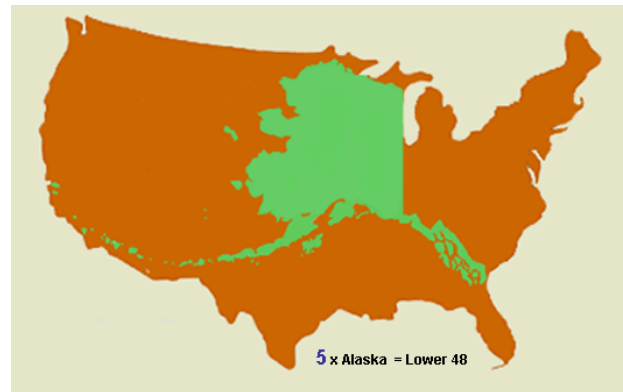
The typical disaster environment in Alaska is constantly changing; DHS&EM is charged with maintaining situational awareness. Some basic facts are:

- Average Year: Operations responds to 36 incidents a year.
- There have been around 226 Declared Disasters in the State of Alaska since 1978.
- The State typically funds: ice jam floods, Fall sea storms and flooding, building fires, extreme cold, wildfires, summer storms, and generator issues.
- The State doesn't typically fund: river and coastal erosion, fuel emergencies, other storms, volcanic eruptions.

## EMERGENCY MANAGEMENT CHALLENGES

Alaska is unlike anywhere else in the country. The main challenges in Alaska involve:

- Alaska Physiography. The physiography in Alaska is typically rugged with very few villages, and few larger cities, set in a large area of remote land.
  - Area = 663,267 sq miles
  - Width = 808 miles
  - Length = 1,479 miles
  - Highest pt = Mt. McKinley at 20,321 ft
  - Population(2009) = ~ 698,473
  - Largest city = Anchorage (2008 population: 279,243)
  - Largest River = Yukon River (1,700 miles long)



- Weather. Weather ranging from a record -82 degrees F in Bettles to over 100 degrees F in Fairbanks have been recorded. Hurricane-intensity storms occur each year. Daylight hours can range from all day during the summer to none in the winter in several communities.
- Travel. Most of remote Alaska is accessible only by small aircraft.
- Culture. More than 90 languages are spoken in Alaska, including 20 which are indigenous to Alaska. The indigenous languages, known locally as Native languages, belong to two major language families.

- Aleut
- Eskimo (Yupik) family
- Athabaskan-Eyak-Tlingit family
- Haida

Disaster types and timing are shown below.

# **DISASTER TYPES IN ALASKA**

## **Earth**

- AVALANCHE
- EARTH MOVEMENT
  - Landslide
  - Erosion
- EARTHQUAKE
  - Fault Rupture
  - Seismic Shaking
  - Liquefaction
- VOLCANIC ERUPTION
  - Lahar/Debris Flow
  - Ashfall/Poisonous Gas

## **Water**

- FLOOD
  - River
  - Ice Jam/Spring breakup
  - Coastal
  - Glaciation/High Groundwater
  - Glacial Outburst
- TSUNAMI
  - Earthquake Induced
  - Landslide Induced
- EXCESSIVE SNOWFALL

## **Fire**

- WILDFIRE
- URBAN FIRE

## **Wind**

- SEA STORM
  - Wind/Rain Storm
  - Sea Surge
  - Ivu and Ice Override
- WINDSTORM
- TORNADO/HURRICANE

## **Environmental**

- EXTREME TEMPERATURES

- Heat wave
- Cold spell
- Drought (agricultural)

## **Human**

- SEARCH AND RESCUE
- CRITICAL INFRASTRUCTURE LOSS
  - Power Plant/Generator
  - Communications
  - Water/Sewer
  - Fuel Storage
  - Airstrip
  - Clinic
  - School
- CRITICAL FACILITY LOSS
  - Building Collapse
  - Bridge Collapse
  - Road Washout
  - Sea Wall/Levee Failure
  - Cemetery/Grave Exposure
- HAZ MAT SPILL OR RELEASE
  - Fuel/Oil Spill
  - Chemical Spill
- BIOLOGICAL HEALTH
  - Pandemic Flu/Disease Outbreak
  - Mass Casualty/Mass Fatality Incident
- HUMAN-CAUSED EVENT
  - Terrorism
  - Criminal Activity
  - Civil Unrest/Riot/Protest
  - Community Evacuation
- TRANSPORTATION ACCIDENT
  - Maritime (cruise ship, ferry, shipping, etc.)
  - Plane Crash
  - Trail Derailment/Crash
  - Major Highway MVI
- ECONOMIC DISASTER
  - Loss of Subsistence Lifestyle
  - Loss of Fish/Wildlife
  - Fuel Shortage

## Alaska Disasters When They Typically Occur

Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avalanche												
Economic - Fish												
Erosion (river/coastal)												
Extreme Cold												
Community Facility Damage												
Fall Sea Storm												
Fuel Emergency												
Ice Jam Flood												
Landslide/Mudslide												
Power/Generator Problems												
Summer Storm/Flood												
Utility Freeze Up												
Wildfire												
Windstorm												
Winter Storm/Flood												

**Notes:**

Monthly distribution based on evaluation of over 250 declared, non-declared, and denied disasters from 1978 to present.

Building fires, volcanic eruptions, earthquakes, and tsunamis can and do happen anytime. Ship accidents, harbor and bridge damage also happen infrequently with no clear pattern.