



Arctic Ice Whales

New approaches needed
in face of increased
human activities

Alexey Knizhnikov
WWF-Russia
aknizhnikov@wwf.ru

With Ewins PJ, Williams M,
Reeves RR.

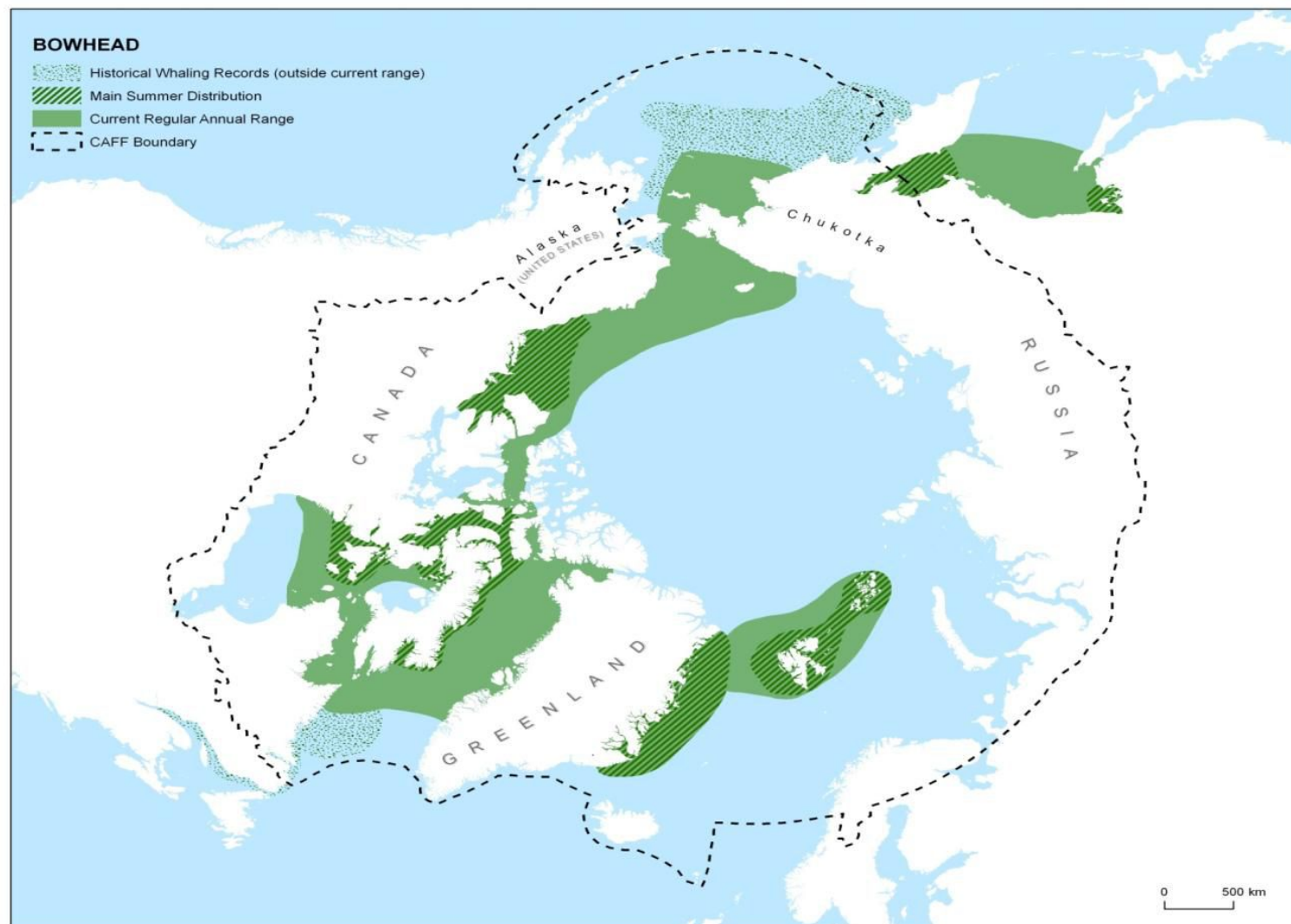


The Ice Whales: evolved over 5 Million years with Arctic sea-ice



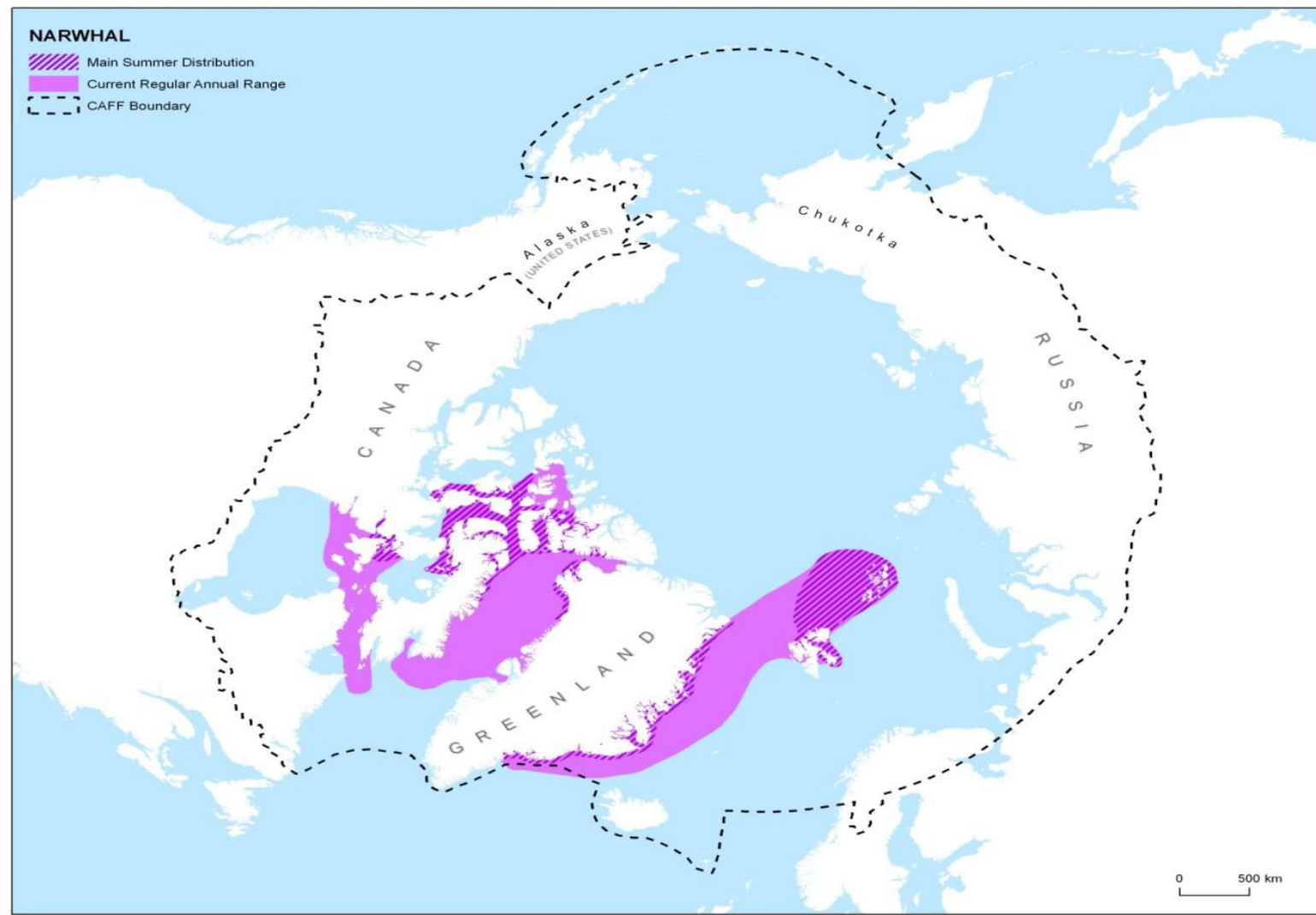


Bowhead Whale: >18,000



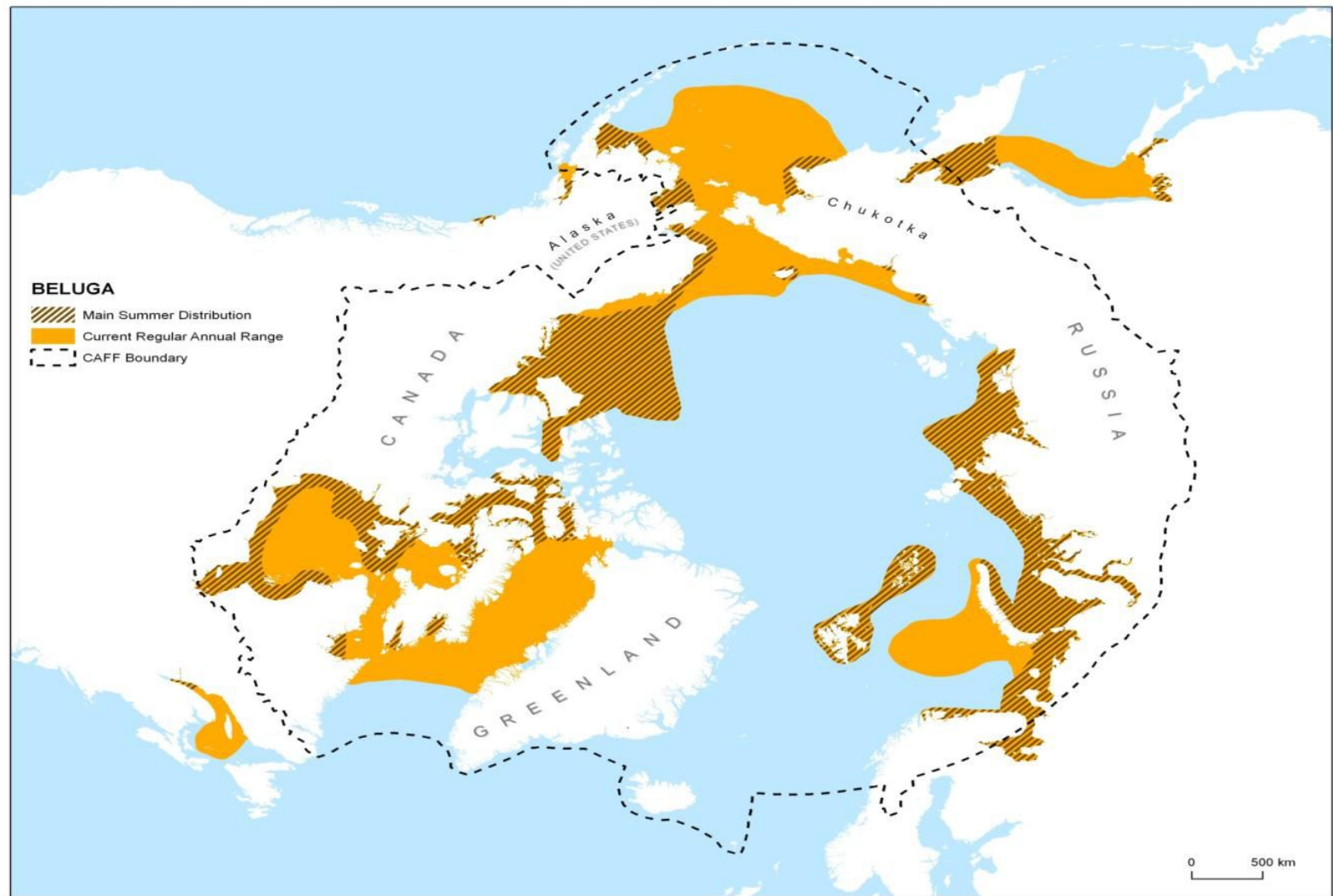


Narwhal: ca. 100,000



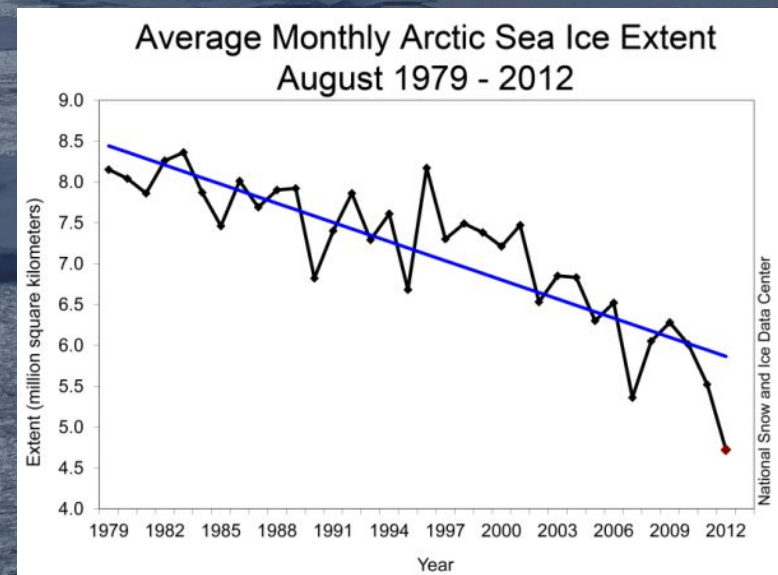


Beluga: >150,000



In 2012, summer sea ice equivalent in area to the Indian sub-continent was lost to global warming.

The Arctic Today



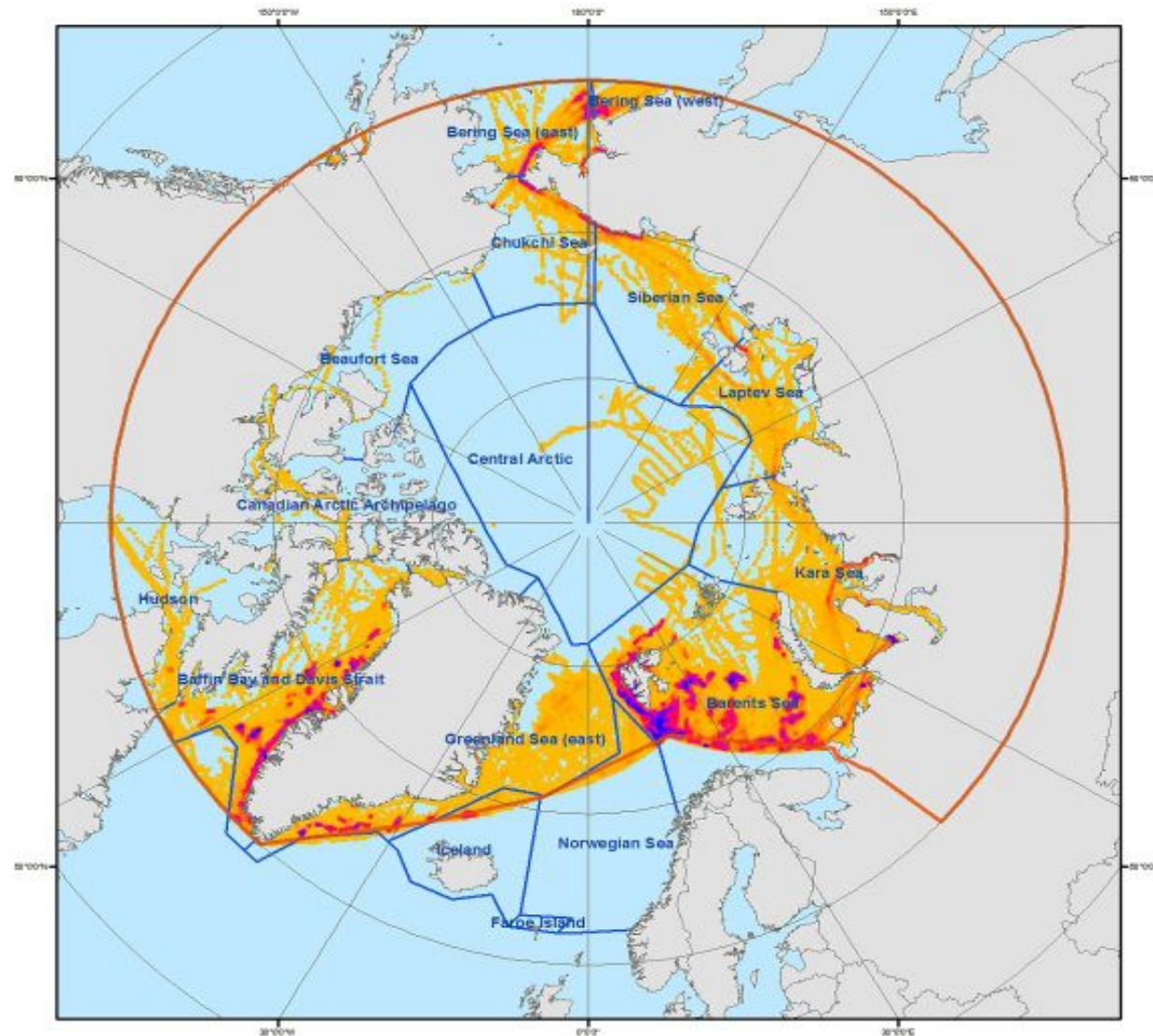


Drivers

- Shipping
- Fishing
- Oil and gas
- Mining
- Tourism
- Harvest



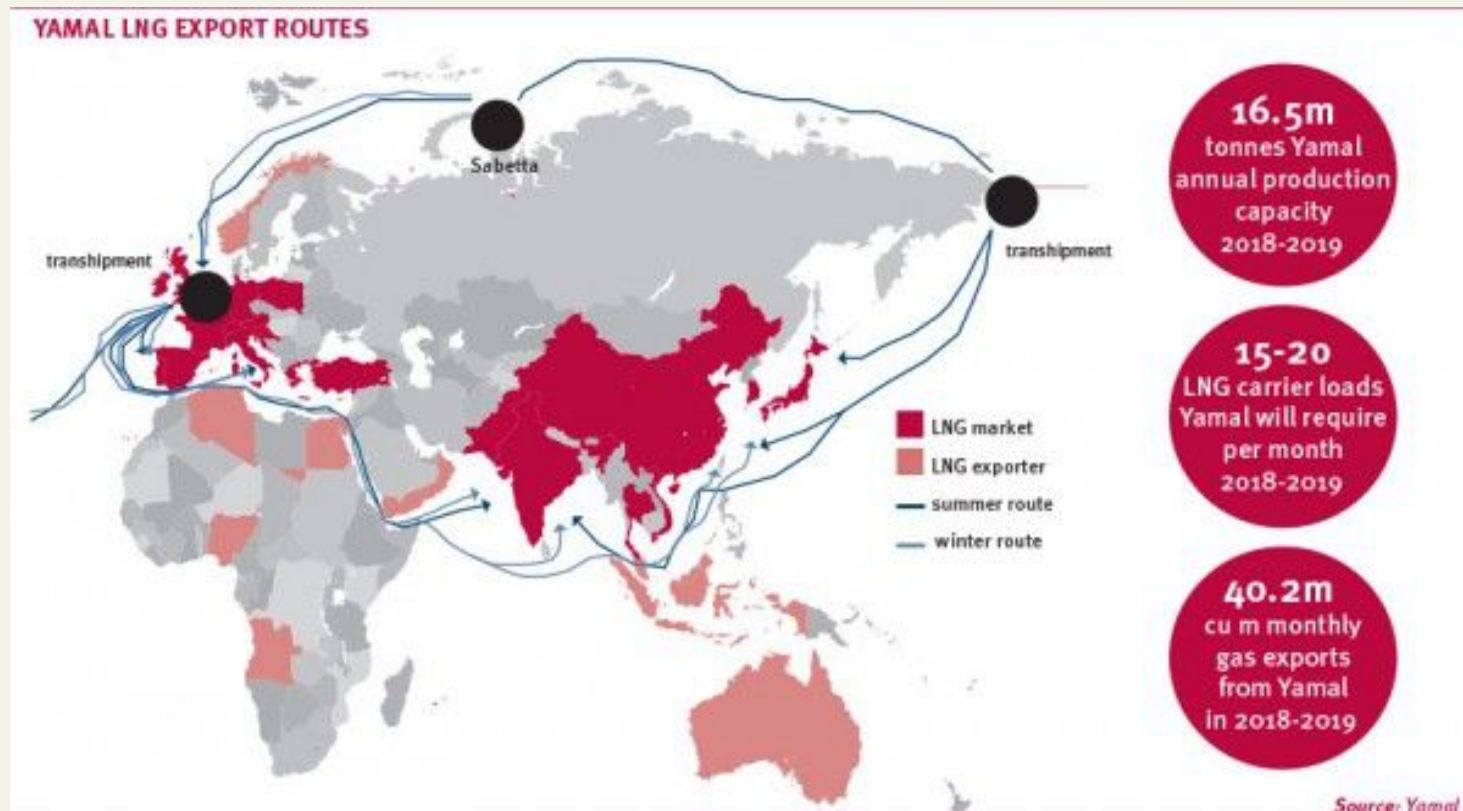
Shipping in the Arctic



(Map from DNV)



New threats to Cetaceans in the Arctic – rapidly development of the shipping as service for offshore/onshore oil & gas projects



YamalLNG (NovoTEK, Total) – the first Arctic LNG project is developing rapidly



Risk: no proven method to clean up oil/condensate spilled in iced waters



2014

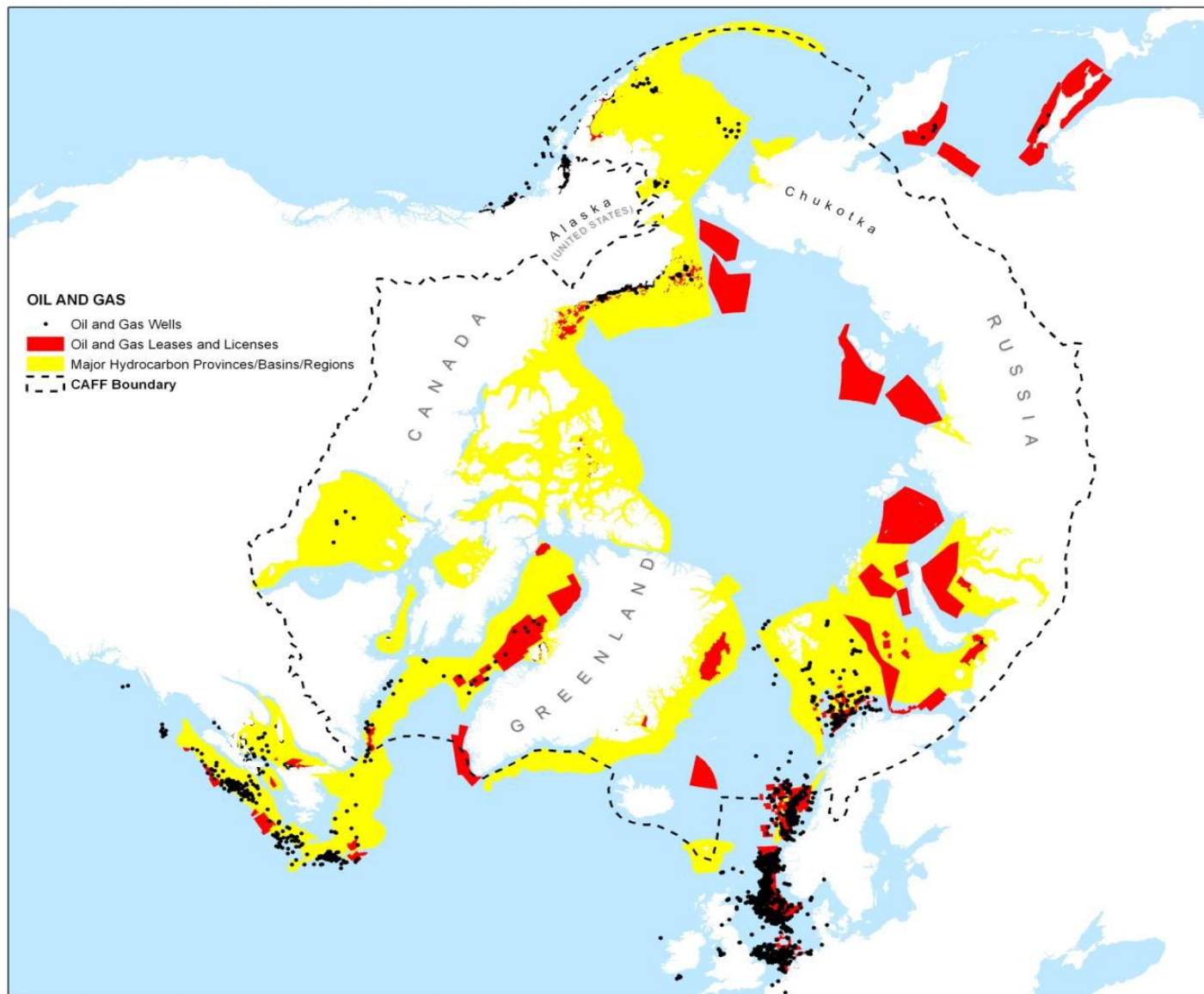
ОТЧЕТ О НАУЧНО-ИССЛЕДОВАТЕЛЬСКОЙ РАБОТЕ
Моделирование поведения разливов нефти
в Беринговом проливе и на прилегающих акваториях
Берингова и Чукотского морей



REPORT OF RESEARCH WORK
Modeling the behavior of oil spills in the Bering Strait
and adjacent waters Bering and Chukchi Seas



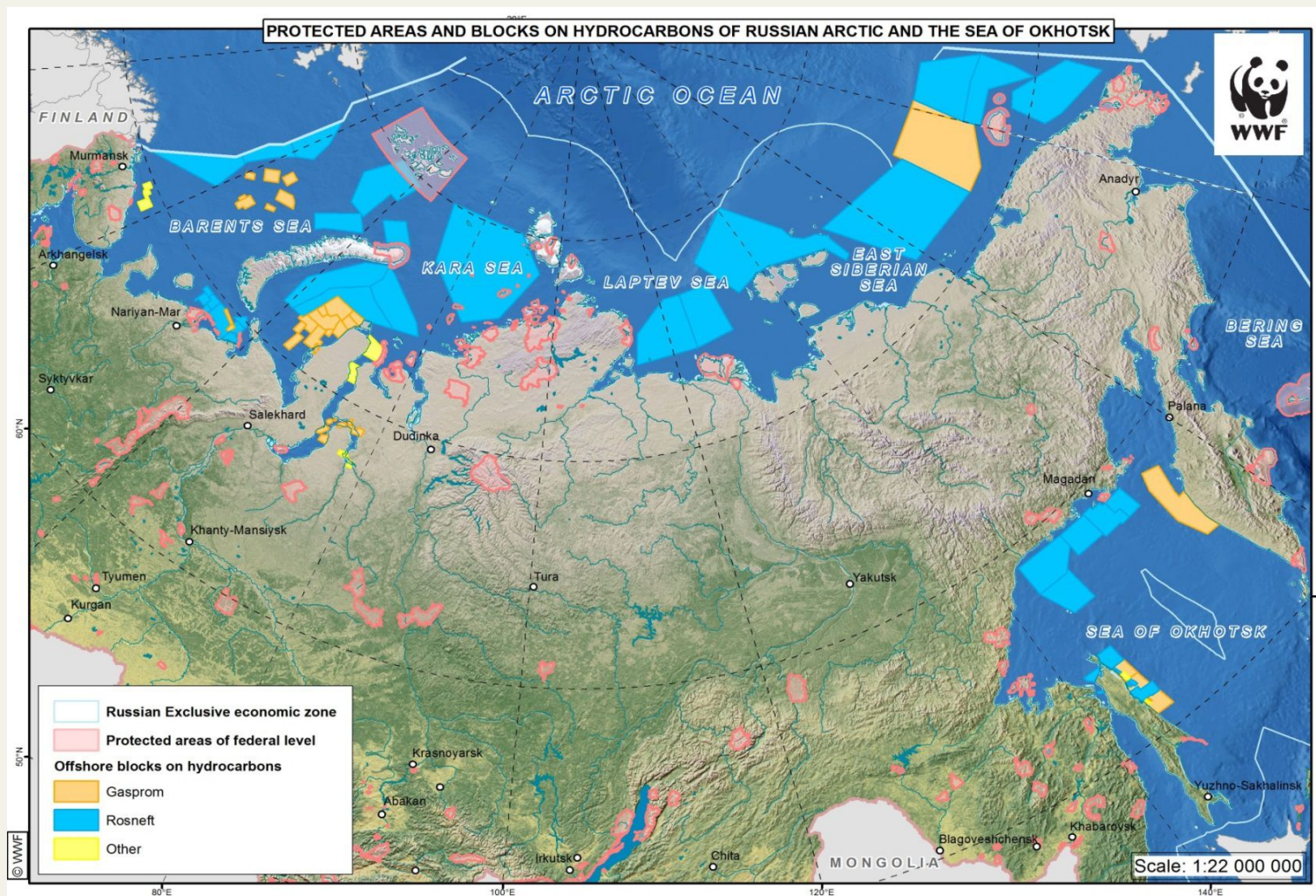
Oil&gas in the Arctic





Offshore Oil & gas development in Russia

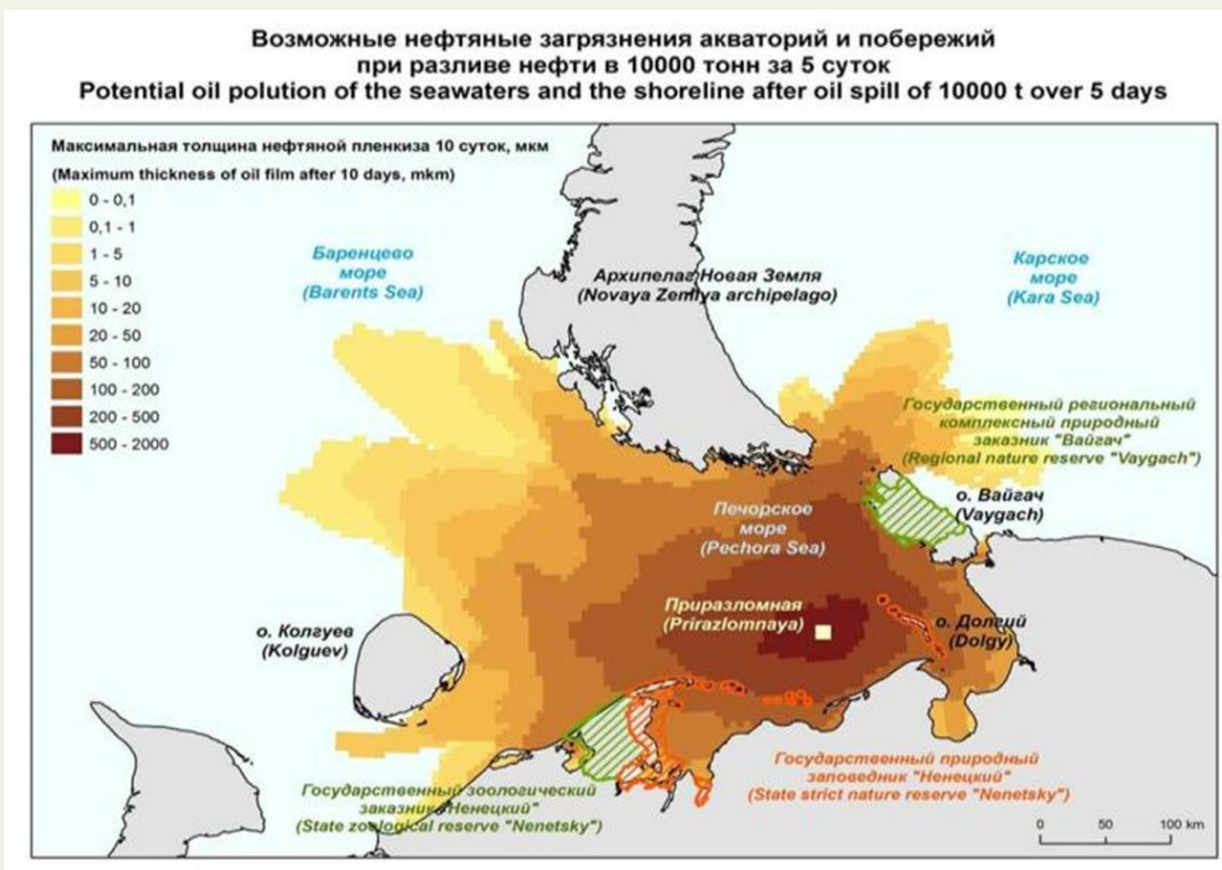
(Data as February 2014)





Oil spill modeling and assessment of OSR capacity for Prirazlomnoe project

<http://www.wwf.ru/resources/publ/book/eng/770>

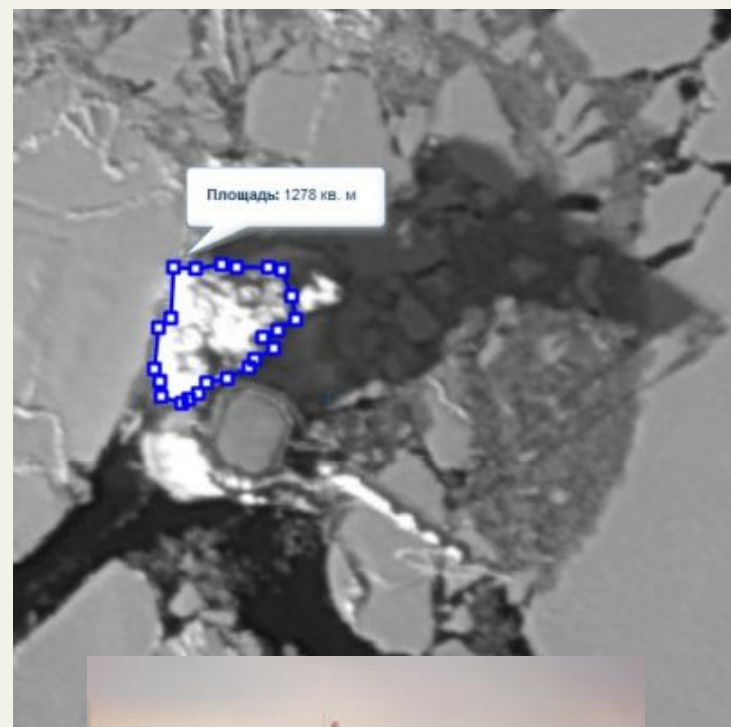


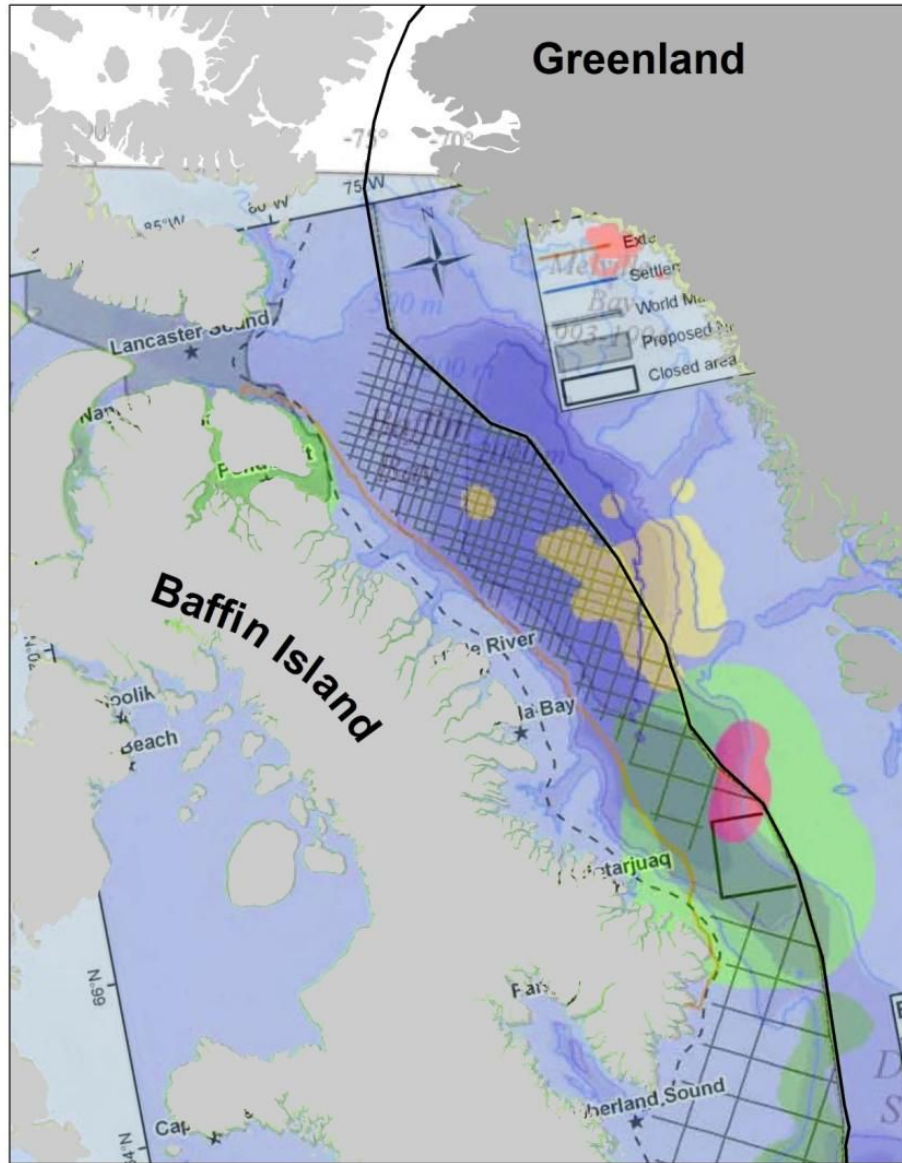
140 000 sq. km – area of risk of the oil spill, over 3500 km coastline





March 2013. The heavy ice condition in Pechora sea Varandei terminal (LUKoil)





5-year plans:
For oil-gas expl/devel.
---- in Narwhal
migration corridors +
wintering areas.





WWF experience

WWF GAP Report (2014): Reducing impacts of noise from human activities on cetaceans

http://awsassets.panda.org/downloads/ocean_noise_report_web.pdf

WWF Russia long term Sakhalin experience to protect western gray whales from oil&gas/shipping activities (seasonal and spatial measures).

Effective mechanism - Western Gray Whale Advisory Panel (WGWAP) under IUCN
<http://iucn.org/wgwap/> . NGO play important role with observer status

New 2014 Memorandum of Cooperation (MoC) between Russia, US and Japan on WGW.

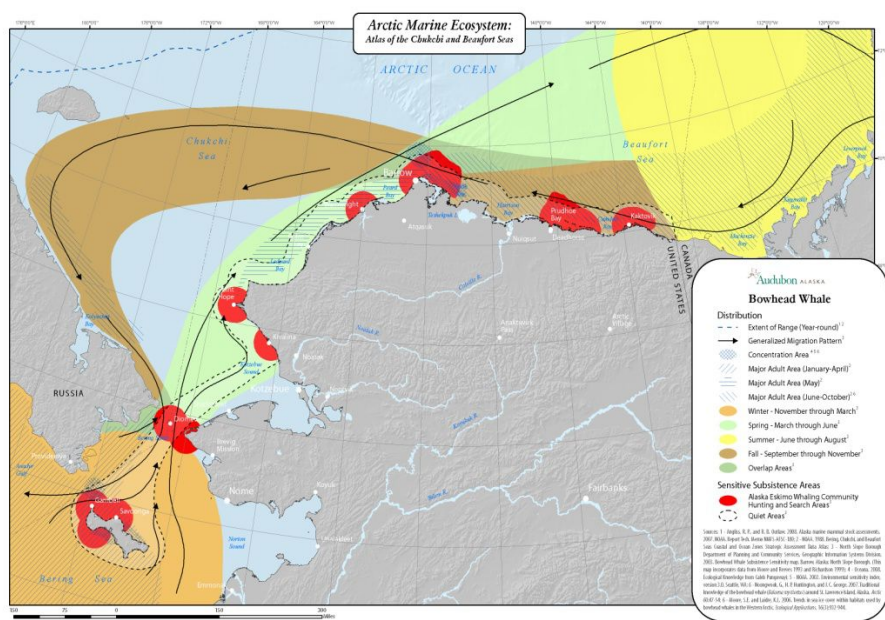
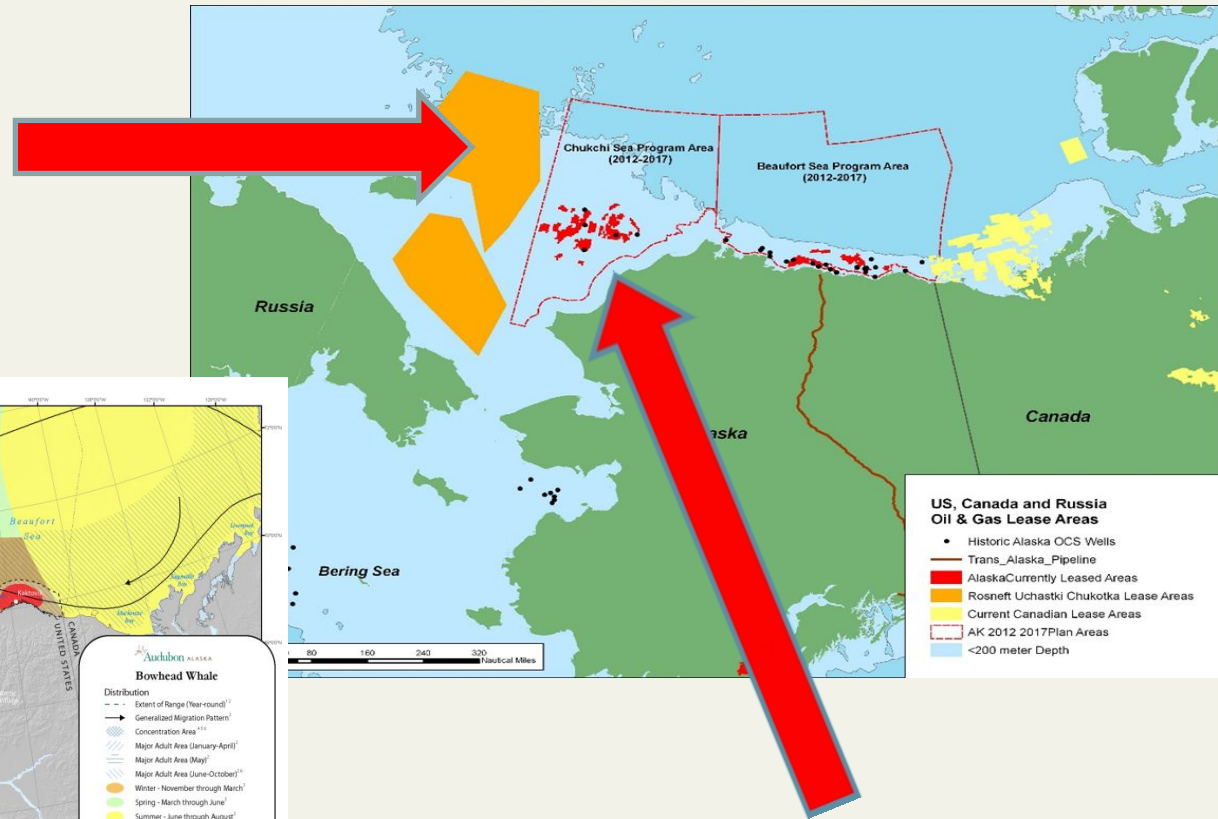
Important lesson learnt for Arctic whales protection





US-Russia-Canada Transboundary Impacts on migratory Cetaceans species from oil/gas development (noise and oil spills)

Rosnetf seismic survey in 2014-15 for Chukchi sea



Shell possible drilling in 2015



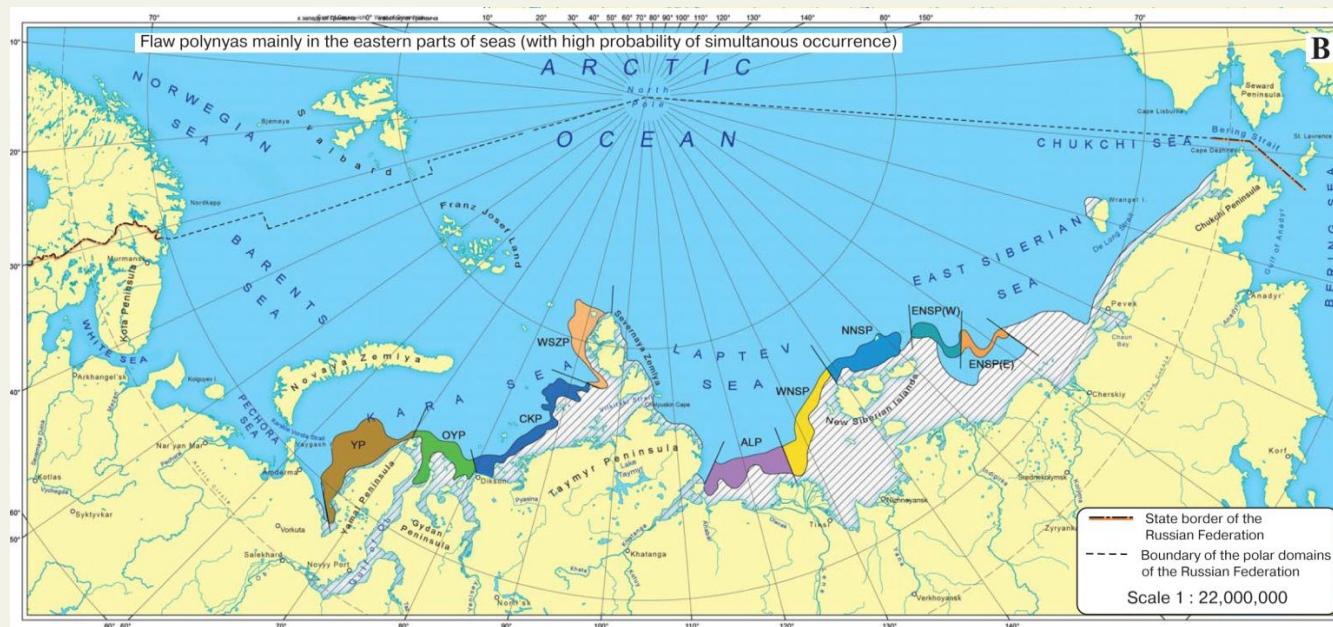
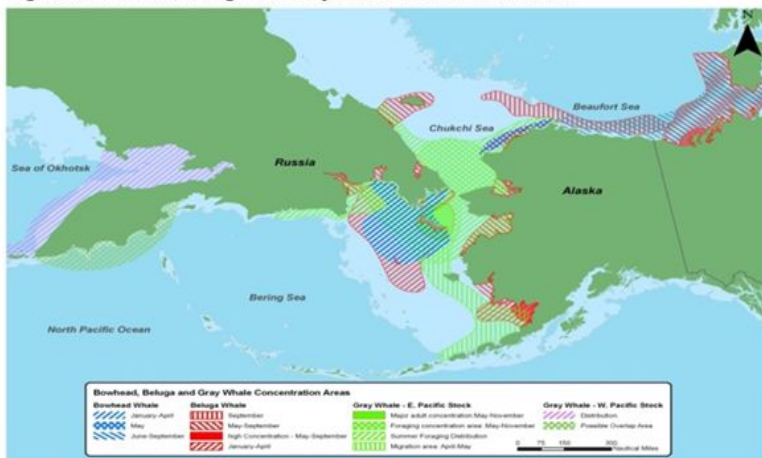
Shared concerns



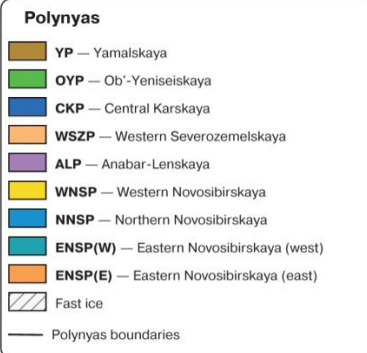


Protect an adequate network of key marine habitats – by 2020

Figure 6. Bowhead, Beluga and Gray Whale Concentration Areas



These maps show maximum development of polynyas. In nature all polynyas never reach maximum development simultaneously.





Conclusions/Recommended Measures (most highly consistent with ABA 2013 recommendations)

- **Zone-based protection for key whale habitats**
 - **Complete scenarios-based ecosystem plans based on risk assessments & cumulative pressures.**
 - **New firm approach to regulation of industrial developments (shipping, oil-gas)**
 - **Fill priority research gaps, including impact thresholds for anthropogenic activities.**
 - **Sustain quality monitoring and adaptive mgmt.**
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Other recommendations to deal with oil&gas and shipping threats

- **Implementation of the Strategic Environmental Assessment (as Kiev Protocol, 2003) for all Arctic states. SEA is the only one effective tool to assess cumulative effects.**
 - **Promotion for implementation Transboundary EIA (based on Espoo Convention approaches).**
 - **Replication of the IUCN/WGWAP lesson learnt to Arctic regions (under IWC/AC umbrella).**
 - **Transparent dialog among all stakeholders about oil spill response technologies in ice conditions**
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