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
  o Landslide
  o Erosion
• EARTHQUAKE
  o Fault Rupture
  o Seismic Shaking
  o Liquefaction
• VOLCANIC ERUPTION
  o Lahar/Debris Flow
  o Ashfall/Poisonous Gas

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

Fire
• WILDFIRE
• URBAN FIRE

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

Environmental
• EXTREME TEMPERATURES
  o Heat wave
  o Cold spell
  o Drought (agricultural)

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

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**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.