Social - Ecological Dynamics of Interior Alaska

Bonanza Long-Term Ecological Research
IV. Coupled Social-Ecological Dynamics for Interior Alaska

1. Identify important ecosystem services
2. Identify past trajectories, rates of change and likely future changes in services.
3. Model social-ecological interactions at the household level
4. Conduct institutional analysis
5. Through partnerships with communities identify conditions that facilitate innovation in future human adaptation and transformation.
Nenana

- Population = 404
- 41% Alaska Native
- History of change
  - High dependence on moose and salmon
  - On the road system
Local Knowledge of Social and Ecological Change in Interior Alaska

Film: Elders of Nenana

a project of the Bonanza Long-Term Ecological Research Program
Maps and Locals Project in Nenana

1949

1976

2002

2010
92,577 lbs flowed to Venetie households (core species, 12 months)

80,874 lbs was harvested
How much food flows into Venetie households – AND what kinds of relationships are important?

The top 5 ranked households are responsible for 48% of inflows reported by other households (shares-helping, sharing).
Complete Network – Venetie
All meat/fish and support provided by any household for a Venetie Household
Sharing and Food Security in Venetie

~35% of households reported they were food insecure....

Larger circles = more inflows from sharing

Red Hhs = Food INSECURE
Green Hhs = Food SECURE