

# ALEUT PEOPLE:

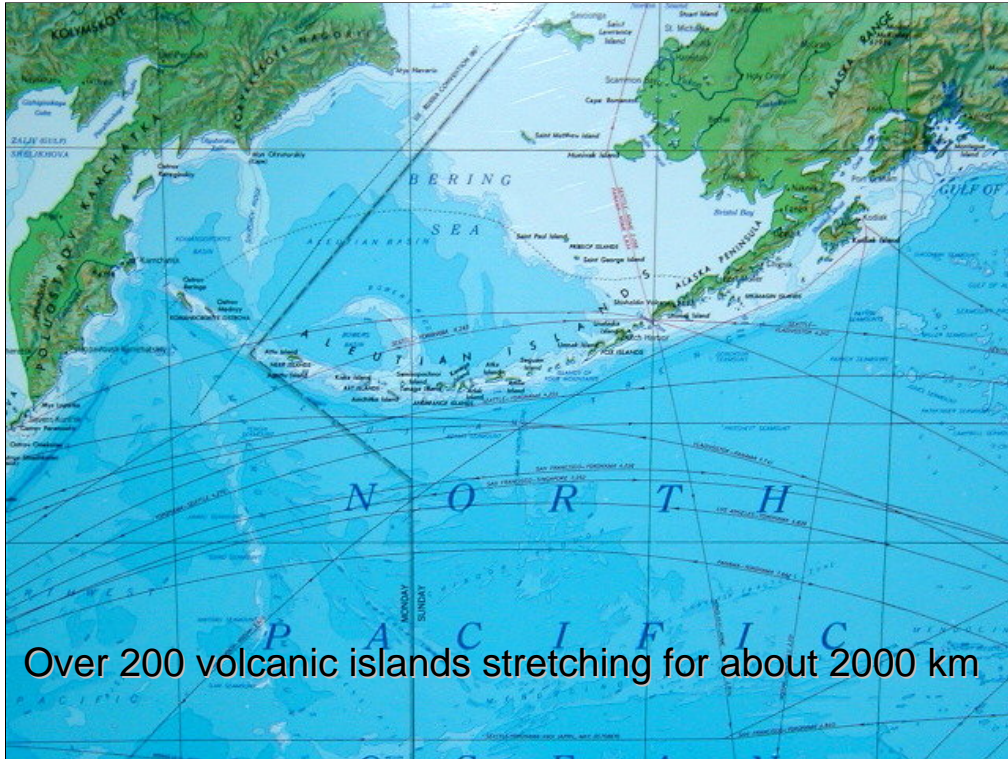


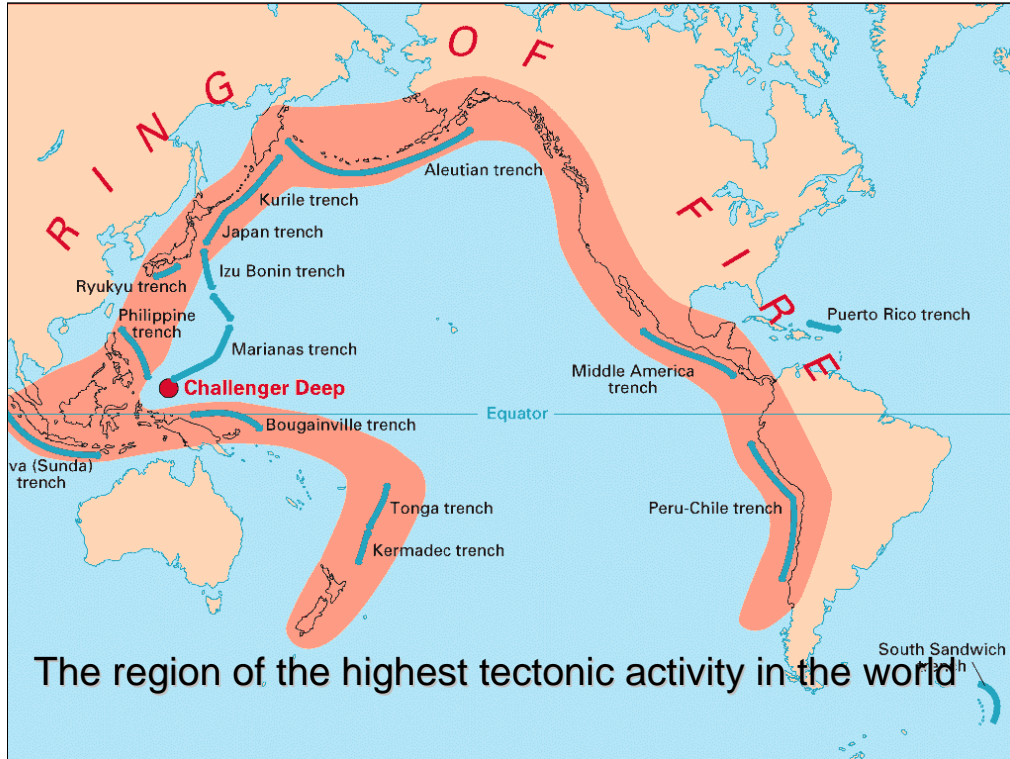
## TIMES OF CHANGE



Aleut International Association,  
Many Strong Voices, Belize, May 2007  
[www.aleut-international.org](http://www.aleut-international.org)

I would like to give a five minute tour of the Aleutian Islands.







13 tribal communities, 11 villages, ~8000 people live there

Nikolskoye, Commander Islands, Russia



About 700 people live on the Commander Islands in Russia



### Birthplace of winds and the Cradle of storms

The economy of the region is tied to the sea as it has been for centuries. The largest city in the region, Unalaska, is also one of the largest fishing ports in the United States, known as Dutch Harbor. The Bering Sea is a major international fishing ground. More than half of U.S. fishery landings are from the Bering Sea catch. Dutch Harbor is the number one fishing port in volume of fishery landings in the U.S. Commercial fishing and seafood processing industry is responsible for 95% of the region's GDP and 2/3 of the labor market.



The region boasts over 90 species of fish. 95 % of gross products are from commercial fishing and seafood fishprocessing



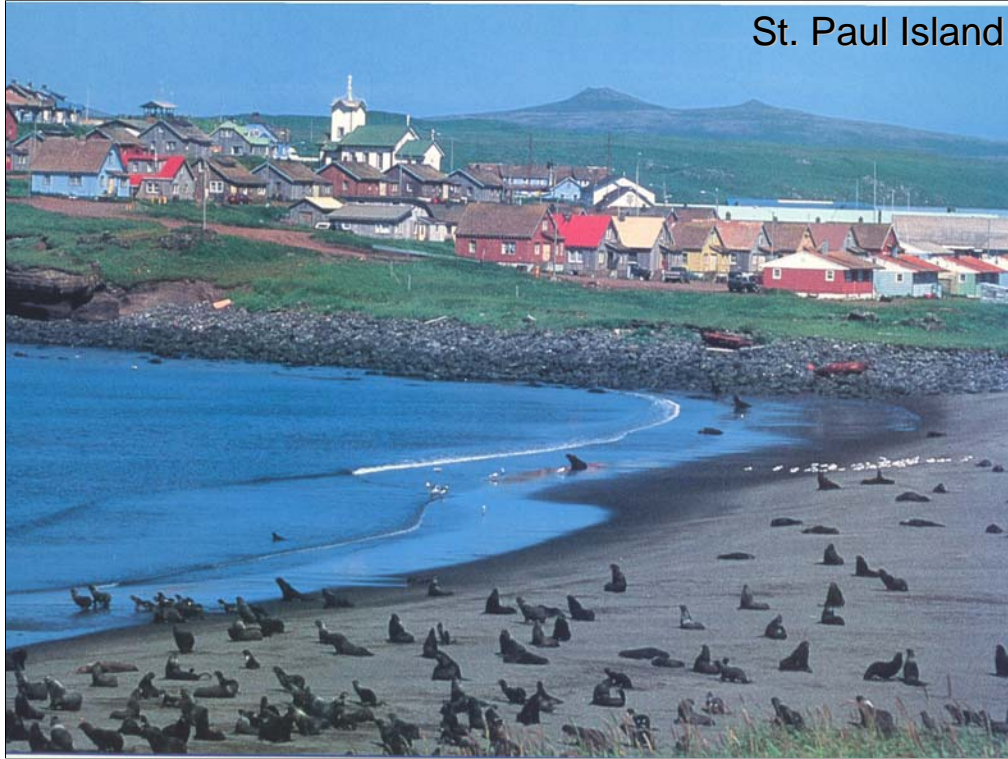


Millions of nesting bird, some of them are endemic to the region.



Largest population of marine mammals

St. Paul Island





Environmental challenges include climate change impacts, the source and impact of contaminants and sustainability of the Bering Sea Resources. Climate change impacts:

Coastal erosion, loss of sea ice, invasive species and safety of traditional food and the decreased access to it



Other stresses include shipping accidents and increasingly violent storms

## Who are the players?

- Aleut Corporation (ANCSA corporation)
- Aleutian Pribilof Islands Assn.  
(Environmental programs, social and health services, cultural preservation)
- Aleut International Association (Arctic Council, international programs)

## Adaptation measures on local level

- An alternative energy program explores wind power, thermal power sources
- New technology for efficient use of residential electric power
- Community-based monitoring programs (oils spills, contaminants, shellfish toxins)

## Adaptation measures on international level

- Development of a Community – Based monitoring network in the Bering Sea region



The concept was conceived during a UNEP-GRID workshop in Arendal in 2003

# Bering Sea Sub-Network BSSN

International Community-Based  
Observation Alliance for Arctic  
Observing Network



A project of the Aleut International Association





Six villages will be selected from the initial 14 shown on the map. The project will likely start in the fall of 2007.

In a true spirit of this IPY our one-year project will go for two years.

We will be traveling through uncharted waters. The concept of community –based observation or place –based research is not new but very little has been done on a network methodology of collection, analysis, and data management. BSSN will set up data management system that is synergetic and coordinates to maximize the data that will be collected by other AON projects.

At the US launch of IPY, Undersecretary of State for Democracy and Global Affairs , Paula Dobriansky, noted three projects: Arctic Human Health Initiative led by CDC, the Arctic Energy Summit and BSSN. The reason I brought it up is her described our project.

“ This is an initiative to monitor changes in the marine environment of the Bering Sea. And villages on both side of the Bering Sea will engage in community-based monitoring of the marine environment and fold their research into the larger Arctic Council Circumpolar Biodiversity Monitoring Program.”

After reading this I imagined a picture from a cooking show where the chef explains “ ...and now the whipped cream is going to be gently folded into the melted chocolate.” This seemingly absurd metaphor provides an insight into the process of integration and synthesis of different types data. We cannot just mix everything, we need to find a way to fold components in a way that we can produce a wholesome product at the end.

## BSSN Co-PIs

- Aleut International Association (V. Gofman)
- University of Alaska (Dr. Lilian Alessa)
- UNEP GRID- Arendal (Joan Eamer)
- Alaska Native Science Commission (Patricia Cochran)

Photo © Alvin Merculief, St. George, Alaska

## **Humans as Sensors of Change**

- Arctic and sub-Arctic have been inhabited for millennia.
- Humans are able to provide reliable, high resolution data.
- BSSN structures these data so they can be used by diverse Bering Sea communities and scientists.

Photo © Alvin Merculief, St. George, Alaska

Humans have been inhabiting Arctic and sub-Arctic for millennia. Indigenous peoples have been finessing the knowledge and senses through empirical observations for thousands of years. Humans could be the most sophisticated sensors able to provide a high resolution imagery that no remote sensor could produce.

The challenge is to learn how to read these fine human instruments. In our project, we will attempt to do this by using innovative methods of surveying for collection of environmental information.

## **BSSN Objectives**

- (1) **Network infrastructure and policies;**
- (2) **Monitoring of selected upper trophic level species** across the network to collect data to answer questions:
  - *1. What are the historical and present distributions and properties ESS (Economic and subsistence species) as derived from collective ITK?*
  - *2. What major variables and indicators may be correlated to develop predicative models based on ITK?*
  - *3. How do community-derived and western science data converge and diverge spatially and temporally?*
- (3) **Collaboration** with SEARCH/AON and other IPY science projects on their community-based research components.

Photo © Alvin Merculief, St. George, Alaska

## BSSN Approaches

- Structured interviews will be conducted to determine status and changes of key environmental indicators. The project initially will focus on establishing the status and the nature of the changes in the recent past (~10 to 20 years) and over the longer term. The **structured interviews** will elicit information about changes in the environment and also changes in the in human interactions with the environment.
- **A resident watch network** will be established to identify emerging issues. This volunteer program will collect observations on anything unusual. This program will consist of observations not subject to statistical treatment, and will be summarized in narrative form.

Photo © Alvin Mercurief, St. George, Alaska

## **State of the Bering Sea Bioresources: Perspectives of Local Residents**

- An independent assessment based on the data collected from local residents
- An innovative way to identify and compare status and trends with scientific assessments, to generate new questions for new hypothesis and research, to prompt investments in community-based research and observation
- From anecdotal evidence to case studies to assessment

Photo © Alvin Mercurief, St. George, Alaska

Results of the community-based observations are often presented as long lists of what people have observed. Such information is used mostly as support data or case studies for conventional or western science. One of the products of BSSN will be an assessment based on observations collected from the local residents using surveys. The assessment may open a door to a deeper understanding of changes as it could lead to identifying emerging trends and formulate prognosis that may or may not coincide with conclusions of western science.

Who is paying for these programs?

Many Arctic villages are poor communities in rich countries

~~WORLD BANK~~

~~GEF~~

# OUR GOVERNMENTS

Most of the programs in the U.S. are funded through competitive grants from various government agencies or direct appropriations



When we begin our deliberations today, please remember that Arctic Communities are not states and the mechanisms of funding of any adaptive activities are very different. However, I believe, we can learn a lot from each other because we face similar problems but we have to select areas for cooperation with care and respect for each others differences. To me, alternative energy research and sharing energy efficient technologies are very promising fields for cooperation. The also address not only adaptation but mitigation as well as they lead to the reduction of consumption of carbohydrates.











