

# Northern Waters Task Force

## An Introduction



# NWTF: Introduction

The Northern Waters Task Force (NWTF) was created by HCR 22 during the 2010 legislative session.



# NWTF: Why monitor the Arctic?

- Loss of sea ice has led to increased human activity in the Arctic and has raised a variety of concerns about future development
- Forecasts predict the possibility of an ice-free Arctic within 20-30 years
- An ice-free Arctic creates new challenges and opportunities for
  - Arctic inhabitants
  - Communities
  - State of Alaska
  - United States
  - other countries
- The US is an Arctic country by virtue of Alaska's geography



# NWTF: Membership

The NWTF is comprised of legislators, leaders of Arctic communities, and members of key state and federal agencies.



Rep. Reggie Joule  
Kotzebue, Chair



Sen. Bert Stedman  
Sitka, Vice-Chair



Sen. Lyman Hoffman  
Bethel



Rep. Bob Herron  
Bethel



Larry Hartig  
Commissioner  
Dept. of Environmental  
Conservation



Mayor Denise Michels  
Nome



Mayor Edward Itta  
North Slope Borough



Chuck Greene  
Vice-President, NANA Corp.



Chris Hladick  
Unalaska City Manager



Dave Kubiak  
Alaska Marine  
Conservation Council

**Alternates:** Sen. Donald Olson; Rep. Bryce Edgmon; Richard Glenn, *Arctic Slope Regional Corporation*; Commissioner Cora Campbell, *Alaska Dept. of Fish & Game*. *The USCG served as the federal liaison and was represented by Rear Admiral Colvin until May 19, 2011. Upon his departure, Rear Admiral Ostebo served as the federal liaison*



# NWTF: Duties

- The resolution directed the task force to do the following:
  - Create a state and federal commission responsible for overseeing development
  - Facilitate regional coordination, cooperation, and outreach in creating a commission to keep local stakeholders informed and able to engage
  - Identify and coordinate efforts of mutual concern for federal, state, local and international agencies
  - Conduct hearings in the northern region of the state to fulfill the above purposes



# NWTF: Meetings

- 12 meetings in Juneau, Anchorage, Barrow, Wainwright, Kotzebue, Nome, Wales, Bethel, and Unalaska
- Toured Red Dog Mine, Bering Strait Choke Point, potential future port sites, Nome port and gold dredging, Barrow Arctic Science Consortium, communities of Wales and Wainwright
- 65 experts from universities, U.S. military, non-governmental organizations and dozens of state and federal agencies testified
- Heard public testimony from local communities and residents
- Studied vast quantity of scientific, social, and economic research

On the web at [www.anwtf.com](http://www.anwtf.com)



# Task force members at work





# NWTF: Areas the task force addressed

- Arctic Governance
- Oil, Gas and Mineral Development
- Arctic Fisheries
- Marine Transportation
- Arctic Research
- Arctic Infrastructure



# NWTF: Top Three Recommendations

- The ANWTF recommends that the State of Alaska and the federal government provide Alaskans with meaningful opportunities to participate in Arctic policy and Outer Continental Shelf development decisions, particularly with those Alaskans likely to be most impacted by changing conditions.
- The ANWTF recommends that the Alaska State Legislature create a commission to develop a comprehensive state strategy for the Arctic.
- The ANWTF recommends that the Alaska State Legislature and the State of Alaska continue to urge the United States Senate to ratify the United Nations Convention on the Law of the Sea.



# NWTF: Arctic Governance



Changes in the Arctic make it necessary to evaluate the adequacy of existing Arctic governance structures and to consider adjusting these systems or creating new ones to better suit developing needs.

The evolving Arctic will require unprecedented cooperation among Arctic Nations to sustain communities and environments.

# NWTF: Recommendations

- The ANWTF supports the development and implementation of a comprehensive U.S. Arctic strategy.
- The ANWTF recommends that the State of Alaska and the U.S. participate in the adoption of international agreements for shipping, fisheries, oil and gas development, and other transboundary issues
- The ANWTF recommends that the State of Alaska and the Alaska State Legislature support greater international cooperation and engagement with the Arctic Council and ICC.



# NWTF: Oil, Gas and Mineral Exploration

- A 2008 US geological survey estimates 13% of the earth's undiscovered oil reserves and 30% of the undiscovered gas reserves are in the Arctic.
- The majority of the oil is likely to be offshore.
- *In perspective, this equates to:*
  - 90 billion barrels of oil
  - 1,700 trillion cubic feet of natural gas
  - 44 billion barrels of natural gas liquids





# NWTF: Oil, Gas and Mineral Exploration

- Alaska's oil and gas industry has over forty years of experience in Arctic oil and gas exploration, production and transportation
- Over 70 wells have been successfully drilled off Alaska's north coast
- Four north slope offshore production facilities continue in operation
- The Trans-Alaska Pipeline System (TAPS) has transported over 15 billion barrels of oil from the Arctic North Slope to the ice free port in Valdez for over three decades
- We need to build on this experience and extend infrastructure and transportation systems to accommodate new exploration and continued production.



# NWTF: Recommendations

- The ANWTF recommends that the State of Alaska and the U.S. develop a framework for the identification, acquisition and sharing of data to support leasing, permitting, and other agency decisions.
- The ANWTF recommends that the State of Alaska and the U.S. support continued improvements in the ability of industry and the government to prevent, contain, control, and remediate spills in the Arctic.
- The ANWTF recommends that the University of Alaska establish an oil spill research center.



# NWTF: Arctic Fisheries

- Alaska and the Arctic contain some of the world's largest and most valuable fisheries.
- Scientists are discovering that a number of sub-arctic species, such as cod, herring and pollock, are expanding their habitation further north and creating commercial fishing opportunities.
- The North Pacific Fisheries Management Council currently bans commercial fishing in the Arctic.

# NWTF: Recommendations



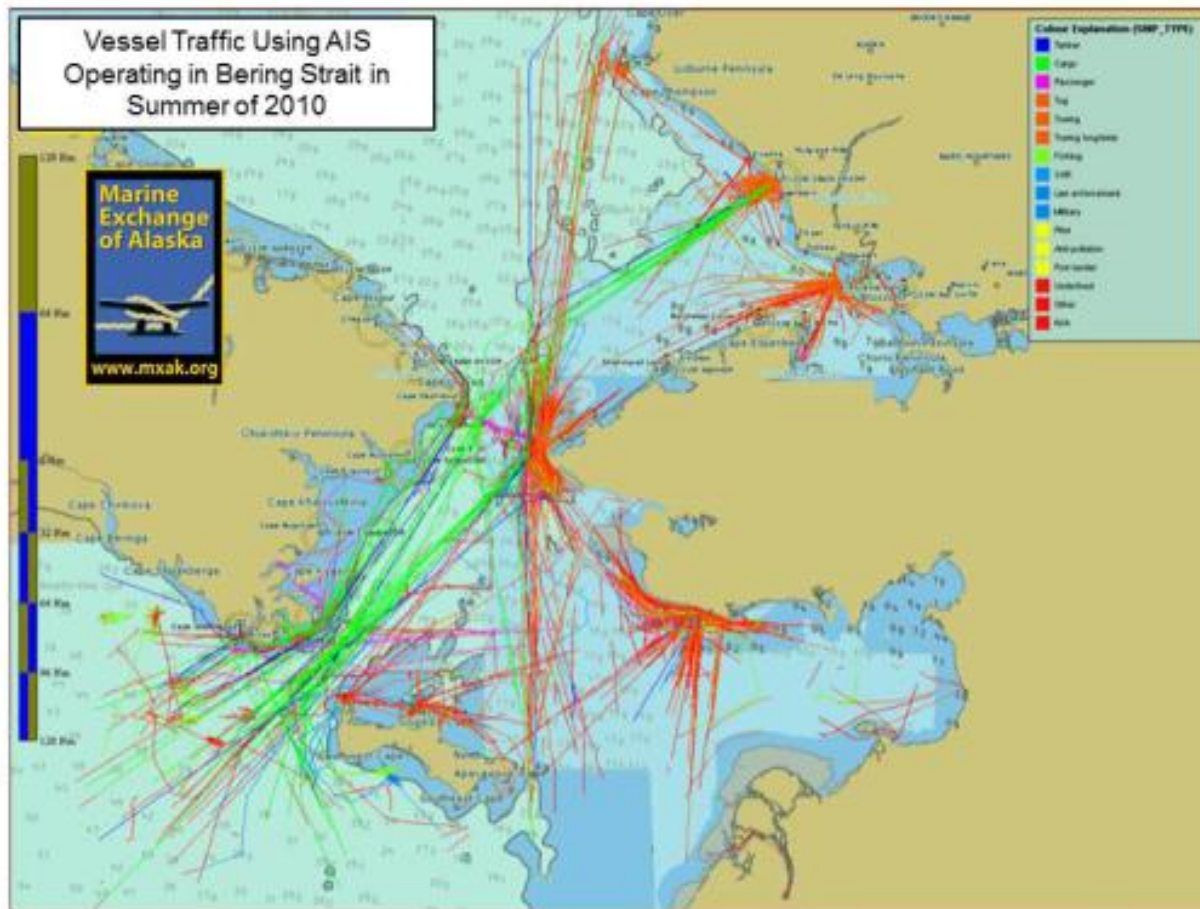
- The ANWTF recommends increasing fisheries research and monitoring in the region.
- The ANWTF encourages the State of Alaska and the U.S. Government to continue actively negotiating fisheries accords with other nations.
- The ANWTF recommends that the State of Alaska and federal authorities prepare strategies to maximize the degree to which local communities and resident Alaskans can benefit from the development of commercial fisheries in waters north of the Bering Strait.

# NWTF: Marine Transportation

- Diminished sea-ice has led to increases in commercial shipping on two trans-Arctic sea routes.
- An estimated 6,000 individual vessels operate in the Arctic (2009, AMSA).
- Tourism and passenger vessels visits are increasing.
- In 2007, an estimated 2.4 million cruise ship passengers traveled to Arctic destinations.



# NWTF: Vessel Traffic Summer 2010



# NWTF: Marine Transportation

- The Bering Strait is a unique international waterway and gateway to Arctic shipping
- The Bering Strait is a unique link between the Arctic and the Bering Sea fisheries which account for over half of the commercial fishery harvest in the nation
- Safe shipping through the Bering Straits is critical for protection of the regions world class commercial and subsistence resources



# NWTF: Recommendations

- The ANWTF recommends that the United States, the State of Alaska, and the international community work to finalize the Polar Code.
- The ANWTF recommends that the United States and the State of Alaska and the international community examine whether to establish an offshore vessel routing scheme for circumpolar marine traffic, including through the Aleutians.
- The ANWTF supports increasing short and long range navigational aids in the North American Arctic and extending Automatic Identification System (AIS) vessel tracking across the North Slope waters to Tuktoyaktuk.
- The ANWTF endorses completing the Aleutian Island Risks Assessment and recommends that the State of Alaska continue to support and participate in the USCG Port Access Route Study.

# NWTF: Arctic Infrastructure

Increased human activity will require new ports and safe harbors, equipment and facilities for oil spill and emergency response, additional Polar Class icebreakers and other ice capable vessels for the U.S. fleet, and improved charting and mapping.





# NWTF: Arctic Infrastructure

Critical infrastructure improvements are needed to address coastal erosion and flood activity in the northwest areas of Alaska

Ice conditions impact fuel delivery





# NWTF: Recommendations

- The ANWTF recommends the State of Alaska continue to urge the federal government to forward base the USCG in the Arctic and to fund construction of additional ice breakers and ice capable vessels.
- The ANWTF recommends that the State of Alaska and the federal government continue efforts to develop deep draft ports and additional safe harbors in northern waters.
- The ANWTF supports increased funding to expedite NOAA's Hydrographic Arctic mapping and updated mapping of coastal navigation and village entrance routes.

**POLAR ICEBREAKERS OF THE WORLD**

RUSSIA	6 HEAVY + 5 PLANNED	ARCTIC (2015) PROJECT 140 ESTIMATED COMPLETION 2016	BARENTS (2015) PROJECT 140 ESTIMATED COMPLETION 2016	TARA (2015) PROJECT 140 ESTIMATED COMPLETION 2016	BOREAS (2015) REPT 2015	ARKTIKA (2015) REPT 2015	SIBIR (2015) REPT 2015	SIBIR (2015) REPT 2015
	12 MEDIUM + 1 UNDER CONSTRUCTION + 1 PLANNED	ARKTIKA (2015) REPT 2015	ARKTIKA (2015) REPT 2015	ARKTIKA (2015) REPT 2015	ARKTIKA (2015) REPT 2015	ARKTIKA (2015) REPT 2015	ARKTIKA (2015) REPT 2015	ARKTIKA (2015) REPT 2015
	13 LIGHT + 1 UNDER CONSTRUCTION	VOSTOK (2015) REPT 2015	TARA (2015) REPT 2015	DOBRYNYA (2015) REPT 2015	TALA (2015) REPT 2015	TALA (2015) REPT 2015	TALA (2015) REPT 2015	TALA (2015) REPT 2015
SWEDEN	4 MEDIUM 5 LIGHT	ATLE (2014)	F62 (2012)	TENER (2012)	EKEN (2011)	EKEN (2011)	EKEN (2011)	EKEN (2011)
FINLAND	6 MEDIUM 2 LIGHT	ARCTIC (2015)	ARCTIC (2015)	ARCTIC (2015)	ARCTIC (2015)	ARCTIC (2015)	ARCTIC (2015)	ARCTIC (2015)
CANADA	2 MEDIUM + 1 Planned 4 LIGHT	TERRY FOX (2015)	LOUIS ST. LAURENT (2015) REPT 2015	JOHN S. TORGERESEN (2015) REPT 2015	JOHN S. TORGERESEN (2015) REPT 2015	JOHN S. TORGERESEN (2015) REPT 2015	JOHN S. TORGERESEN (2015) REPT 2015	JOHN S. TORGERESEN (2015) REPT 2015
UNITED STATES	2 HEAVY 1 MEDIUM + 1 UNDER CONSTRUCTION + 1 Planned 1 LIGHT + 1 UNDER CONSTRUCTION	POLAR STAR (2015) ESTIMATED RETURN TO SERVICE 2015	POLAR SEA (2015)	HEALY (2015)	HEALY (2015)	HEALY (2015)	HEALY (2015)	HEALY (2015)
CHINA	1 LIGHT + 1 UNDER CONSTRUCTION	XUE LONG (2015)	XUE LONG (2015)	XUE LONG (2015)	XUE LONG (2015)	XUE LONG (2015)	XUE LONG (2015)	XUE LONG (2015)
DENMARK	2 LIGHT	SVALBARD (2015) REPT 2015 OUT OF SERVICE 2015	SVALBARD (2015) REPT 2015 OUT OF SERVICE 2015	SVALBARD (2015) REPT 2015 OUT OF SERVICE 2015	SVALBARD (2015) REPT 2015 OUT OF SERVICE 2015	SVALBARD (2015) REPT 2015 OUT OF SERVICE 2015	SVALBARD (2015) REPT 2015 OUT OF SERVICE 2015	SVALBARD (2015) REPT 2015 OUT OF SERVICE 2015
ARGENTINA	1 LIGHT	ALMIRANTE BROWN (2015)	ALMIRANTE BROWN (2015)	ALMIRANTE BROWN (2015)	ALMIRANTE BROWN (2015)	ALMIRANTE BROWN (2015)	ALMIRANTE BROWN (2015)	ALMIRANTE BROWN (2015)
AUSTRALIA	1 LIGHT	AURORA AUSTRALIS (2015)	AURORA AUSTRALIS (2015)	AURORA AUSTRALIS (2015)	AURORA AUSTRALIS (2015)	AURORA AUSTRALIS (2015)	AURORA AUSTRALIS (2015)	AURORA AUSTRALIS (2015)
CHILE	1 LIGHT	ALMIRANTE O'HIGGINS (2015)	ALMIRANTE O'HIGGINS (2015)	ALMIRANTE O'HIGGINS (2015)	ALMIRANTE O'HIGGINS (2015)	ALMIRANTE O'HIGGINS (2015)	ALMIRANTE O'HIGGINS (2015)	ALMIRANTE O'HIGGINS (2015)
GERMANY	1 LIGHT + 1 Planned	POLARSTERN (2015)	POLARSTERN (2015)	POLARSTERN (2015)	POLARSTERN (2015)	POLARSTERN (2015)	POLARSTERN (2015)	POLARSTERN (2015)
JAPAN	1 MEDIUM	SHIRASE (2015)	SHIRASE (2015)	SHIRASE (2015)	SHIRASE (2015)	SHIRASE (2015)	SHIRASE (2015)	SHIRASE (2015)
KOREA	1 LIGHT	YONHYON (2015)	YONHYON (2015)	YONHYON (2015)	YONHYON (2015)	YONHYON (2015)	YONHYON (2015)	YONHYON (2015)
NORWAY	1 LIGHT + 1 UNDER CONSTRUCTION	SVALBARD (2015)	SVALBARD (2015)	SVALBARD (2015)	SVALBARD (2015)	SVALBARD (2015)	SVALBARD (2015)	SVALBARD (2015)
		<p><b>KEY</b></p> <p>Vessels were selected and organized based on their installed power (indicated in kW). Vessel colors reflect vessel sizes.</p> <p><b>COLOR GUIDE</b></p> <p><b>HEAVY</b> At least 45,000 hp</p> <p><b>MEDIUM</b> At least 21,000 hp but less than 45,000 hp</p> <p><b>LIGHT</b> At least 10,000 hp but less than 21,000 hp</p> <p><b>NON OPERATIONAL</b> Under repair or in limbo</p> <p><b>UNDER CONSTRUCTION</b> Being constructed currently</p> <p><b>PLANNED</b> Planned for construction in the near future</p> <p>Data derived from various sources.</p> <p>UPDATED: 03-MAR-2011</p>						

Developed and maintained by USCG Directorate of Marine Transportation Systems Management  
Office of Mobility and Ice Operations (CG-5523)

# Polar Icebreakers of the World

# NWTF: Research Recommendations

- The ANWTF recommends that the State of Alaska and the federal government identify priorities for Arctic research. By ranking priorities funding can be targeted more effectively and research can be better coordinated.
- The ANWTF recommends improving the exchange of research information and integration of data management.
- The ANWTF recommends increased long-term monitoring of the Arctic, including routine surveys of key chemical, physical, and biological parameters of the Beaufort and Chukchi Seas.



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