# Summaries from ANSC Regional Meetings with Alaska Native Communities

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# Overview of Regional Meetings

- Funded through the National Science Foundation
- Purpose: determine Alaska Natives thoughts, ideas, and opinions on research needs in their respective regions
- Conducted in traditional Talking Circle format

Northwest January 22-24, 2003

• **Southcentral** May 13-14, 2003

Southeast January 22-23, 2004

• Yukon-Kuskokwim March 11-12, 2004



- Earth Science
  - Exploration of changes in the local ecosystem: caribou migration, oceanographic changes and the corresponding relationship between the changes and the health of local indigenous people
  - Impact of water, sewer, and solid waste installations in remote Arctic villages on local ecosystems



"The development that is going on in our community is changing our lifestyles. We see that they are building houses and putting in water and sewer and we are worried about the effect of this. For example, not too long ago a pipe burst and 300 gallons of raw sewage went into our river.

We don't know what is happening. We don't really even think about it and we don't realize the positive and negative effects. When development is happening in our community, we have to be involved." (Charlie Curtis, Kiana Traditional Council)





- Research Concerns (continued)
  - Atmospheric
    - Global changes and the impact/relationship to the Arctic ecosystem, such as animal migration, waterway and climate changes
    - Unusual lights in the sky above several Native communities
    - Boundary and weather pattern shifts as reflected in changes and impacts to localized Arctic ecosystems

- Research Concerns (continued)
  - Oceanographic Research
    - Impact on preserving the traditional Native lifestyle:
      - retaining cultural traditions
      - physical impact upon communities by changes in water temperatures
      - current and channel changes, water depths
      - migration changes
      - -quality, quantity, and availability of fish



- Research Concerns (continued)
  - Arctic Social Science
    - Impact of social and economic trends upon the local indigenous peoples' traditional ways of life
    - Comparison of historic Native ways of life today



- Communication & Research Process
  Concerns
  - Accuracy of local information
    - Information that is collected by researchers is not brought back to the community for review prior to release of findings.
    - Without this review process, inaccurate information can be introduced into the research process and result in inaccurate findings

- Communication and Research Process Concerns
  - Communicating Research Results to the Community:
  - After a research project is conducted, information is often not relayed back to the community and/or program participants.
  - A peer review would help alleviate this problem
  - Ensure research results are presented to participants and local government entities such as local Tribal councils and regional corporations.

- Earth Science
  - Research efforts should determine what changes are occurring in Alaska's glaciers compared to changes on a global scale.
  - Exploration of changes in the local ecosystem, i.e., decline in health and number of wildlife, marine life and birds, introduction of new species and understanding the reasons for these changes and the affect upon the lifestyle of Alaska's indigenous people.

- Arctic Social Science
  - Establishment of a Learning Center based on traditional values with Elders in leadership roles and involved in the creation of all aspects of center
  - Research Native worldviews to discover commonalities throughout
  - Research the effectiveness of a western sciencebased education system in regards to Native students as it relates to special needs determinations,
  - Opportunities to learn and apply Native knowledge, cultural awareness of educational staff and make appropriate recommendations to State education officials

# Native Knowledge & Research Process Concerns

- Aligning traditional needs with that of western science applications when completing applications for research projects
- Difficult to submit an effective application because the two areas often approach a subject from opposing views





"Subsistence is a very divisive issue in the State of Alaska and it's not the correct word to use in dealing with the resources out there in rural Alaska. When they're talking about subsistence, sometimes other people or other cultures understand it as the way of human beings. An elder from the Interior of Alaska was telling me, instead of using the word 'subsistence' why don't we start saying 'livelihood.' It's very generic, even the simplest minds can understand livelihood." (Ole Lake, Hooper Bay)



# Concerns in Continuity of Research

- Coordinate research and use equally weighted priorities. Many organizations participate in research projects throughout the Arctic region, often researching different aspects of the same issue.
- Action-Oriented Results. Studies are conducted over several years with no action taken.

- Loss of traditional knowledge
- Contaminants and Health
- Commercial (cruise, tankers, fishing) vessel pollution and ballast (exotics)
- Need for documentation of traditional knowledge and application in professional research
- Management, regulations, and politics



#### Research Concerns (continued)

- Salmon
- Population declines (esp. harbor seal, herring, salmon)
- Sea otter populations growing, competing for subsistence foods (shell fish)
- Limited funding sources
- Sacred sites and acid rain
- Access issues



- Research Concerns (continued)
  - Loss of traditional knowledge
  - Persistent Organic Pollutants
  - Lack of military clean-up funds
  - Changing quality of subsistence foods
  - Commercial vessel pollution and ballast
  - Local native authority over regulations and territory boundaries



#### Research Concerns (continued)

- Abnormalities in fish
- Population declines in harbor seal, herring
- Population growth in sea otters
- Limited funding sources
- Preservation of sacred sites
- New boat launches
- Increased landings (fast ferry)



- Climate
  - Water issues
    - Rivers shallower,
    - Lakes drying up
  - Increase in different kinds of spiders/bugs not native to Alaska
  - Freezing weather has slowed down



- Research Concerns (continued)
  - Community
    - Sewage
    - Location of land fills
    - Dumping of batteries
    - Method of recruiting subjects for research
    - Mildew in homes



- Development/Industry
  - Bering Sea being raped of its resources
  - Mining, dumping of chemical waste, byproducts, equipment
  - Deforestation
  - Increase in tourism, sport fishing/hunting and problems they bring (fuel, planes, pollution, waste of animals)
  - Noise pollution, hydrocarbons dumped daily, biogenetically changed foods



"Big companies are hurting us, like the mining companies causing contaminants. They are using heavy equipment and dredges, arsenic, mercury and selenium and other toxics under ground which are then dumped into the main river.



"They have settling ponds, they call them settling ponds, but every time we have rain and high water those settling ponds overflow and flow into the main rivers and we drink the water." (John Napoka, Sr., Tuluksak)



- Education
  - Global as well as local
  - Native education of our youth
  - Teaching parenting to our children
  - Education and testing is skewed



#### Research Concerns

#### Environment

 Local observations document changes in wildlife (population, pattern, behavior), plantlife, erosions, abandoned beaver dams, atmospheric changes

#### Health

- Sickness/deformity/change in taste of fish
- Increased asthma/respiratory and allergic problems
- Importance of Native foods



#### **Research Process Concerns**

- More collaboration between Western scientists and Native scientists,
- Need to LISTEN to each other
- Increased village partnerships
- Include Elder representation



