
Command Overview Briefing

For

Alaska Joint Armed Services Committee

13 July 2022



Lt Gen David Krumm, USAF

Commander, Alaskan NORAD Region,
Alaskan Command, and Eleventh Air Force

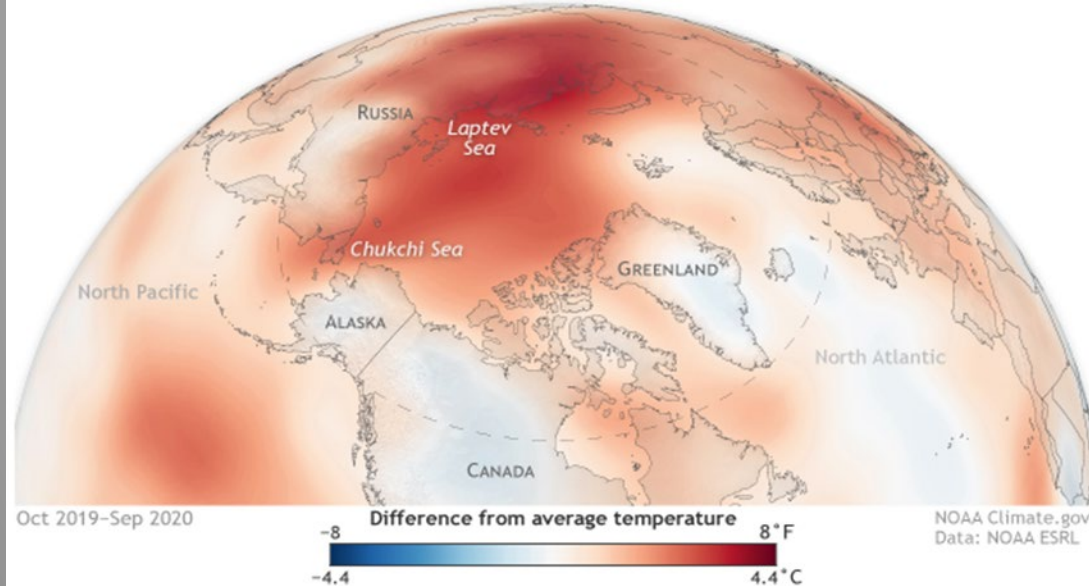
CMSgt Kristopher Berg, USAF

Senior Enlisted Leader, Alaskan NORAD Region, Alaskan
Command, and Eleventh Air Force

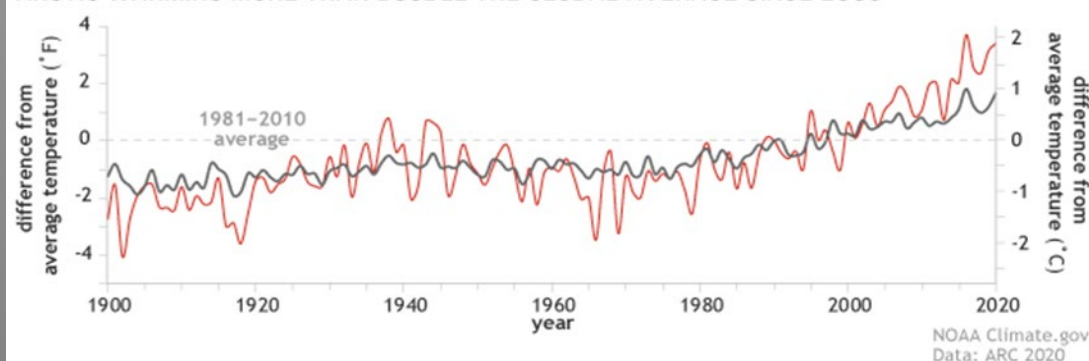
- Arctic Opening/Impacts to Homeland Defense
- Evolving Threats to Homeland Defense
- Opportunities for State Assistance

Rising Surface Temperatures

2020 WAS ARCTIC'S SECOND-WARMEST YEAR ON RECORD



ARCTIC WARMING MORE THAN DOUBLE THE GLOBAL AVERAGE SINCE 2000



- Since the late 1970s Alaska annual average temperatures began to increase an average of 0.7°F per decade
- Alaska North Slope warming at 2.6 times the rate of the continental U.S.
- Alaskan west coast, central interior, and Bristol Bay areas are warming at more than twice the rate of the continental U.S.
- Past temperature trends vary widely decade to decade, and are consistent with large-scale patterns of climate variability in the Pacific Ocean sea surface temperatures
- 3 Major Impacts
 - Sea Ice
 - Permafrost
 - Coastal Erosion

Permafrost-DOD Impacts

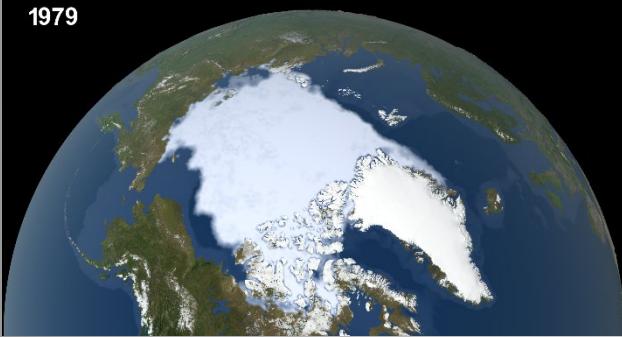


- Over last few years, Eielson AFB has spent \$164 million in new construction and repairs due to permafrost changes
- T-39 taxiway currently usable only for fighter aircraft for approximately 2 months (Jul-Aug)
 - Heavier aircraft buckles the pavement and causes more damage
- Widespread cracks throughout runway
- Increased Wildfire Threat and Intensity
 - 3 of largest wildfire years on record since 2000
 - Warming temperatures
 - Longer snow-free season
 - Permafrost burns easily
 - 2.5M acres burned in 2019

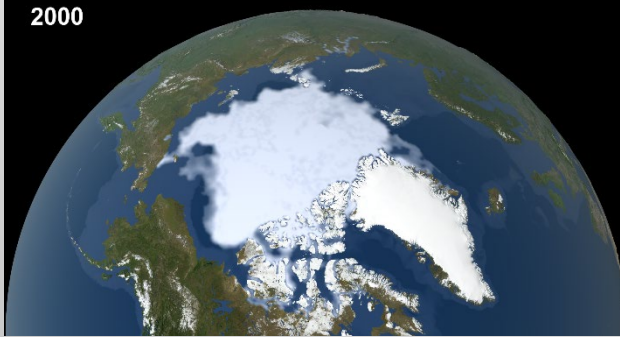


Arctic Sea Ice Minimums

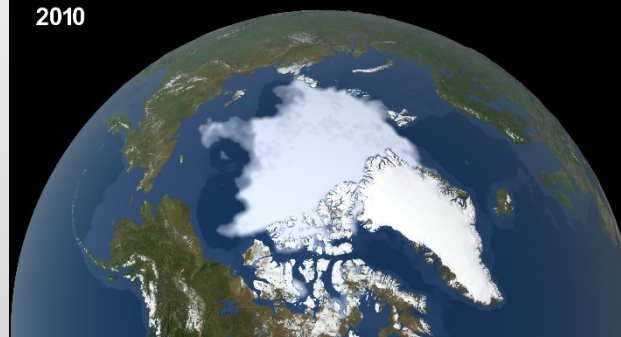
1979



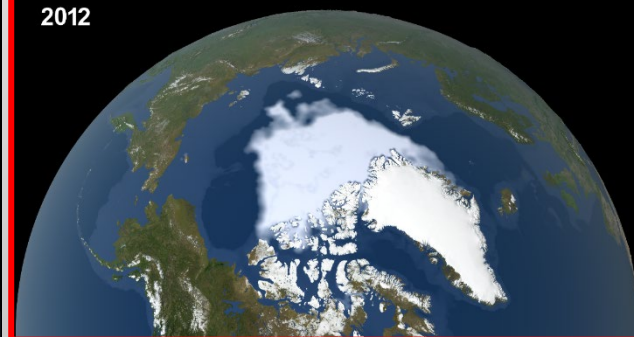
2000



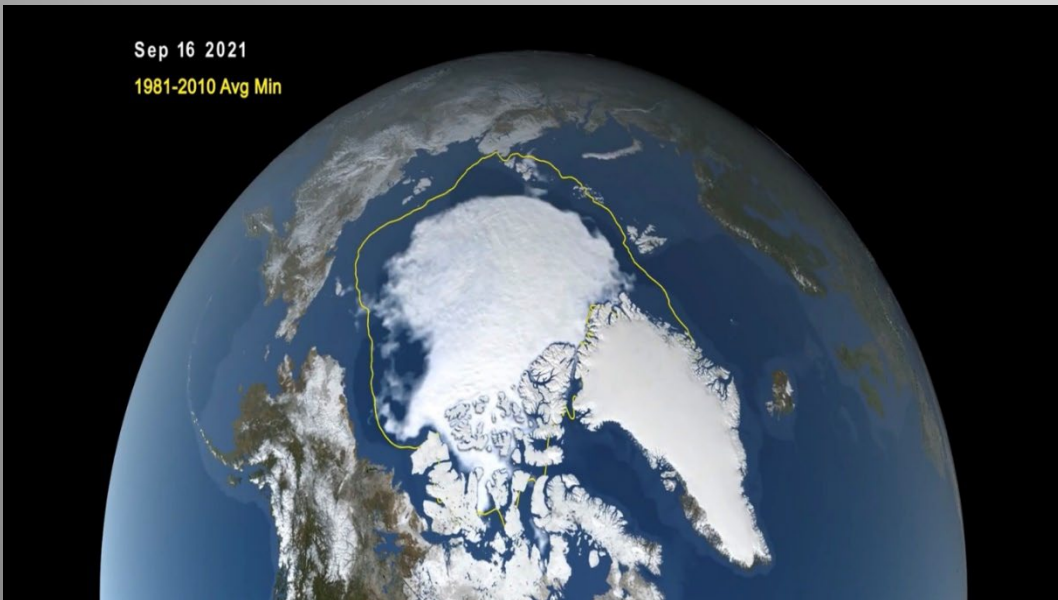
2010



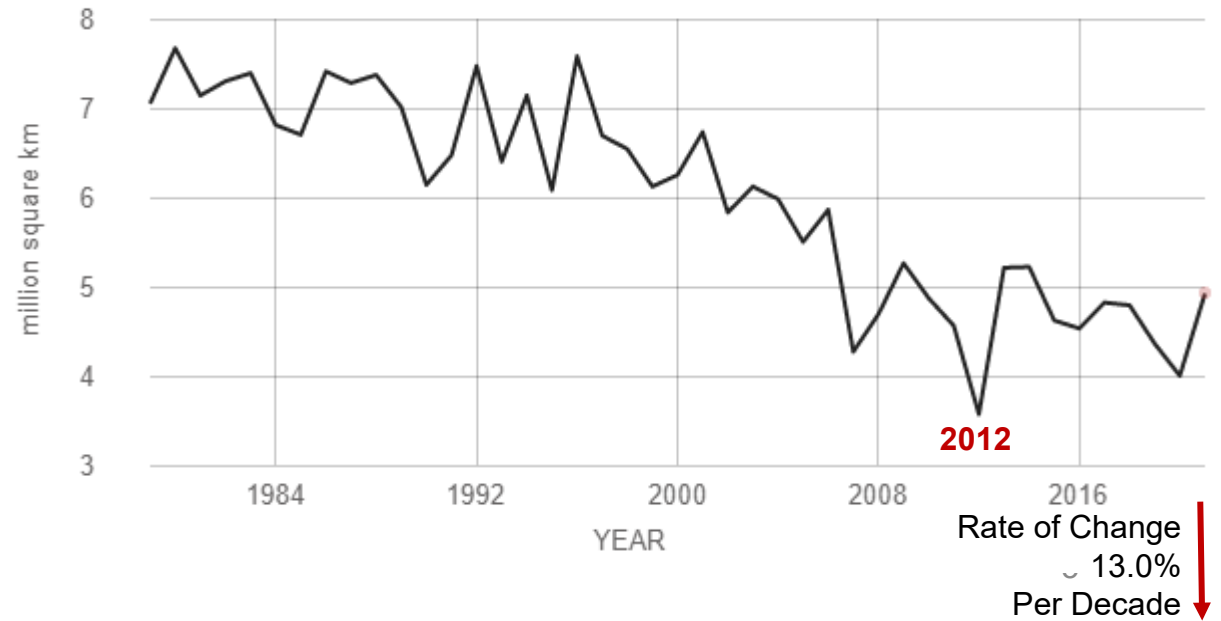
2012



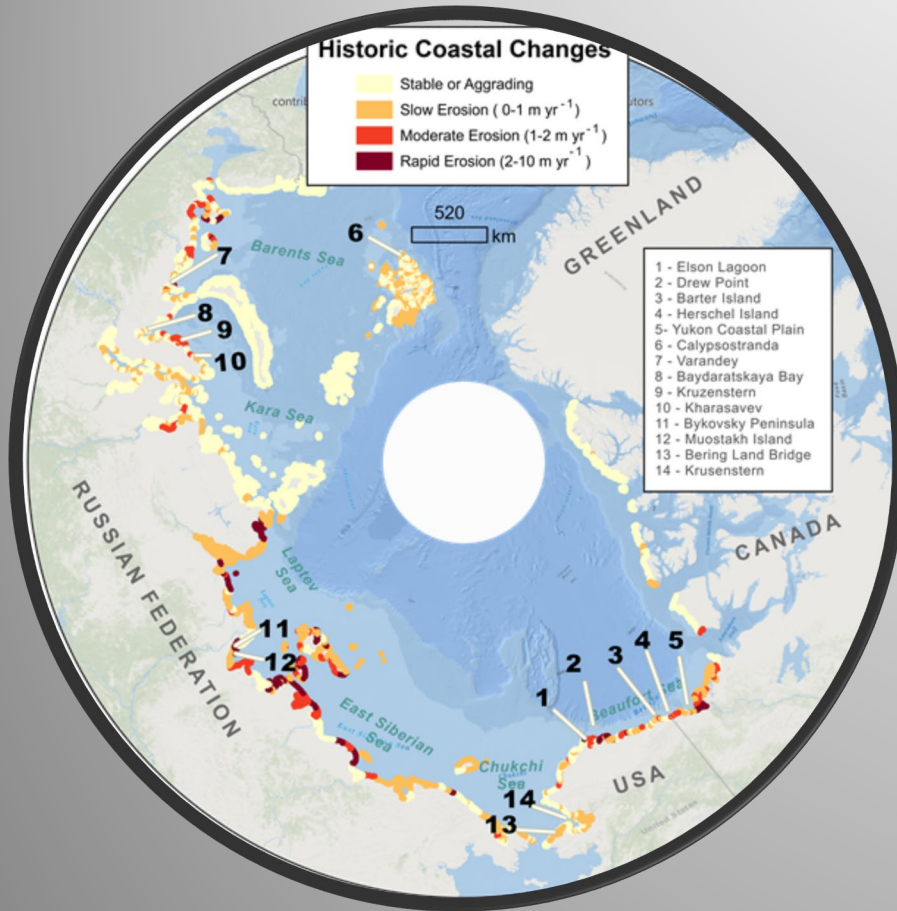
Sep 16 2021
1981-2010 Avg Min



Average September Minimum Extent

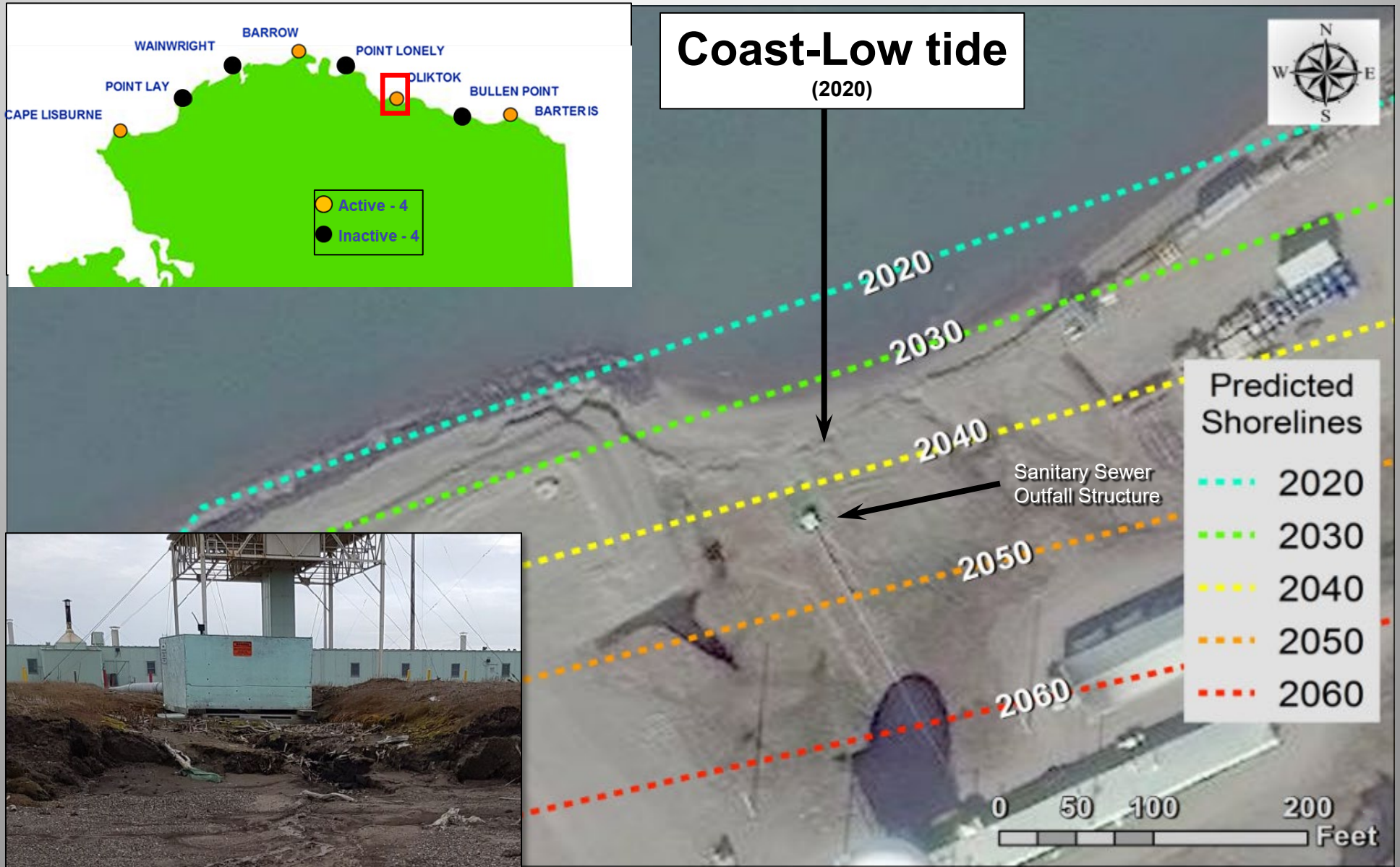


Coastal Erosion



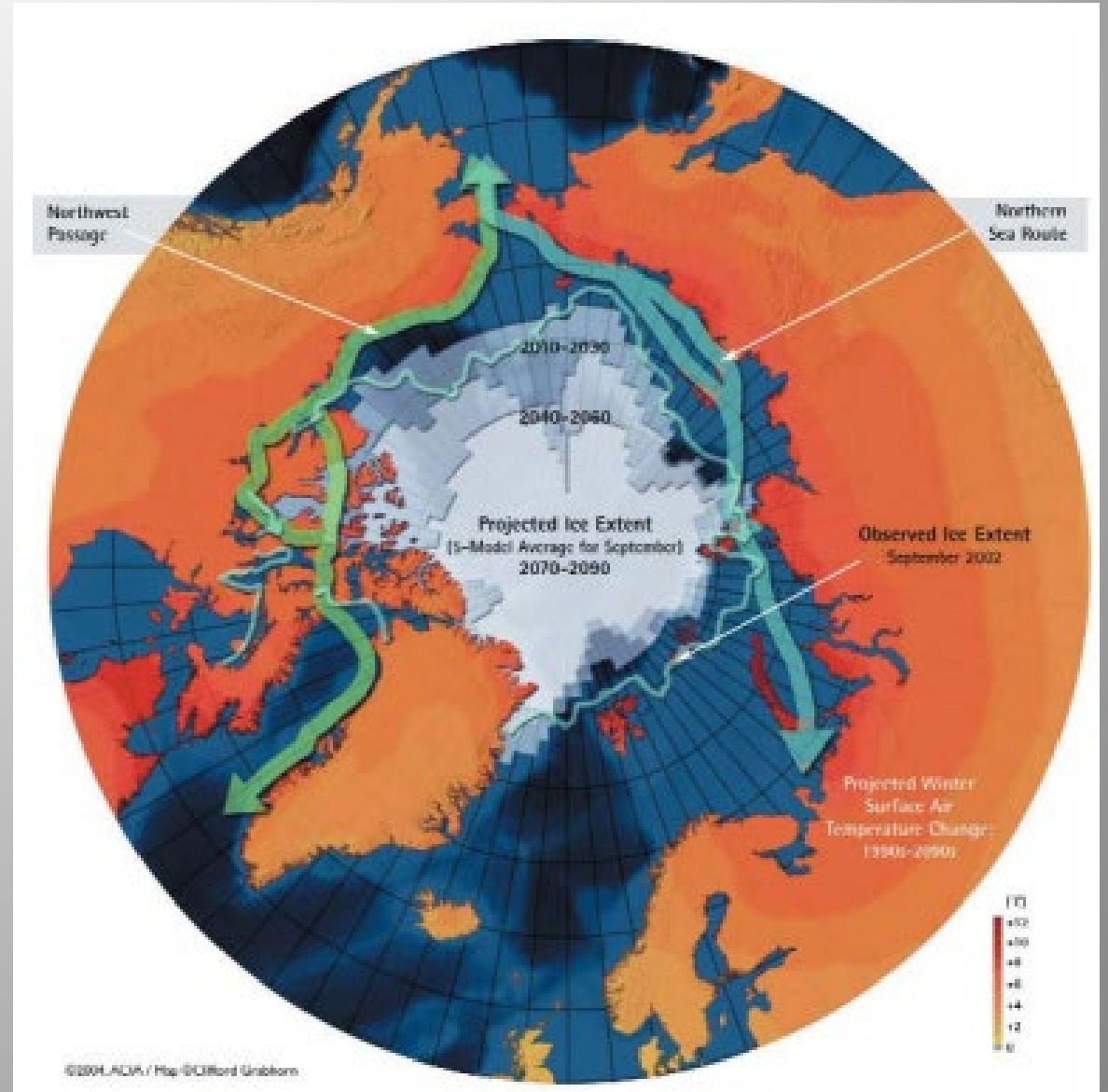
- Permafrost coasts in the Arctic make up more than 30% of Earth's coastlines
- Changes in permafrost coasts are primarily due to erosion
 - Amplifying Factors:
 - Extent of Sea Ice
 - Increased duration of open water period
 - Rising air temperatures
 - Rising sea-levels
 - Warming permafrost
 - Subsiding permafrost landscapes
 - Increased storminess and wave heights
- Increased coastal erosion at AF radar early warning and communication installations
- Risk to DOD early warning system operating with diminished functionality
 - Damaged roads, utility infrastructure, seawalls, and runways
 - Limited access to locations
 - Damaged seawalls allow large waves to overrun runway

2012 Conceptual Linear Model Erosion at Oliktok LRRS

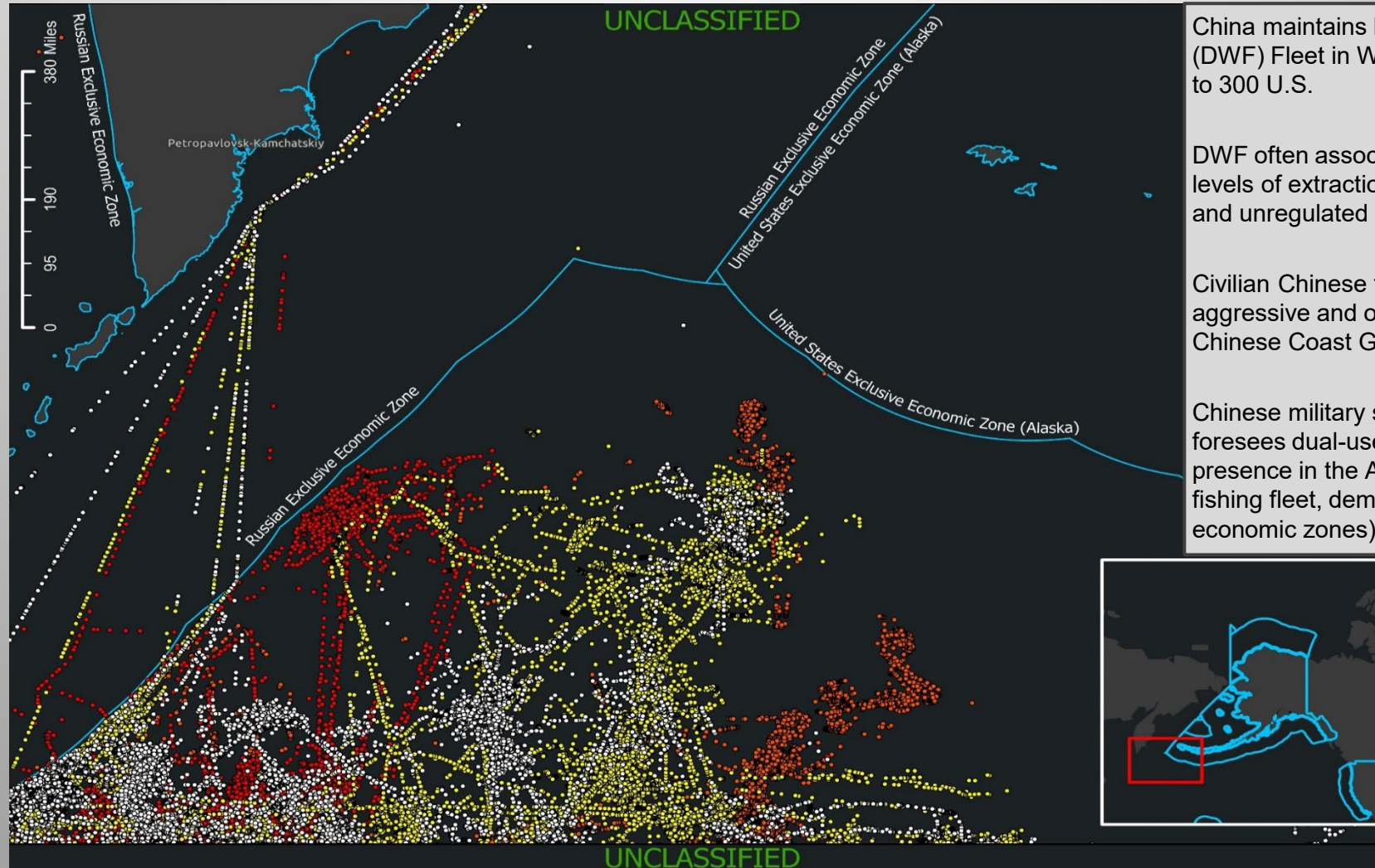


Increased Human Activity in the Arctic

- **Arctic activity will increase**
 - **Natural resource development**
 - Hydrocarbons, minerals, rare earth minerals, and fisheries
 - Transportation corridor
- **Conflicting interests will overlap**
 - Many stakeholders and non-Arctic actors
- **Forecast**
 - **Increased commercial presence**
 - Shipping, research, travel
 - **Potential environmental impacts**
 - 2020 Norilsk Oil Spill
 - 21,000 tons
 - Resource extractions
 - **Increased military action**



Chinese Fishing Vessel Activity



China maintains largest Distant Water Fishing (DWF) Fleet in World, ~17,000 PRC compared to 300 U.S.

DWF often associated with unsustainable levels of extraction, and with illegal, unreported and unregulated (IUU) fishing activities.

Civilian Chinese fishing boats notoriously aggressive and often shadowed by armed Chinese Coast Guard vessels militia.

Chinese military scenario for the Arctic foresees dual-use of economic and scientific presence in the Arctic (e.g., militarization of fishing fleet, demanding access to exclusive economic zones).

Legend

- 2018
- 2019
- 2020
- 2021

BLUF: Chinese Fishing Vessels annually continue to migrate northeast to establish new fishing grounds due to fish migration likely following an increase in overfishing (Assessment USCG D-17)

Evolving Threats to our Nation

- Domain Awareness
- Missiles
 - Ballistic, cruise, hypersonic
- Air
 - Technology transfers, sUAS, electromagnetic warfare
- Cyber
 - Infrastructure, data, misinformation

America is no longer a sanctuary



Opportunities for State Assistance

Key Focus Areas:

- The Fairbanks North Star Borough Housing Situation
- Childcare
- Military and Spouse Licensure Reciprocity
- Medical Providers
- Public Sale of Land IVO JPARC
- Environmental Remediation



Thank you for Your Commitment to our Military Members and Families – It Shows!

Thank You for Your Support

