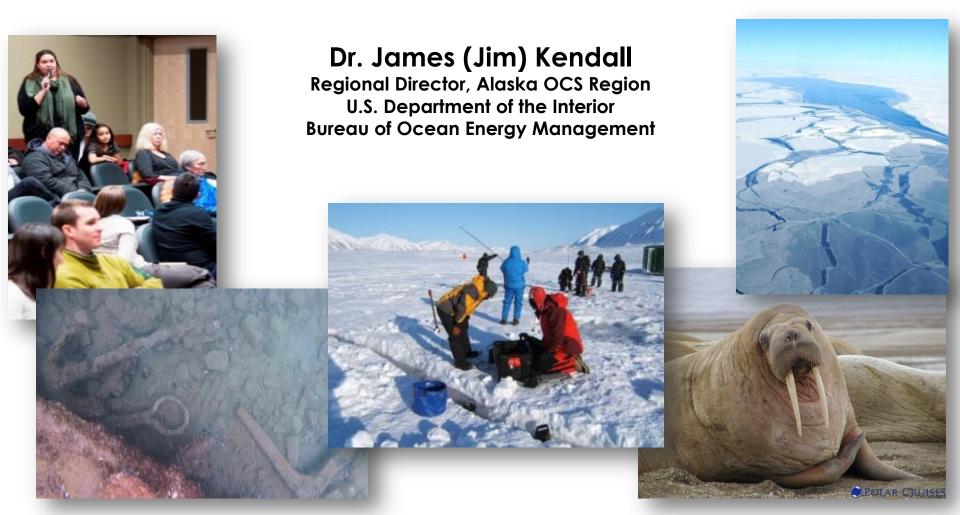


U.S. / Canada Northern Oil and Gas Research Forum

Role of Research in Regulation





Strategic National Resources

BOEM's Mission:

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



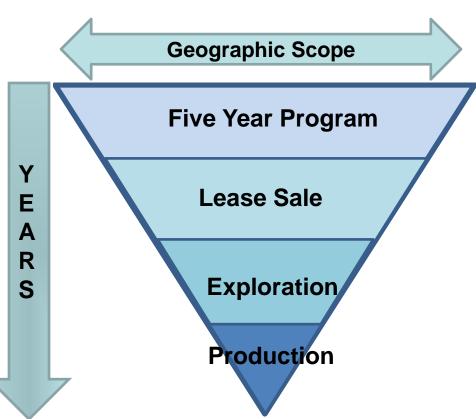


How do we get there?

Process-Rich Endeavor*

- Engagement is Key Public, Government, Tribes, & the Industry
- Multiple steps, decision points,
 & opportunities for input during each phase
- Entire process spans years



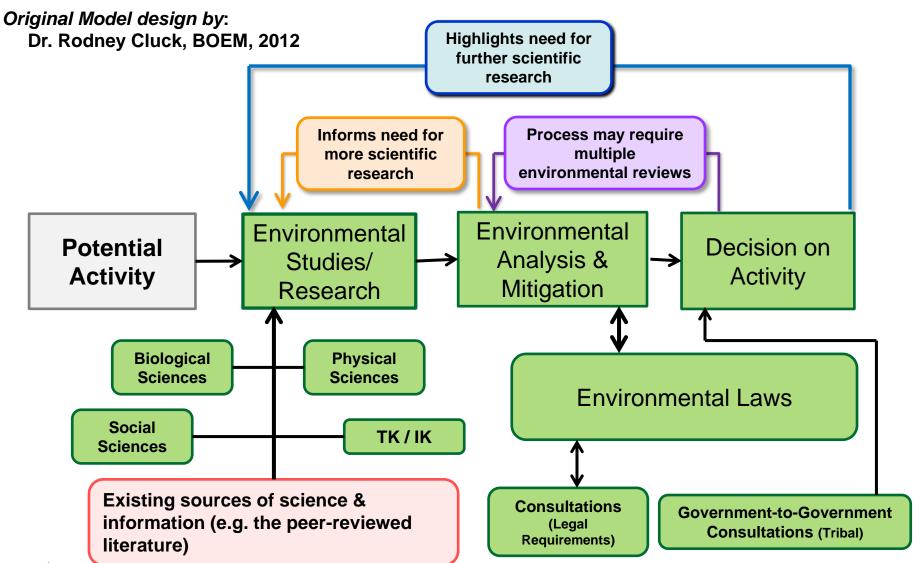




^{*}Must take into account and be adaptable in terms of incorporating new information, new technologies, and changes in economics and environment.



Science, Analysis, and Decision-making





Many Considerations



Outer Continental Shelf Lands Act

Oil Pollution Act of 1990



Marine Mammal Protection Act

National Environmental Policy Act

Endangered Species Act

Migratory Bird Treaty Act

National Historic Preservation Act MagnusonStevens Fishery
Conservation &
Management Act

Coastal Zone Management Act



Clean Air Act

Executive and Secretarial Orders

Clean Water Act





U.S. Environmental Laws

REAL	J OF UCEAN ENERGY IVIANAGEMENT	
	Outer Continental Shelf Lands Act and Oil Pollution Act	Regulates prelease & post-lease activities on the OCS
	National Environmental Policy Act	Environmental analysis and review during project planning
	Federal Water Pollution Control Act (Clean Water Act)	Regulates discharges into marine waters
	Clean Air Act	Regulates air emissions
	Coastal Zone Management Act	Assures compliance with state coastal area protection plans (Alaska does not have CMP)
	Endangered Species Act	Protects Threatened & Endangered Species and related Critical Habitats
	Marine Mammal Protection Act	Protects Marine Mammals
	Magnuson-Stevens Fishery Conservation & Management Act	Protects Essential Fish Habitat
	National Historic Preservation Act	Protects historic sites and cultural archaeological resources, including those on the ocean floor



Environmental Studies Program

Applied research helps us to predict environmental

impacts and monitor for changes over time

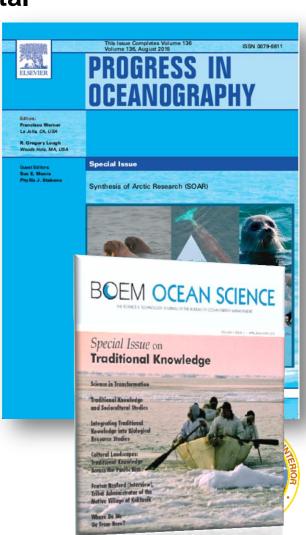
~\$500M in Studies Funded

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





Traditional / Indigenous Knowledge

"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



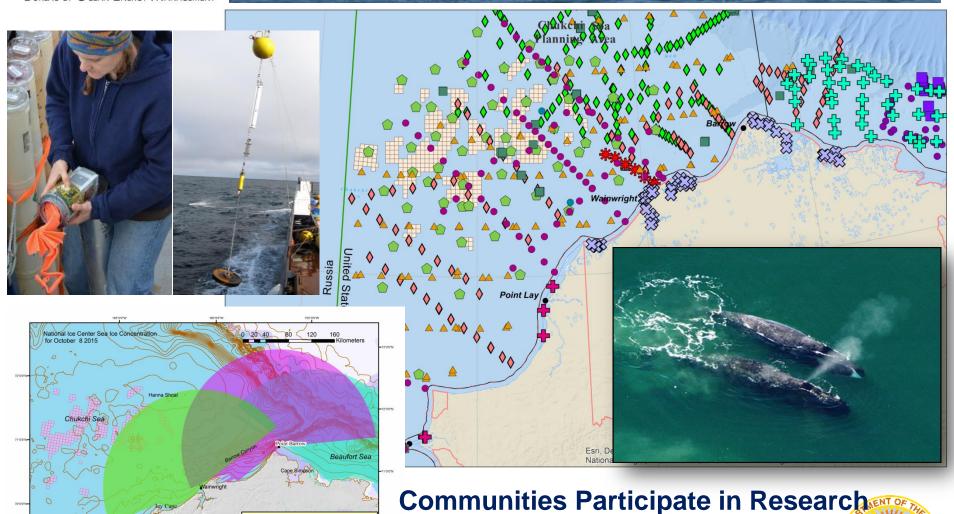
BOEM actively seeks TK/IK to complement its science and to further support its decision-making process (i.e. better decisions).







Data Collection



Whale tagging performed by Whaling Captains with ADF&G



An Example, Science-to-Regulation

The Arctic Air Quality Assessment Modeling study and Implementing BOEM's Air Quality Regulatory Responsibilities

- The Consolidated Appropriations Act, 2012, amended the Clean Air Act to transfer regulatory authority for air emissions on the OCS off Alaska's north coast, including the Chukchi and Beaufort seas, from the EPA to the Department of the Interior.
- In 2013, BOEM initiated the \$1.76 million Arctic Air Quality
 Assessment Modeling study to develop information
 needed to guide BOEM's implementation of this authority.
- Specifically, this project is evaluating existing formulas for exemption thresholds for air emissions on the OCS. Results from this evaluation will inform BOEM as to whether these formulas remain protective of the environment.





Broader Responsibilities & a few final thoughts

Strategic Priorities

- Advancing our security interests energy resources are a core component of our National Security;
- Responsible environmental stewardship; and
- Strengthening international cooperation.

Efficiency through Coordination

 Promoting responsible, efficient, and effective processing of energy-related authorizations, permits, regulations, & agreements.

International/Pan-Arctic

- Safety & Stewardship
- Improving the economic & living conditions of our citizens who call the Arctic home.







