## A Tribal Partner's Perspective



Alex James
Project Manager
Yakutat Tlingit Tribe





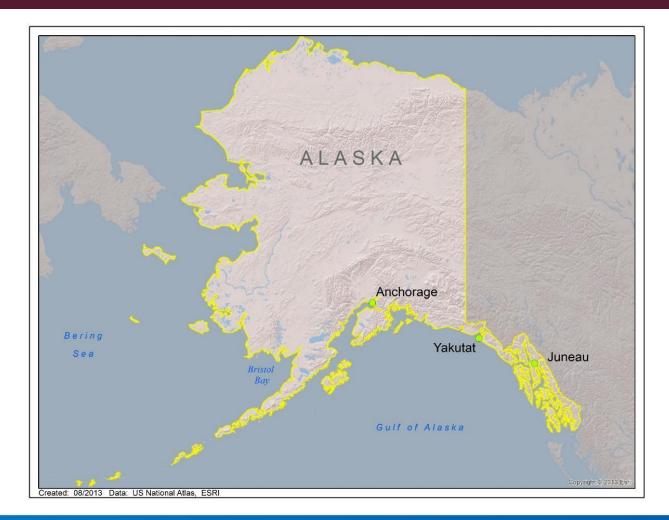
## Adverse Environmental Impacts on the Ankau Saltchucks







## Alaska









## **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









## **Ankau Saltchucks Culture Camp**

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











## U.S. Department of Defense

#### 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.









