

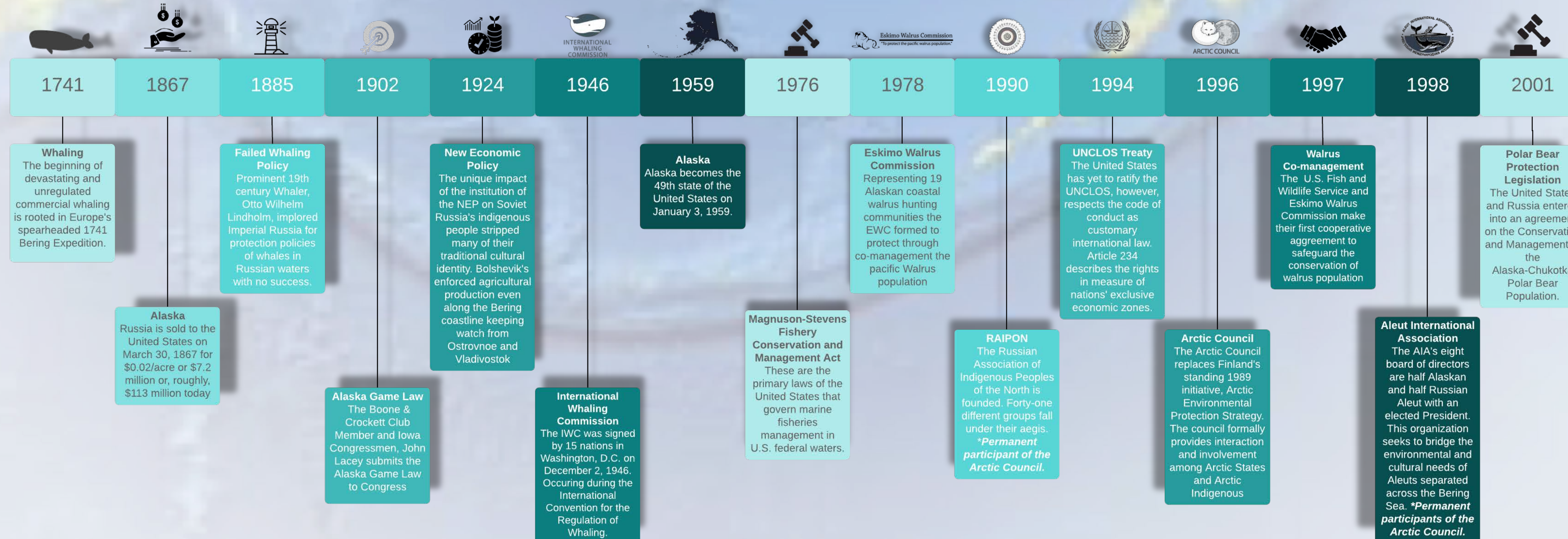
Institutional analysis on Arctic subsistence



Through the Ostrom IAD framework we developed the current action arena understanding the power each actor has and lacks under the various challenges of Climate Change.

Points of Policy Convergence

18th to 21st Century Bering Sea



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presentation

Achieving Our Arctic Adaptive Governance Demonstrated Through The IAD Framework

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graph TD; BC[Biophysical Contributions] --> AS[Actions Situations in the Bering Sea Actors]; AC[Attributes of Community] --> AS; RIU[Rules-in-Use] --> AS; AS --> ECR[Evaluative Criteria]; ECR --> O[Outcomes]; AS --> I[Interactions]; I --> O; AS --> C[Co-management & Collaborative science]; C --> O;
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Biophysical Contributions

- Anthropogenic Climate Change:-Sea ice loss
- Permafrost melting
- Coastal erosion

Attributes of Community

- Subsistence dependent indigenous
- Small scale local fisheries

Rules-in-Use

- Magnuson-Stevens Act of 1946
- UNCLOS Treaty of 1994
- MSA Reauthorization Act of 2007

Actions Situations in the Bering Sea Actors

United States

- Alaska
- Native Alaskans

Russia

- Kamchatka
- Local Obshchina
- Chukotka
- Local Obshchina

Arctic Council

Interactions

- Co-management
- Collaborative science

Evaluative Criteria

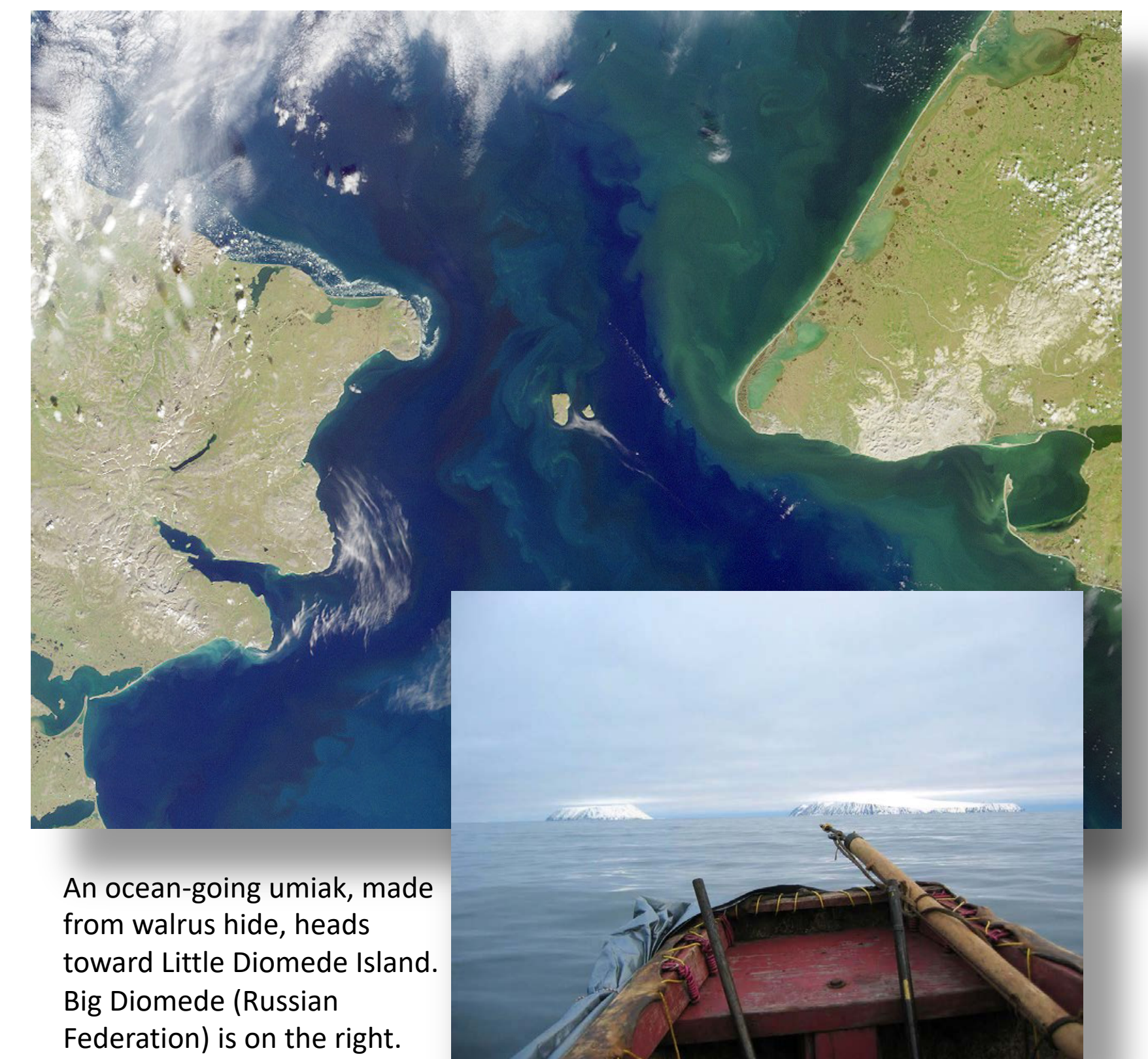
- Negotiate Arctic transportation routes
- Subsistence rules/laws must be more flexible/adaptive give ice variability
- Partner with industry for offshore development, but provide strong oversight/control
- Strengthen Marine Monitoring efforts
- Improve food security/food sovereignty

Outcomes

- Polycentricity
- Feedback
- Adaptive Learning

The boundary between the US and Russia lies between Big and Little Diomedes Islands, which are visible in the middle of the Bering Strait. The Arctic Circle, at 66.5 degrees north latitude, runs through the Arctic Ocean in the top part of this image. This circle marks the southernmost latitude for which the Sun does not rise above the horizon on the day of the winter solstice. At the bottom of this image is St. Lawrence Island. Situated in the Bering Sea, it is part of Alaska and home to Yupik Eskimos.

Image courtesy NASA/GSFC/JPL, [MISR Team](#).



An ocean-going umiak, made from walrus hide, heads toward Little Diomed Island. Big Diomed (Russian Federation) is on the right.

 Morgan Kempf, Elizabeth Hartley,
Mahir Yazar, Brenna Deerberg,
Dr. Abigail York



Dickie, G. (2018, April 6). Trump Budget Axes Alaska's Sea Grant Program. Retrieved from <https://www.newsdeeply.com/arctic/articles/2017/05/25/trump-budget-axes-alaskas-sea-grant-program>.
-The umiak image taken by E. Shoolook has been unaltered and original caption retained from article with respect for author and credit to photographer.