

Collaborative Adaptive Science for Self Reliance: Redefining Partnerships with Communities



Photo: Corrie Knapp

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Presentation Structure

- Why am I here?
- Background
- Outcomes
- Lessons Learned
- Why adaptive science is important to adaptive management?



Community Meeting in Igiugig

Why am I in this session?

- Rangelands?
- Adaptive management?
 - Adaptive and collaborative science
 - Learning experiments for adaptation to climate change
 - Challenge the traditional relationship between researchers and communities
 - **Connect innovators to each other**

The Alaskan Context



- Historically adaptive.
- Confluence of increased gas and food prices, reduction in state budgets, outmigration and climate change.
- From 1949-2000, temperatures increased 1.7C (Stafford 2000).
- 86% of communities at risk for flooding & erosion (GAO 2004).



Historic Relationships

- The relationship between scientists and native communities have not been ideal.
 - research goals determined by scientists
 - no reporting back to communities
- Alaska Native Science Commission founded in part to improve this relationship.

Motivating Question

How can Native communities maintain their tradition of self-reliance and other cultural values?

A New Model:

Community Partnership for Self Reliance and Sustainability
(CPSS)

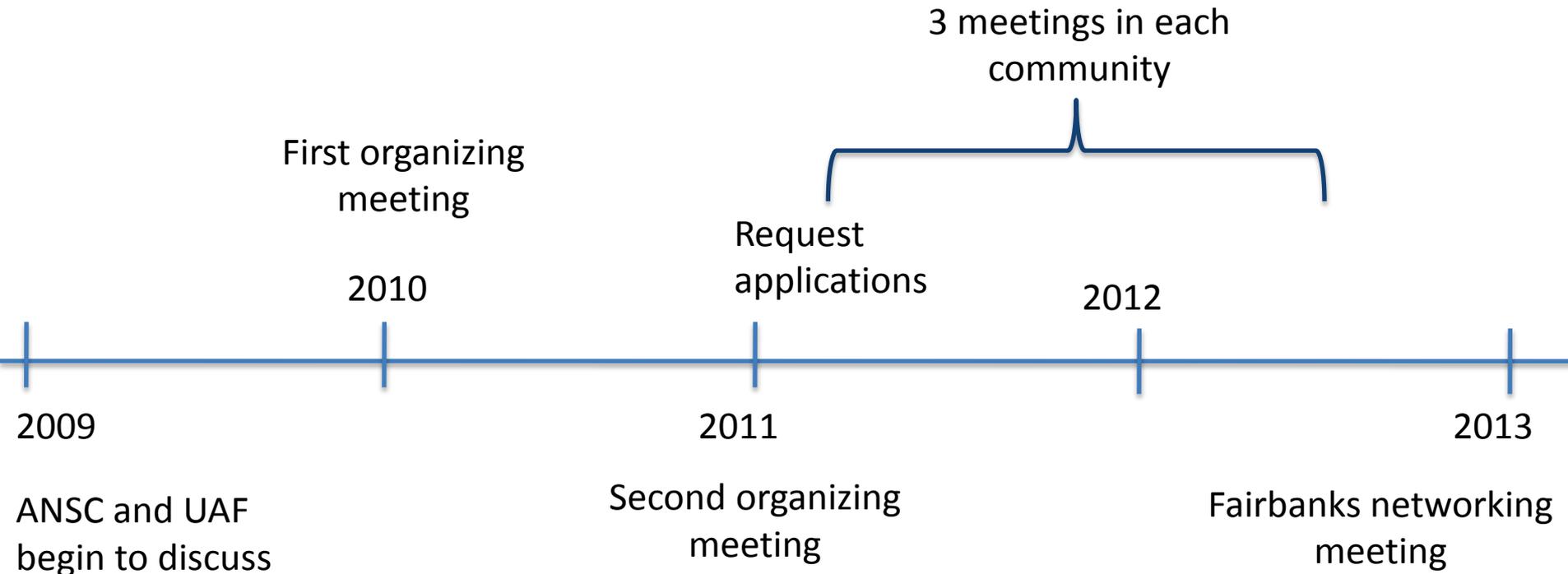
- **Goal:**
to implement each community's long-term vision for self-reliance and sustainability
- **Elements:**
 - Partner with eager learners
 - Listen actively
 - Community-driven

Partnership Roles

- ***Alaska Native Science Commission:*** take the lead in engaging communities
- ***Communities:*** define their own goals for self-reliance and pursue partnerships
- ***Graduate Students and Community Contact:*** primary communication link
- ***UAF:*** provide technical and research expertise requested by communities



Our Process



Communities

- Selection of communities
 - Not representative
 - Start with “willing learners”



Newtok



Iguigig



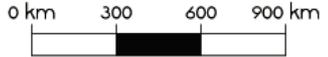
Koyukuk



Nikolai



ALASKA
(United States)



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CHUKCHI SEA

BEAUFORT SEA

RUSSIA

ARCTIC CIRCLE

ARCTIC CIRCLE

Great Bear Lake

Chukchi Peninsula

Bering Strait

Koyukuk

Nikolai

MACKENZIE MOUNTAINS
ROCKY MOUNTAINS

CANADA

BERING SEA

Newtok

Igiugig

ALASKA RANGE

Anchorage

JUNEAU

Whitehorse

Gulf of Alaska

Aleutian Basin

Aleutian Islands

PACIFIC OCEAN

Queen Charlotte Islands

Prince George

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6194
Mount Mc Kinley

Yukon

Mackenzie

Yukon

Kodiak

Sitka

Ketchikan

165°

150°

135°

120°

165°

150°

135°

120°

Community Concerns

Shared Issues:

- High cost of energy
- Subsistence
- Education

Unique Issues:

- Village relocation (Newtok)
- Flooding (Koyukuk)
- Clean water (Iguigig)
- Salmon fishing (Nikolai)

Community Solutions

- Existing strategies:
 - Formation of for-profit and nonprofit corporations,
 - Purchase of equipment (multiple uses),
 - Training of community members, and
 - Learning about projects or funding from other communities.

Reflection Survey

- Questions about:
 - Past interactions
 - Potential improvements
 - Benefits of experience
 - Improve self reliance?
 - Future partnerships
 - Other comments

Reflections on Partnership

- **Past Interactions**
 - No one worked with ANSC or UAF before
- **Potential Improvements:**
 - More time in communities
 - Build trust

“ You guys did an awesome job, maybe spending more time in the communities. Sometimes it takes time for people to open up. They need to get to know you first”

Community representative

Reflections on Partnership

- **Benefits for communities:**
 - Researchers listen
 - Provide space to reflect
 - Provide opportunity for discussion
 - Specific project-related benefits
 - Connect communities

- **Benefits for ANSC and UAF :**
 - Learn about problems
 - Opportunity to communicate more effectively
 - Influence long-term goals and research philosophy

“Now I know the people to contact about the concerns we have”

Community representative

Reflections on Partnership

- **Self-Reliance**

- All agree that the CPSS Partnership has helped improve their self-reliance

“It has helped us to step back and verbalize and summarize steps we can take towards self-reliance”

Community representative

- **Future Partnerships**

- All agree that they would like to continue to work with CPSS

“They can direct me on the right path to connect with people”

Community representative

Next Steps

Specific:

- Communities will continue to work through new connections to solve current problems.
 - EX: Salmon workshop to discuss decreased populations

General:

- Working to scale up
 - Events to share partnership
 - Development of knowledge network
- Capacity building
 - Training in grant-writing skills
 - Educational opportunities for community members

Redefining Partnerships with Communities

- Active listening
- Share control
- Play a boundary role



Why adaptive science is important for adaptive management?



Questions?