

Assessing the Human Component – Socioeconomics and the Ecosystem

A Presentation for the
Workshop on “Climate
Effects on the Gulf of
Alaska LME”

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OVERVIEW

- Why are humans relevant in the context of fisheries management?
- Humans are the endpoint of the conceptual model
- Different management strategies will impact humans in different ways
- Understanding the linkages allows us to be proactive rather than reactive



DESIRED RESULTS

- Establish links between fisheries and community well-being
- Create regional economic models of fisheries
- Analyze alternative management strategies and the resulting socioeconomic impacts
- Evaluate communities' response to alternative management actions and ecosystem change
- Measure benefits, costs and the distribution thereof associated with consumptive and non-consumptive resource use



EXAMPLES OF SOCIOECONOMIC DATA

- **Fisheries Data:**
 - Prices (e.g. Ex-vessel, wholesale, retail)
 - Processing production by species and product
 - Variable/fixed costs for vessels and processors
 - Spatial and temporal distribution of fisheries
 - Employment and income data for crew and processing plant workers
- **Community/Regional Data:**
 - Socioeconomic and demographic data for fishery dependent communities
 - Community and regional economic data
 - Subsistence harvest and consumption data

CURRENT SITUATION

- Socioeconomic data collection and analysis tends to happen out of necessity
 - i.e. in the context of EIS, fisheries management planning, regulatory measures.
- Meaningful long term time-series data do not exist
- Problems with existing data
 - Not at correct temporal and spatial scales
 - Not detailed
 - Break down easily
 - Do not account for fishing effect
- Trade-off issues
- Summary: Lack of data makes analyses, predictive modeling, pre- and post-studies difficult to do

NEXT STEPS

- Focus on establishing a baseline
- Pool existing data sources into coherent data-set
 - E.g. SWAMC, CFEC
- Mine TEK and LTK data sources
- Socioeconomic data collection
 - Correct spatial and temporal scales to specify dynamics
 - Compatible with biophysical models
 - Increased level of detail and transparency
- What is doable?
 - Focus initially on case study fisheries and communities
 - Development of key indicators that relate most directly to climate change and related environmental changes
 - Seek stakeholder buy-in and participation