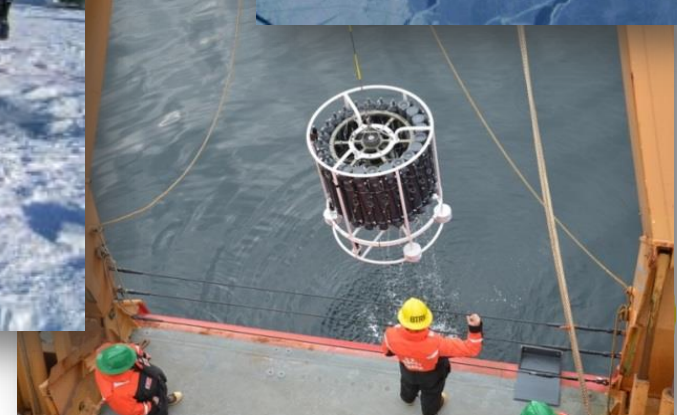


# *Science-informed Decision-making*



**Dr. James (Jim) Kendall**  
Regional Director, Alaska OCS Region  
U.S. Department of the Interior  
Bureau of Ocean Energy Management



## BOEM's Mission:

*... to manage development of the United States Outer Continental Shelf energy and mineral resources in an environmentally\* and economically responsible way.*

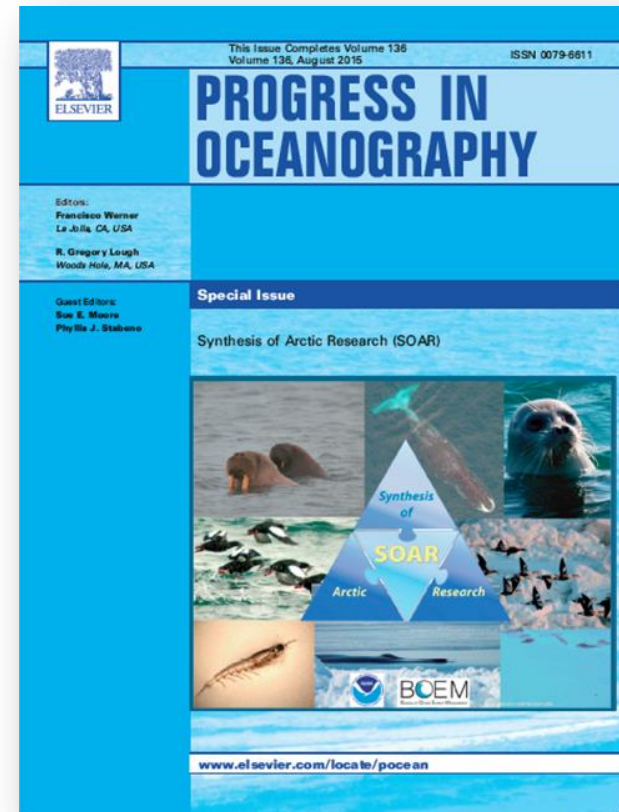


\*includes the **human**, marine, and coastal environments



## Science helps us to predict environmental impacts & to monitor for changes over time

- **~\$500M in Studies Funded in Alaska!**
  - More Than 1,000 Reports & Published Articles
- **Currently ~\$12M+ per Year** with an Additional \$5M in Leveraged Funds
- **2007 – Present (Arctic Focus):**
  - Marine Mammals
  - Ecosystem Monitoring
  - Physical, Biological, & Chemical Oceanography
  - Fate and Effects Modeling
  - Atmospheric Science
  - Social Systems
  - Benthic Ecology

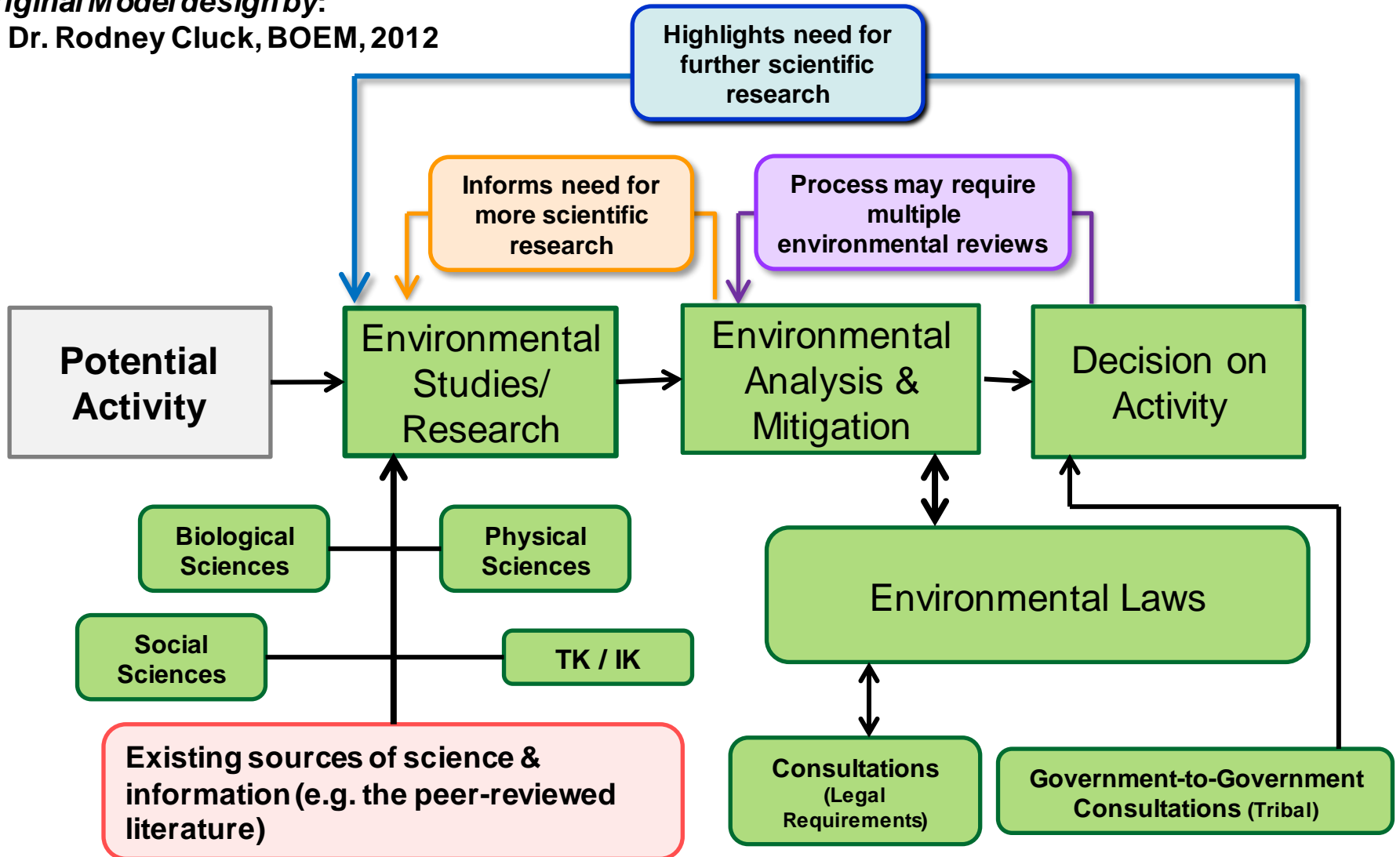


***“A body of evolving practical knowledge based on observations and personal experience of local residents over an extensive, multi-generational time period”*** BOEM Ocean Science Journal, 2012

- Sometimes perceived as difficult to integrate with “Science”
- **PGO.....to follow!**

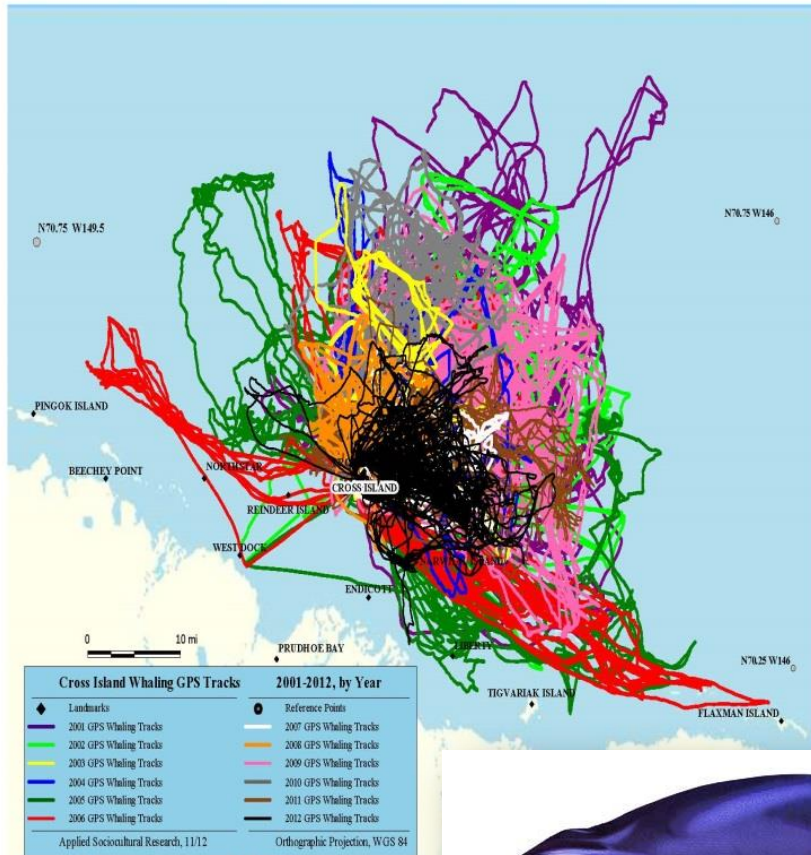


*Original Model design by:*  
Dr. Rodney Cluck, BOEM, 2012





## Cross Island Subsistence Bowhead Whale Hunt Mapping



- TK about whale behavior underscored Iñupiat concerns that industrial activities would impact hunting success.
- Hunters provided GPS Units to record boat tracks and whale strikes from 2001-2012.
- Result: convergence of BOTH knowledge systems, enabling conflict avoidance.

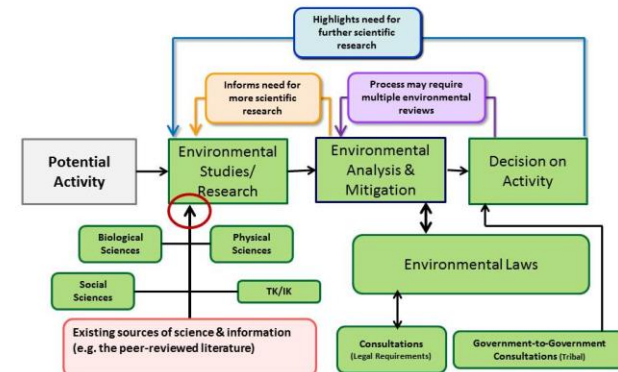
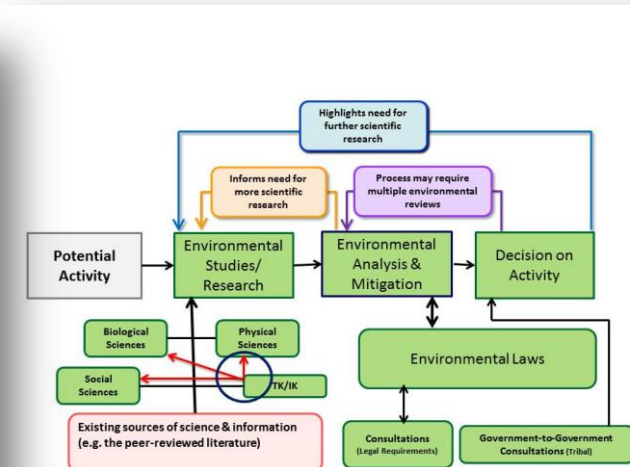


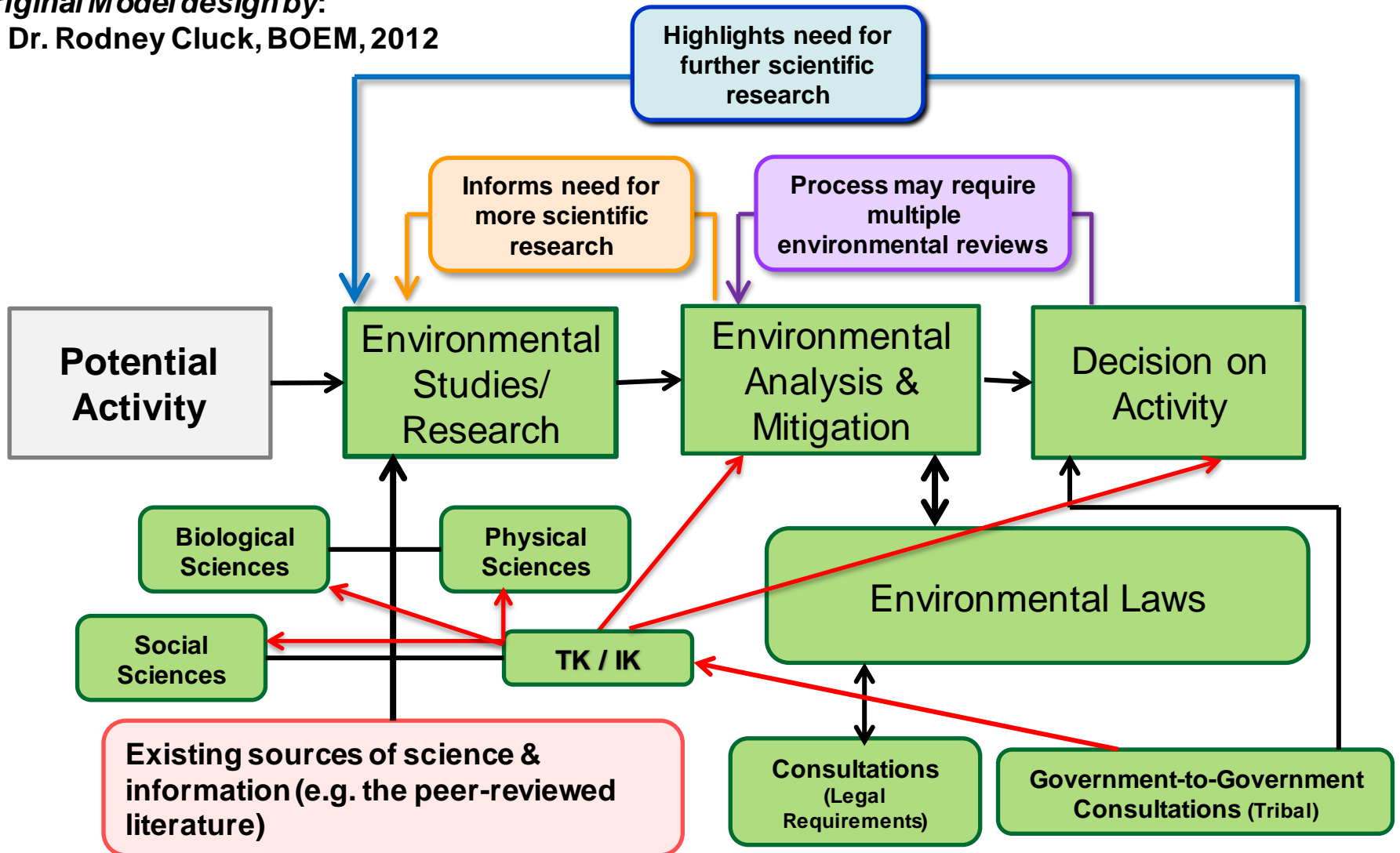
FIGURE 6. GPS tracks for Cross Island whaling by year, 2001–2012

## Why did the Arctic cisco of the Colville River, an important subsistence fishery, crash?

- BOEM hosted a workshop of Iñupiat expert fishers, elders, and scientists to prioritize concerns about the 3-year demise of Arctic cisco.
- A panel of indigenous experts guided the research from the hypothesis stage to preparing the final report.



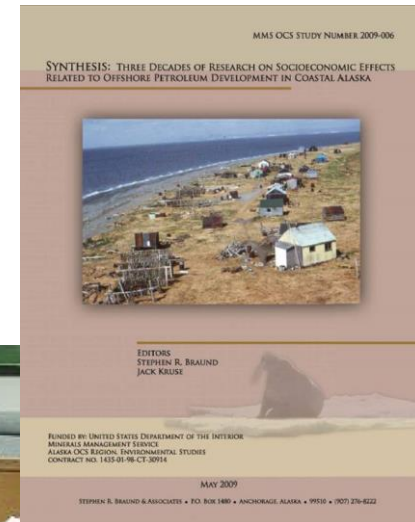
*Original Model design by:*  
Dr. Rodney Cluck, BOEM, 2012





***“A body of evolving practical knowledge based on observations and personal experience of local residents over an extensive, multi-generational time period”*** BOEM Ocean Science Journal, 2012

- Sometimes perceived as difficult to integrate with “Science”
- **PGO:** Best to treat TK / IK and Science as separate; but, comparable knowledge systems in the decision-making process



***Science, Traditional Knowledge, and Collaboration are part of the our Decision-making Process leading to:***

- Exploration - Eni Nikaitchuq North Exploration
- Development - Liberty Development Plan
- Production – Northstar Island





# QUESTIONS?

