A Tribal Partner’s Perspective

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Adverse Environmental Impacts on the Ankau Saltchucks

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Ankau Saltchucks
Ankau Saltchucks

“OUR BEACHES WERE OUR GARDEN...
ANKAU ALWAYS HAD THE BEST OF EVERYTHING”

- Rich estuary with abundant clams, cockles, crab, fish, seals, ducks, moose, deer, berries, and useful plants
- Used all year round for hunting and gathering of subsistence foods
Ankau Saltchucks Culture Camp

• A place where our children learned and lived the traditional Tlingit way of life
  • Song
  • Dance
  • Storytelling
  • Language
  • Arts and crafts
  • Preparation of traditional subsistence foods
Our Culture Camp began in 1985 and closed in 2003 due to concerns about dioxins in the soil, water, and seafood.
Military History

- U.S. military occupied the Phipps Peninsula and areas surrounding Yakutat since 1929
- Strategic World War II Air Base from 1940 to 1945
- U.S. Army, Navy, and Air Force facilities were located in and around Yakutat
Military Impact Concerns

- Dioxins and furans
- Polychlorinated biphenyls (PCBs)
- Diesel
- Gasoline
- Oil
- Metals
- Asbestos
- Debris dumps
- Barrel dumps
- Fuel storage areas
- Firing ranges
- Septic systems
- Culverts and roads
How Mitigation of Impacts Began

• Community health concerns raised awareness of the possibility of dioxin exposure

• Former military facilities were identified as possible sources
Native American Lands Environmental Mitigation Program (NALEMP)

• Cooperative agreements are negotiated between federally recognized tribes and U.S. Department of Defense (DoD)

• Tribes identify sites that are eligible for work under NALEMP, develop strategic plans, and manage the work

• Yakutat NALEMP Objectives:
  • Protect the Tribal food gathering areas within the traditional and customary use lands of the Yakutat Tlingit Tribe
  • Protect and provide for the health and safety of the Yakutat Tlingit Tribe
  • Protect and enhance the environment
  • Preserve the Yakutat Tlingit culture
Challenges

Convincing others there is a problem

• Limited options under NALEMP
• Limited sampling and inconclusive results from Culture Camp under FUDS
• Limited support from Alaska Department of Public Health (Now working with Tribe)
Strategic Planning

• What do we know?
  • Compile and review existing data

• What do we need to know?
  • Identify targeted sampling areas
  • Compile data to strengthen the Tribe’s case

• How do we ensure high quality data?
  • EPA support in developing sampling and analysis plans
  • Independent data review and validation

• How DO other agencies help?
Review of Dioxin Sampling Conducted Under Formerly Used Defense Sites (FUDS)

- During 2003, 2004, and 2006, samples of soil, surface water, sediment, and shellfish tissue were collected within the Yakutat area.
- Of the contaminants of concern detected, dioxins are of greatest concern to the Yakutat Tlingit Tribe and Yakutat community.
- The Tribe compiled and evaluated existing dioxin data that were collected within the usual and accustomed lands of the Yakutat Tlingit Tribe.
2010 Site Investigation

- Funded under EPA Tribal Response Program
- Built on results of previous investigations
- Soil sampling in the Culture Camp area and analysis at lower detection levels
  - Developed a sample profile for the dioxins
  - Compared to typical source profiles
- Seafood sampling within the Ankau Saltchucks
  - Determined whether elevated dioxin concentrations in tissue are localized or wide-spread
Recommendations from 2010 Site Investigation

- Collect additional sediment samples over a more extensive area
- Analyze sediment samples to lower detection limits
- Collect additional shellfish samples over a more extensive area
- Analyze shellfish tissue to lower analytical detection limits
- Co-locate shellfish and sediment samples
ATSDR Involvement

- Yakutat Tlingit Tribe petitioned ATSDR for assistance in evaluating findings
  - Working with Joe Sarcone, Environmental Health Scientist
- ATSDR reviewed results of 2010 investigation
  - Determined that quality of data is excellent
  - Identified additional data needed
Yakutat Tlingit Tribe and ATSDR Concerns and Public Health Evaluation

- ATSDR met with the community to compile information on subsistence use of the Saltchucks and assessed:
  1) Whether community members still gathered food from the area
  2) What kinds of subsistence foods were gathered
  3) How much of each subsistence food is consumed
Next Steps with ATSDR

• ATSDR partnered with environmental public health experts on dioxin to evaluate the dioxin data from investigations of the Ankau Saltchucks
  • 2010 shellfish and soil
  • 2012 shellfish and crab
  • 2013 shellfish and sediment
  • Culture Camp soils
**Summary**

**ATSDR responds** to two tribal community concerns:

- Are dioxins in shellfish from the Ankau Saltchucks harmful to our health?
- Can exposure to dioxins in the shellfish account for the high cancer rate in Yakutat?

**ATSDR partners** with a toxicologist expert on dioxin and an epidemiologist from the State Cancer Registry to tackle these hard questions.

**ATSDR provides** feedback to the Tribe that is helpful in deciding the future use of the Ankau Saltchucks for shell fish harvesting and informs the discussion of reopening the culture camp.