DRAFT
JANUARY 25, 2013

ALASKA DEEP-DRAFT ARCTIC PORT SYSTEM STUDY

The US Army Corps of Engineers and the Alaska State Department of Transportation and Public Facilities are reporting on the first year (2012) of their co-sponsored three-year study to enhance the Alaska Deep-Draft Arctic Port System.

US Army Corps of Engineers

ALASKA DEEP-DRAFT ARCTIC PORT SYSTEM STUDY

The Alaskan Arctic has many existing ports, from rudimentary barge landings and community docks to ingenious solutions for bulk export of lead-zinc at Red Dog and international trans-shipment at Dutch Harbor.

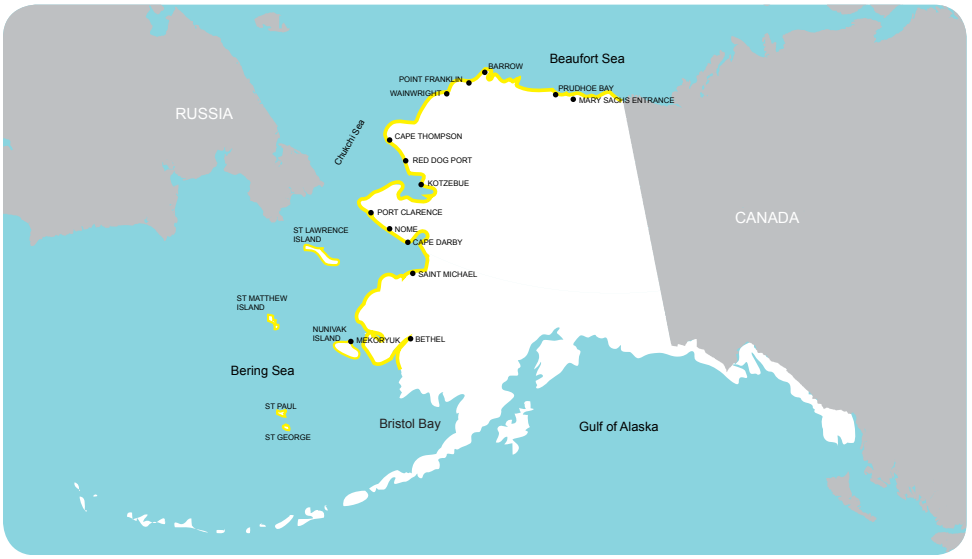
There is a need to invest further in port development for the Alaskan Arctic to be able to respond to the changes in conditions noted below.

- Large-vessel traffic past Alaska shores is increasing and more than 60 percent of these vessels are foreign flagged.
- Increased interest in the Arctic is documented daily in the global media, and the number of international meetings focused on Arctic marine traffic and resources.
- Foreign trade and resource development in international waters highlight the need to support federal sovereignty.
- The US entered into an international agreement on May 12, 2011 through the Arctic Council to support Search and Rescue in the Alaskan Arctic.
- Increased traffic means increased risk of incidents calling for response by the US Coast Guard and other available vessels.
- Environmental protection is important as marine traffic increases and oil and gas development grows in the Chukchi and Beaufort Seas.
- Community resupply costs are high due to lightering, fuel costs, limited infrastructure and multiple handling. At the same time, rural communities are reliant on a subsistence lifestyle. Food resources could be jeopardized by increased traffic.

- The State of Alaska policy calls for increased development of mineral and oil and gas resources in the Arctic.
- The US has expressed interest in more national sufficiency in energy resources and has selected the Arctic offshore region as one answer to this quest.
- Section 721 of the Coast Guard and Maritime Transportation Act of 2012 directs the Commandant to complete a study on the feasibility of establishing a deepwater seaport in the Arctic to protect and advance strategic United States interests within the Arctic region.

Study Area

Federal and State stakeholders met in May 2011 and resolved that for purposes of this study, the geographic region in the greatest need of marine infrastructure is the area from Bethel west and north and then east to the Canadian border. The study area includes more than 3,000 miles of coastline, which is one and half times the distance of the eastern coast of the US from Canada to the tip of Florida.



Study Process

The Northern Waters Task Force (NWTF) Proposal for Key Changes to Arctic Policy, Infrastructure, and Resource Development, published in January 2012 provided the initial list of sites for consideration.

The Arctic Marine Shipping Assessment (AMSA), published in cooperation with the Arctic Council and the Protection of the Arctic Marine Environment (PAME) in 2009 provided key information for future Arctic scenarios.

The Governor's program for Roads to Resources for unlocking the State's resources for the benefit of all Alaskans provided additional sites for consideration in this study.

Candidate Sites include: St. Paul Island, St. Lawrence Island, Nome, Port Clarence/Teller, Kotzebue/Cape Blossom, Mekoryuk, Cape Thompson, Wainwright, Point Franklin, Barrow, Prudhoe Bay, Mary Sachs Entrance, Bethel, and Cape Darby.

The primary criteria for evaluation of each site's physical suitability were:

- Port Proximity to Mission (mining, oil and gas)
- Intermodal Connections
- Upland Support
- Natural Water Depth
- Navigation Accessibility

Based on the physical criteria, the analysis of candidate sites yielded a short list of four sites: Nome, Port Clarence, Cape Darby, and Barrow. The ranking of these sites varied depending on the weighting of the criteria.

Timeline 2008-2015

The following graphic summarizes some of the recent activities addressing Arctic needs.

Alaska Arctic Port System Development

2008

1st USACE/DOTPF Alaska Regional Ports & Harbors Conference

2009

Arctic Marine Shipping Assessment Report

2010

2nd USACE/DOTPF Alaska Regional Ports & Harbors Conference

2011

JANUARY

USACE/DOTPF Alaska Regional Ports - Planning for Alaska's Regional Ports and Harbors

MAY

USACE/DOTPF Alaska Deep-Draft Arctic Ports Planning Charrette

2012

USACE/DOTPF Alaska Deep-Draft Arctic Ports Study - Year 1

JANUARY

Alaska Partnership for Economic Development - Mining and Infrastructure

Arctic Marine Science Symposium

Alaska State Legislature Alaska Northern Waters Task Force Report

FEBRUARY

Commonwealth North - Infrastructure Study

Alaska Mining Association

MARCH

Institute of the North, North America and the Arctic

APRIL

State Committee on Research

Renewable Energy Alaska Project

World Affairs Council - Oil & Gas

JULY

State Committee on Research

Commonwealth North - Energy/Power

K&L Gates Alaska Shale Conference

Alaska Arctic Ports Scenario Development, Arctic Advisors

AUGUST

Arctic Council Strategic Plan, ION Workshop

Northern Energy Science Fair

North Slope Science Initiative

Bering Strait Management Authority, ION Workshop

National Ocean Policy

Senator Begich - Alaska Gas Roundtable

Arctic Imperative

Alaska Mining Convention

SEPTEMBER

Nome meeting with Mayor Denise Michels

Kotzebue meeting with Mayor Eugene Smith & staff

Alaska Oil & Gas Congress

North Slope Science Initiative Meetings

OCTOBER

Barrow meetings with Mayor Charlotte Brower, NSB, Jake Adams and other ASRC Reps

NOVEMBER

2013

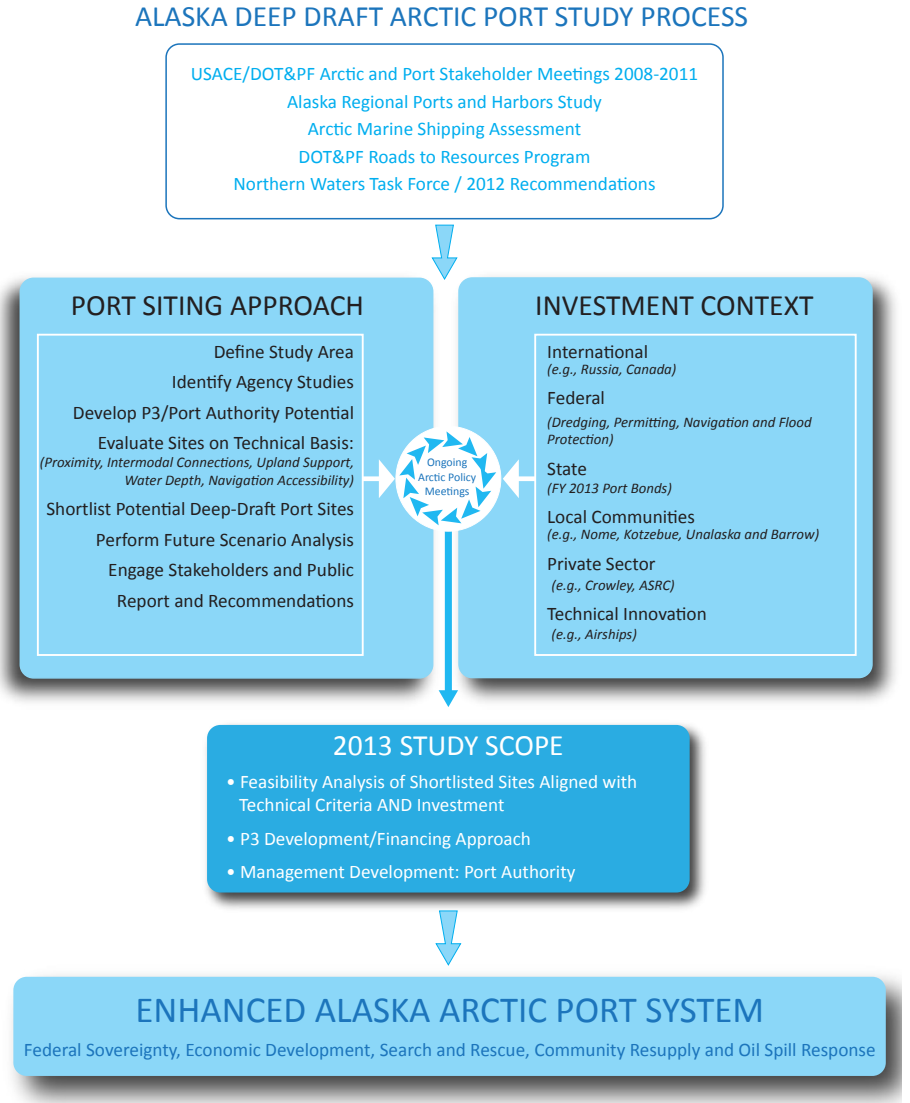
USACE/DOTPF Alaska Deep-Draft Arctic Ports Study - Year 2

2014

USACE/DOTPF Alaska Deep-Draft Arctic Ports Study - Year 3

Investment Context

Recognizing the need to go beyond physical parameters and to deal with the real world, the study team engaged in multiple Arctic meetings to help shape the political and investment climate. Representatives of local communities and private industry provided the team with the status of investment and infrastructure planning.



Future Scenarios

The study period of analysis is 50 years. Scenarios were developed in order to test candidate port sites with the scale and character of unknown and accelerating changes in the Arctic. The two driving forces for changes related to ports are defined as Resource Development and Collaborative Investment.

Recommendations

1. Invest strategically to enhance the Arctic Ports System. Include deep-draft solutions for resource export and support, as well as improvements appropriate for USCG, environmental protection, SAR, and community resupply.

2. Assign lead Federal agency responsibility to the US Army Corps of Engineers for permitting, design, and construction of the Alaska Deep-Draft Arctic Port system.

3. Encourage private entities/banks and authorize other public agencies to collaborate in funding and constructing marine infrastructure. Use the strengths of each sector to achieve success through Public/Private Partnerships (P3).

4. Increase funding to NOAA and other agencies to provide hydrographic and bathymetric mapping and needed data to support marine infrastructure development.

5. Explore and develop navigational aids, such as ship routing, vessel tracking, traffic separation, and identification of areas of concern.

6. Conduct feasibility analysis of shortlisted sites (Nome and Port Clarence) using physical criteria and alignment with potential investors; P3 development; and Port management authority. These two highest ranked sites will be the focus of the feasibility work for 2013-14.

These recommendations for further study of the Alaska Deep-Draft Arctic Port system reflect the policies governing formulation of projects. They do not necessarily reflect the program and budgeting priorities inherent in the local/State and Federal programs or the formulation of a national Civil Works water resource program. Consequently, the recommendations may be changed at higher review levels of the local/State and Federal government.

Project Team

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Additional information can be found on these websites:

www.poa.usace.army.mil/Library/ReportsandStudies/AlaskaRegionalPortsStudy.aspx.

www.dot.state.ak.us/stwddes/desports/arctic.shtml.