## People in the 21st Century

### Map, compass, and

# Map, <u>compass</u>, and knowledge of place













# Map, compass, and knowledge of place















# Salmon and People as complex adaptive systems

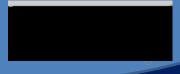
What ought to be sustained is an variables:

between three dynamic

- Arthur McEvoy 1996







# Salmon and People as complex adaptive systems

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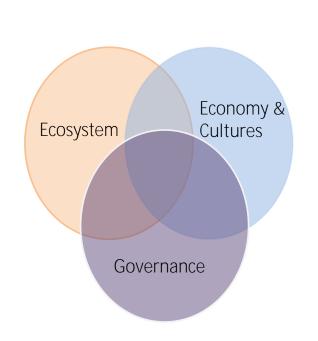
What ought to be sustained is an variables: an

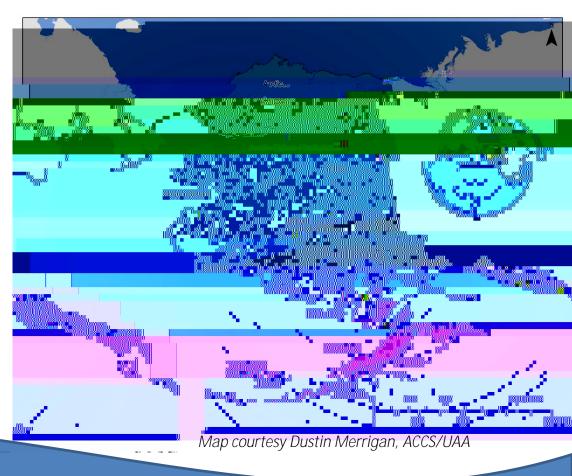
between three dynamic





# Examination of the three variables at statewide scale

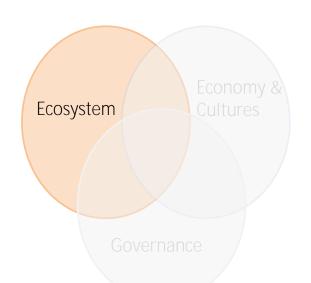


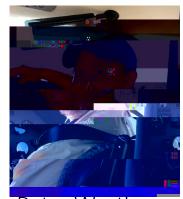






# Bio-physical working group (









Peter Westley

Dan Rinella

Stephanie Quinn-Davidson





Additional support from: Matt Sloat Brian McKenna Rich Brenner Jon Gerken ACCS Team

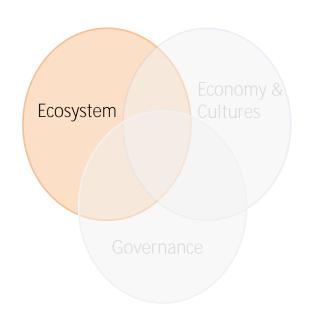
Madeline Jovanovich







### Biological System - First steps



- Abundance and productivity
  Data from over 650 sites, from 1955-2016, > 1 Billion counted fish
- 2. Age and size structure (escapement quality)
- 3. Distributions (e.g. Anadromous Waters Catalogue, colonization of Arctic, use of marine habitat)







# Physical system-identifying data to address 4 Cs





Artwork by 'Salmon & Society' student Alix Connor

- 1. <u>Cold</u> (e.g. water temperature; Cook Inlet Keeper; SNAP)
- 2. <u>Clean</u> (presence of invasive species, extent of urbanization, water quality)
- 3. <u>Complex</u> (Riverscape Analysis Project)
- 4. Connected (culverts and fish passage)







#### Sociocultural and Economic





Courtney Carothers

Jessica Black





Toby Schw rer

UAF UAF UAA emeritus

ADF&G

Yukon River Intertribal Fish Commission

*AMCC* 

**UAA ISER** 

ADF&G

UAF

Native Village of

Kotzebue

Central Council

Tlingit & Haida Indian Tribes of Alaska

Kawerak







### Guiding Principles









### To summarize:



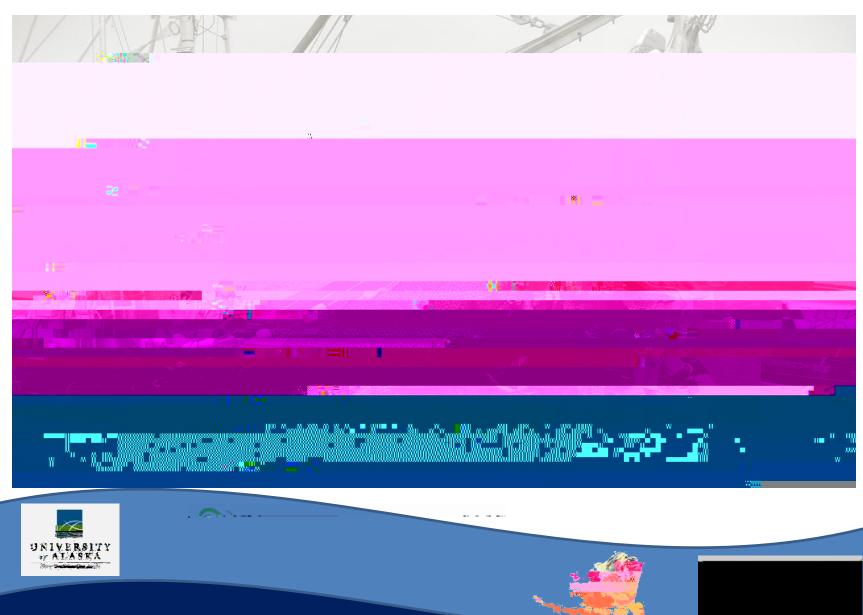






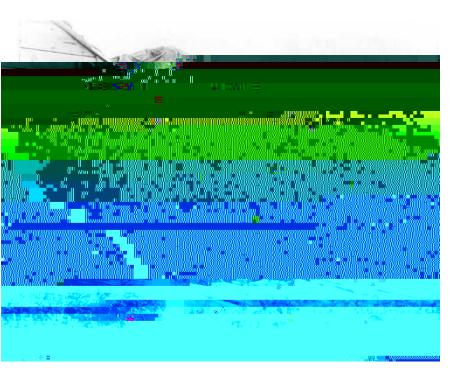


#### To summarize:



#### Governance

### Some major goals are to:



Humans have been interacting with salmon in Alaska for over 10,000 years.

Identify the concepts, institutions, policies and processes which have guided these interactions through time

Describe indigenous processes of engagement and utilization of salmon, with emphasis on subsistence, through historical and ethnographic research

Summarize contemporary practices of indigenous governance through interviews with elders

Use historical records to describe post-contact systems of governance including, Russian, federal and state







#### Some expected outcomes:

Identification of critical policies that guide governance as result of court decisions

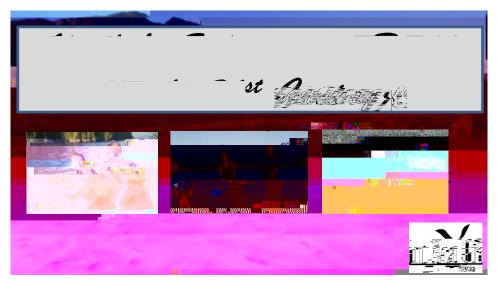
Increase awareness of databases that provide evidence of



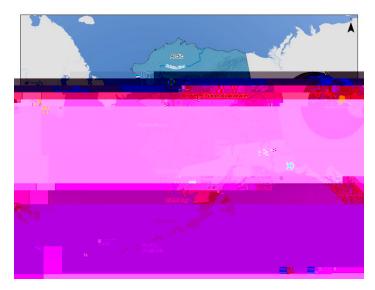




### SASAP project communication



Publications written for wide audiences



Web-based interaction tools



Shortfilms







## Map, compass, and knowledge of place are necessary but not sufficient







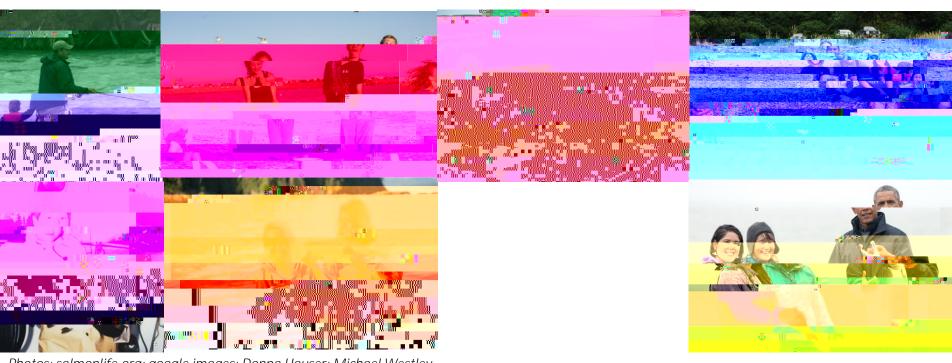








## Collective need to decide what sort of world we want











# State of Alaska's Salmon & People in the 21st Century



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