

Climate Change in Alaska

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Bethel, Alaska

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Port Graham Alaska





Diverse Cultures

As Indigenous peoples from the Arctic, North America, Asia, Pacific Latin American, Africa and from many other countries, **we are the most vulnerable to the impacts and root causes of climate change.** We reaffirm the unbreakable and sacred connection between land, air, water, oceans, forests, sea ice, plants, animals and our human communities as the material and spiritual basis for our existence.

Quote from the 2009 Global Indigenous Peoples Summit Anchorage Alaska



Facts about Climate Change



Traditional Knowledge

In many communities throughout Rural Alaska, our traditional lifeways are still being practiced. We continue to live off our land and waters as our ancestors have. This is who we are, this is our way of life.





Now, we are facing a battle that we will never win...

Coastal erosion on Alaska's far northern coast has doubled over the past 50 years and coastal cliffs saturated with melting permafrost have crumbled into the sea as the world's climate has warmed, scientists report. The erosion rate is speeding, too, and in the 30 years from 1955 to 1985, the coast in the study area lost an average of 120 acres a year, but during the following 20 years the loss of land from erosion along the coast averaged nearly 270 acres a year. There are several communities that are facing relocation, one of which is in the process .



We are also battling with melting of the permafrost, because of this event many of our village's are also sinking....

Native Village of Kipnuk, Alaska





Alaska's glaciers are receding at twice the rate previously thought, according to a new study published in the July 19, 2002 *Science* journal. These four images show Portage Glacier, near Anchorage, Alaska, in about 1950 and in July 2001. The ice has pulled back nearly out of sight.



In 2009 Governor Palin declared a disaster for the flooding event in the Interior of Alaska, including the drainages of the Yukon, Kuskokwim and Kobuk rivers.



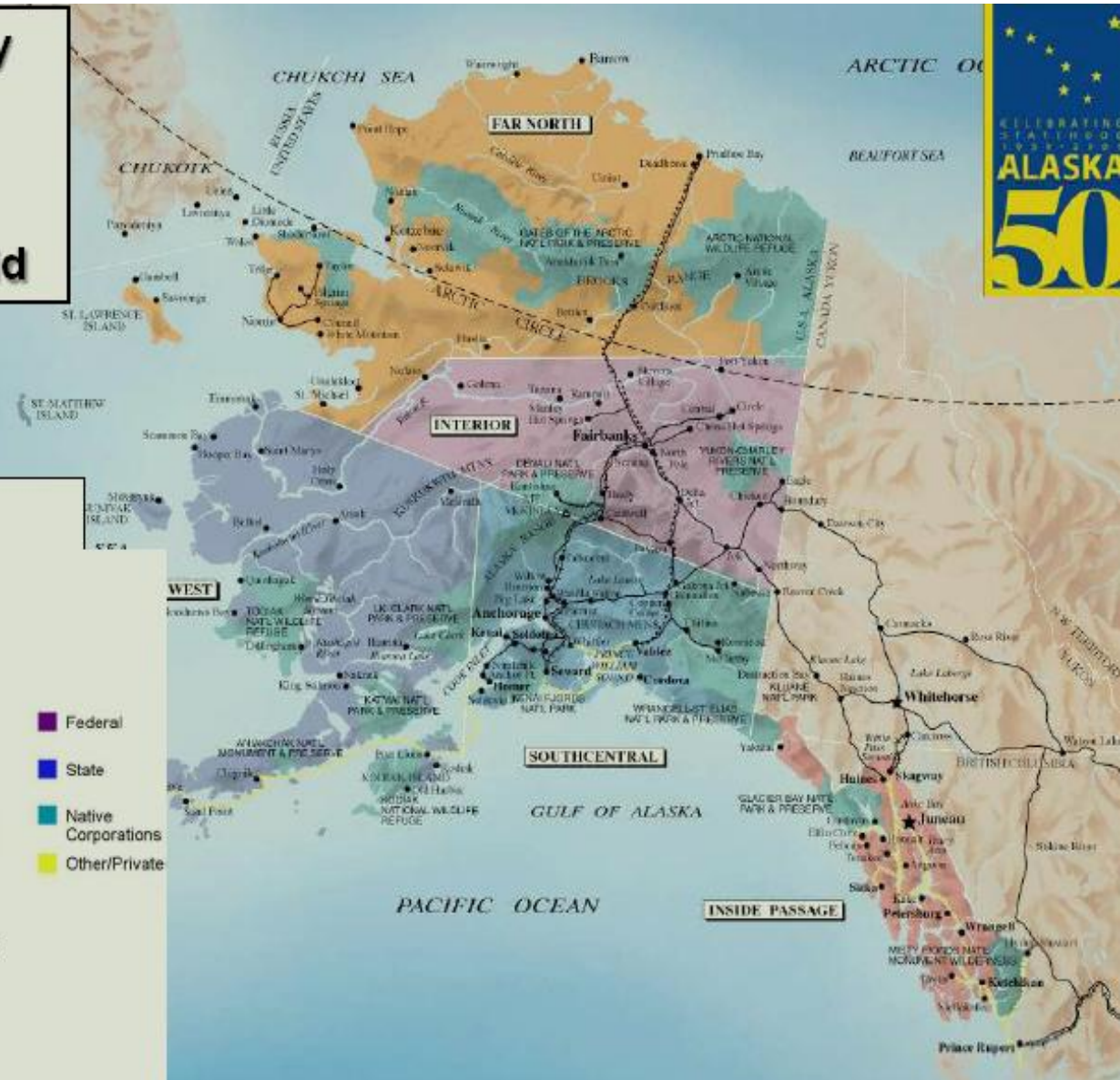
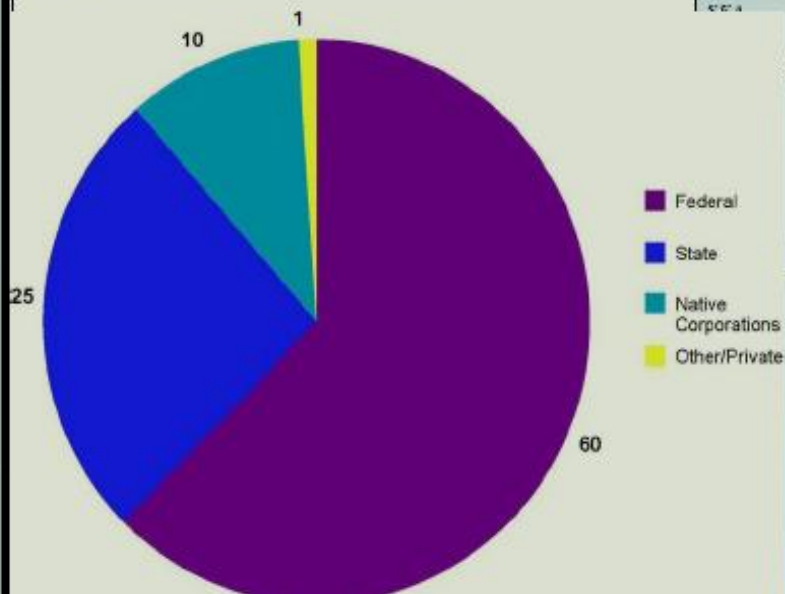
Because of the massive permafrost melting many of the river banks have huge sink holes along the rivers causing concerns of changes in fish migration and chemistry changes in the drinking water .



The U.S. Army Corps of Engineers has identified over 160 additional rural communities threatened by erosion.

- Low Population Density
- Great Distances
- Remote locations
- Sparse Road System
- No Statewide Utility Grid

LAND OWNERSHIP:



Millions are now being spent, not just from relocations but from damages caused by mother nature.

Nome, AK – During October 2004 Storm

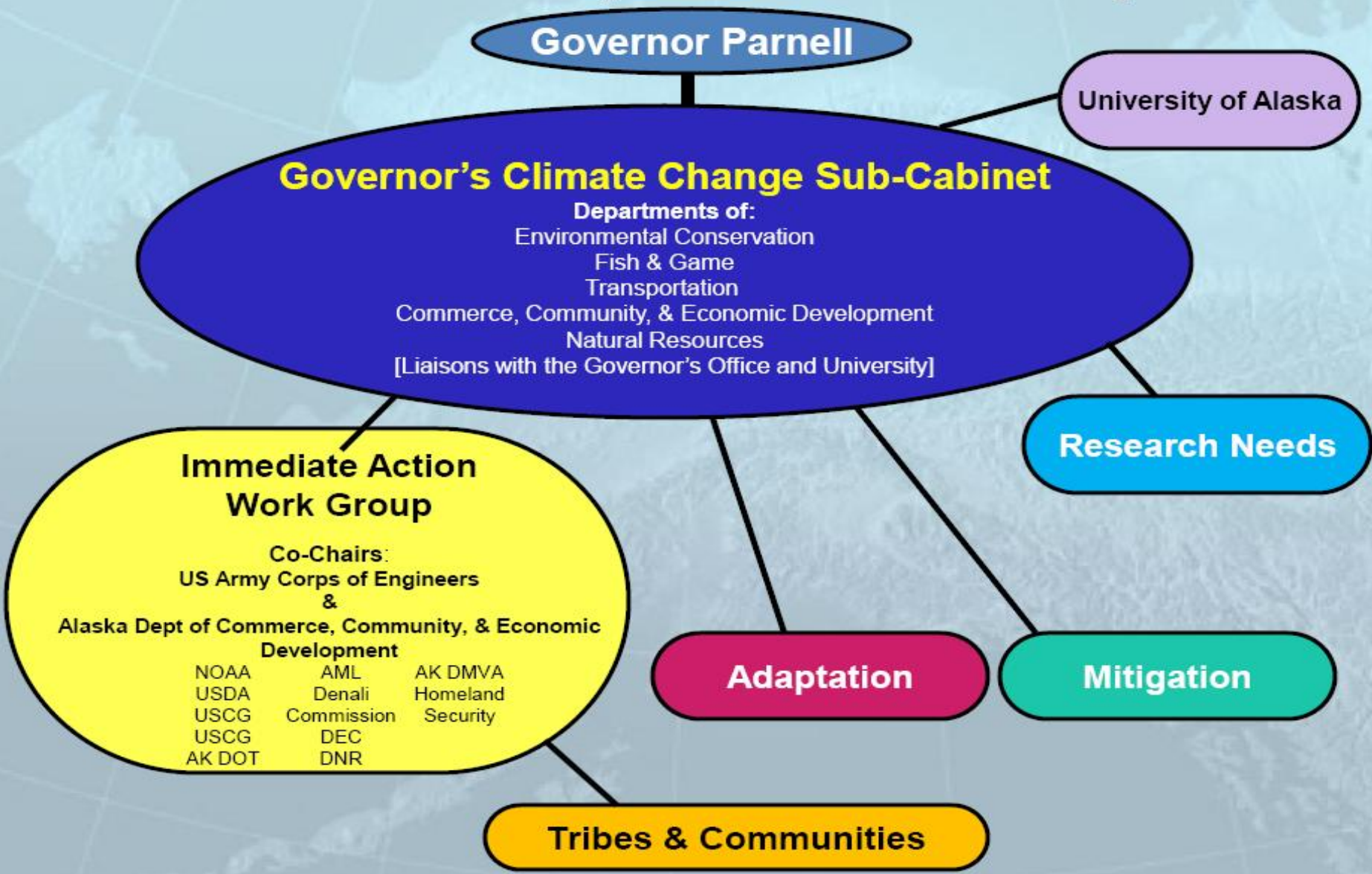


**Cause over \$20M Damage
along the Coast of Alaska**

**Nome, AK – Front Street
(where the Iditarod
finishes) →**



State of Alaska Climate Change Sub-Cabinet & Coordinating Bodies



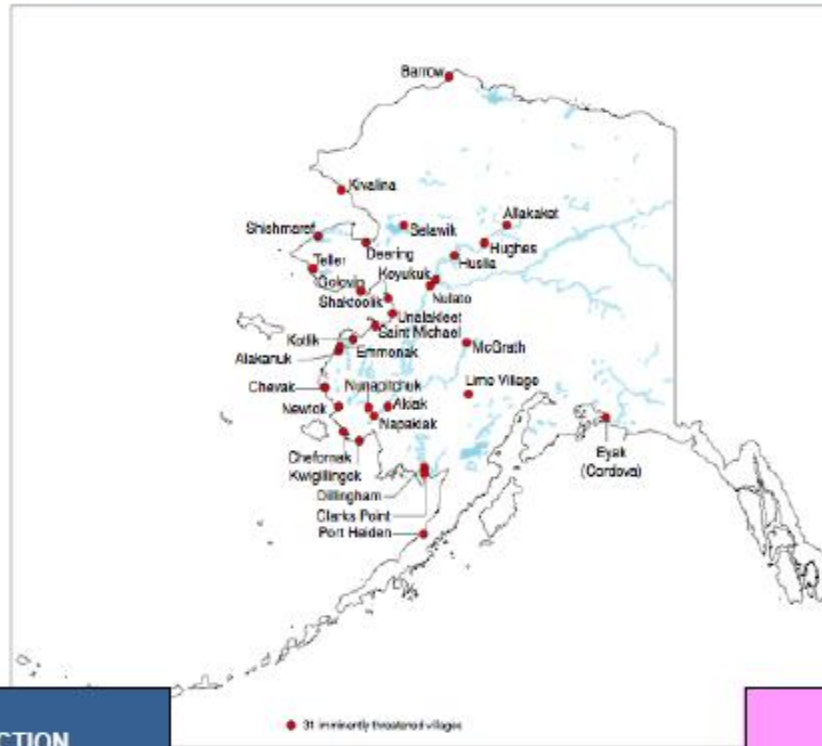
In July of 2008 Governor Palin signed the Administrative Order creating the climate change sub cabinet.

Alaska Communities in Peril

**RECOMMENDATIONS REPORT TO
THE
GOVERNOR'S SUBCABINET
ON CHANGE CLIMATE**



**FINAL REPORT
FROM THE
IMMEDIATE ACTION WORKGROUP
APRIL 17, 2008**



Source: GAO (analysis); Pinay Davis-Bushnell (map)

Requesters
**United States Government
Accountability Office**

GAO

June 2009

**ALASKA NATIVE VILLAGES
Limited Progress Has Been Made
on Relocating Villages
Threatened by Flooding and
Erosion**

GAO-09-551

**IMMEDIATE ACTION
WORKGROUP
RECOMMENDATIONS
TO THE
GOVERNOR'S SUBCABINET
ON
CLIMATE CHANGE**

**Alaska Baseline Erosion
Assessments**

Coastal Communities Faced with Flooding & Erosion

KIVALINA



Shismaref—Storm Damage



Unalakleet Storm Damage



2009 Flood



2009 Flood



2009 Flood

Newtok—Relocating entire community



Mertarvik is now the new location where the whole community of Newtok is currently relocating to. In June of this year about 40 – 50 Marines moved there to assist the tribe during their process of moving the village. The Marines will be helping the community until the fall season.



Participants in Newtok Planning Group

Native Village of Newtok

- ☐NewtokTraditional Council
- ☐NewtokNative Corporation**State of Alaska**
- ☐Alaska Department of Commerce, Community, and Economic Development—*group coordinator*
- ☐Alaska Department of Environmental Conservation (DEC)/Village Safe Water Program
- ☐Alaska Department of Transportation and Public Facilities
- ☐Alaska Department of Military and Veterans Affairs/Division of Homeland Security and Emergency Management
- ☐Alaska Department of Education and Early Development
- ☐Alaska Department of Health and Social Services
- ☐Alaska Industrial Development and Export Authority/Alaska Energy Authority
- ☐Alaska Governor's Office
- ☐Senator Lyman Hoffman's Office

Federal

- ☐U.S. Army Corps of Engineers, Alaska District
- ☐U.S. Department of Commerce, Economic Development Administration
- ☐U.S. Department of Commerce, National Oceanic and Atmospheric Administration
- ☐U.S. Department of Defense, Innovative Readiness Training Program
- ☐U.S. Department of Agriculture, Rural Development
- ☐U.S. Department of Agriculture, Natural Resources Conservation Services
- ☐U.S. Department of Housing and Urban Development
- ☐U.S. Department of the Interior, Bureau of Indian Affairs
- ☐U.S. Department of Transportation, Federal Aviation Administration
- ☐U.S. Environmental Protection Agency
- ☐U.S. Fish and Wildlife Service
- ☐Denali Commission
- ☐Senator Lisa Murkowski's Office
- ☐Senator Mark Begich's Office

Regional Organizations

- ☐Association of Village Council Presidents, Regional Housing Authority
- ☐Coastal Villages Region Fund
- ☐Lower Kuskokwim School District
- ☐Rural Alaska Community Action Program
- ☐Yukon-Kuskokwim Health Corporation

Chefornak 2008



Chefornak 2010





As caretakers of our land, our elders have taught us how to live our life as being one with the earth. It is the very core of our traditional way of life. No one will speak for her, she is our land, air and water. If we abuse her, she will no longer provide for us. We are told at a young age to keep her clean, or she will no longer feed us. Quyana Cakneq.