ALASKA DEEP-DRAFT ARCTIC PORT SYSTEM

Presented to EDTT and Joint Transportation Committee

30 Jan 2014

ALASKA DEEP-DRAFT ARCTIC PORT SYSTEM

Project Need

- Large vessel traffic is increasing and more than 60% of these vessels are foreign flagged.
- Greater traffic heightens risk of incidents, accidents, and potential threats to subsistence and national sovereignty.
- Emergency response can be many days travel away.
- Community resupply costs are high.
- State policy calls for increased development of mineral, oil and gas resources in the Arctic.
- Increased national concern for energy sufficiency.

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Study Authority

House Public Works Committee Resolution dated 2 December, 1970 states:

"Resolved by the Committee on Public Works of the House of Representatives, United States, that the Board of Engineers for Rivers and Harbors is hereby requested to review the reports of the Chief of Engineers on Rivers and Harbors in Alaska, published as House Document Numbered 414, 83rd Congress, 2nd Session; and other pertinent reports, with a view to determining whether any modifications of the recommendations contained herein are advisable at the present time."

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Study Area

The greatest need for Arctic marine infrastructure is the area from Bethel west and north and then east to the Canadian border.

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Site Selection Criteria

The primary criteria for evaluation of each site's physical suitability as a deep-draft Arctic port were:

- Ports Proximity to Mission(s)
- Intermodal Connections
- Upland Support
- Natural Water Depth
- Navigation Accessibility

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Site Shortlist

- All sites, all purposes, all criteria, equal weights:
  - Nome, Port Clarence (Teller), Cape Darby
- Oil and Gas sites – water depth limited to minus 35-feet
  - Nome, Port Clarence (Teller), Barrow
- Mining Sites – water depth limited to minus 45-feet
  - Nome, Cape Darby, Port Clarence (Teller)

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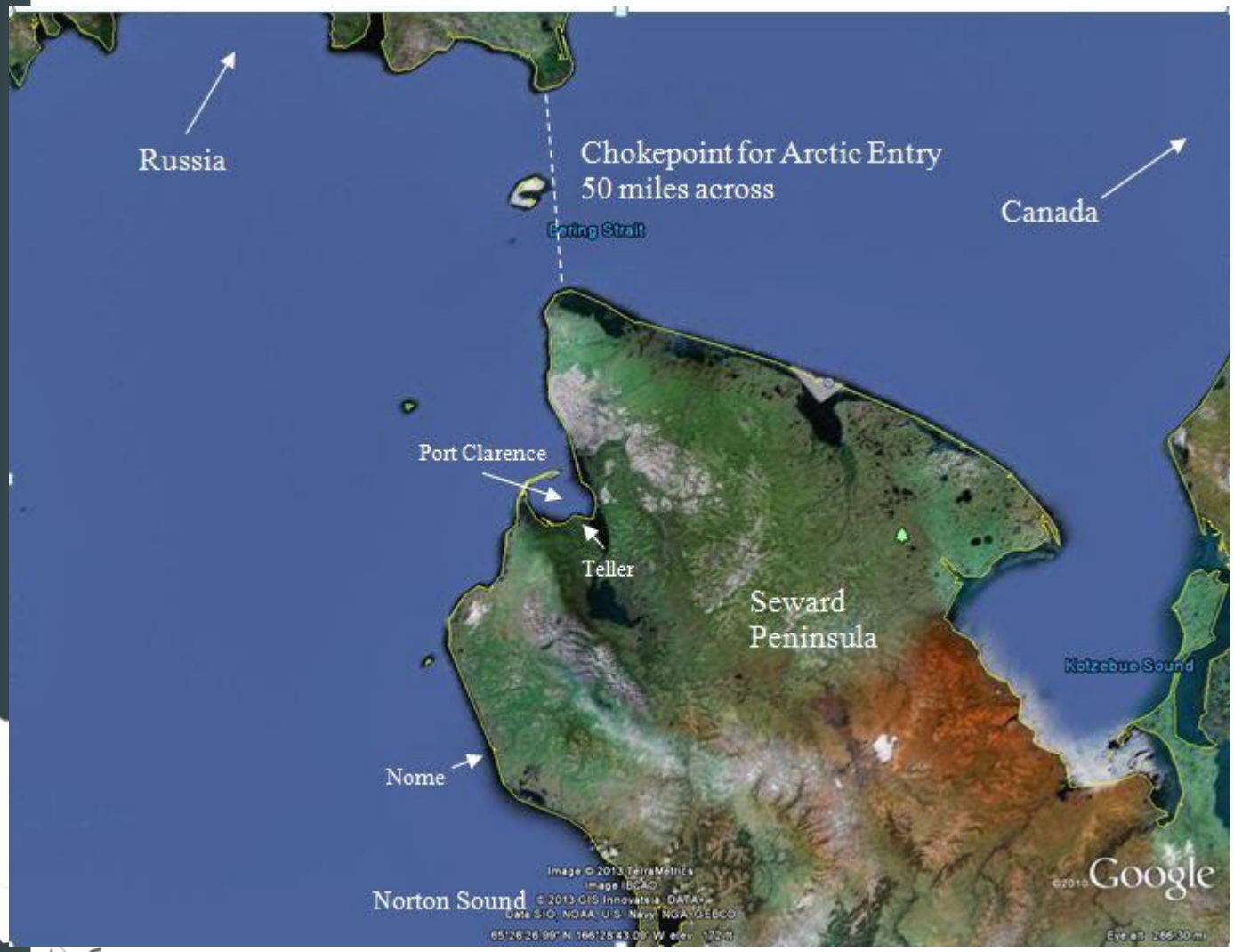
Study Area



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Problem Statement

Increased vessel traffic coupled with limited marine infrastructure along Alaska's Western and Northern shores poses risks for accidents and incidents, increases response times for Search and Rescue, and requires international coordination.

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Opportunities

- Develop local and regional economies (i.e. resource extraction, tourism, research)
- Decrease the cost to exist in the Arctic region
- Improve cooperation and sharing between Nome, Port Clarence, and Teller (and possibly Brevig Mission)
- Provide protected moorage to support offshore oil and gas endeavors, fishing fleet, and resource extraction vessels

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Opportunities Cont'd

- Provide vessel repair and maintenance support
- Improve international relationships
- Increase U.S. exports
- Optimize economic benefits while preserving natural resources
- Raise awareness of U.S. as an Arctic Nation
- Provide upland support to vessels operating in the region (i.e. fuel, water, electricity, food, medical, storage facilities, laydown/staging area for resource extraction)

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Initial Array of Alternatives

Alternative Number	Alternative Name
1	No Action
2	Cape Riley alone
3	Point Spencer alone
4	Nome alone
5	Point Spencer/Cape Riley
6	Nome/Point Spencer
7	Nome/Point Spencer/Cape Riley
8	Nome/Cape Riley

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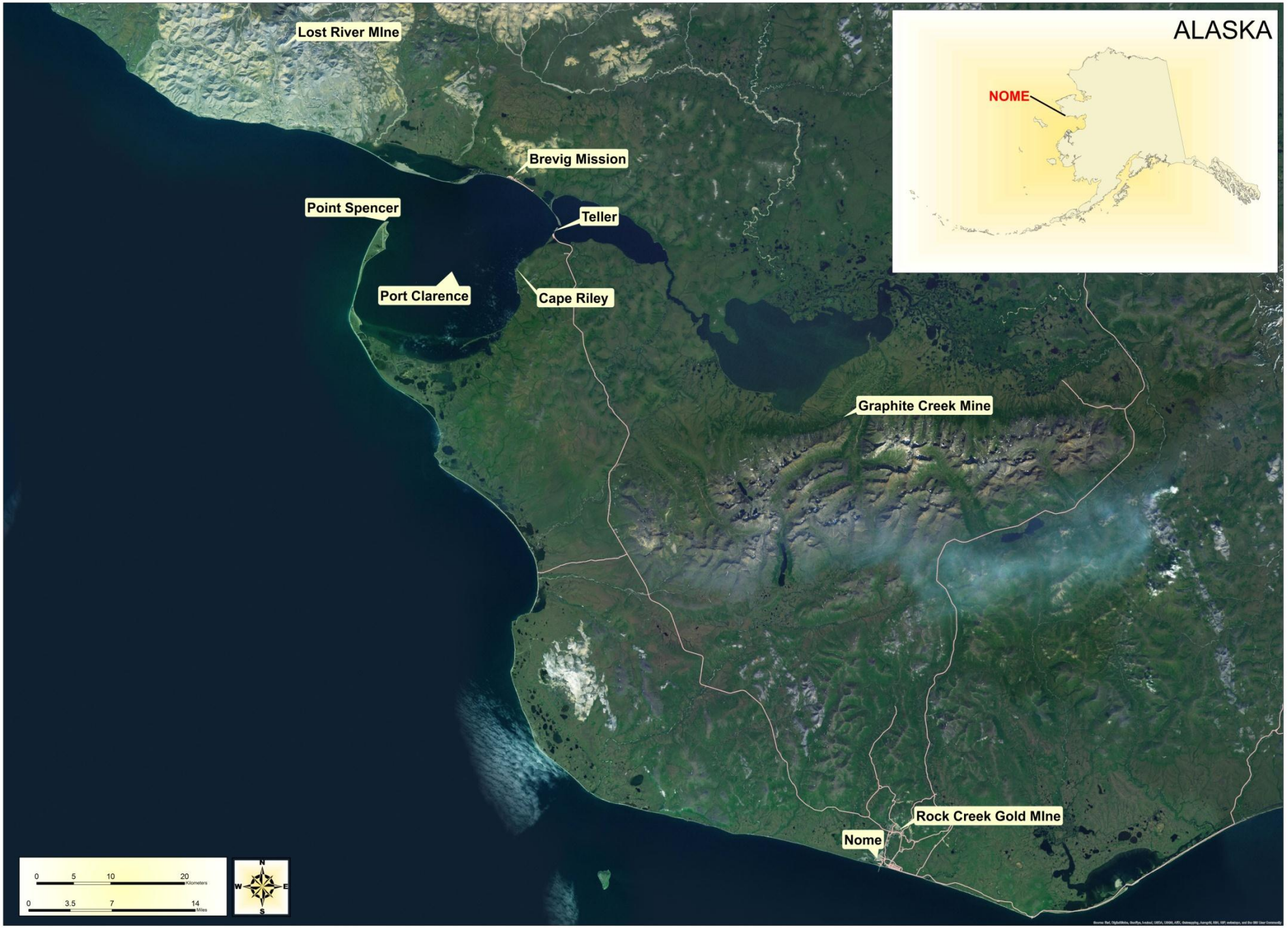
Screening Alternatives

- Three geographic sites:
  - Nome
  - Point Spencer
  - Cape Riley


Lost River MIne
Brevig Mission
Point Spencer
Teller
Port Clarence
Cape Riley
Graphite Creek Mine
Rock Creek Gold MIne
Nome
ALASKA
NOME
0 5 10 20 Kilometers
0 3.5 7 14 Miles
N
W
E
S

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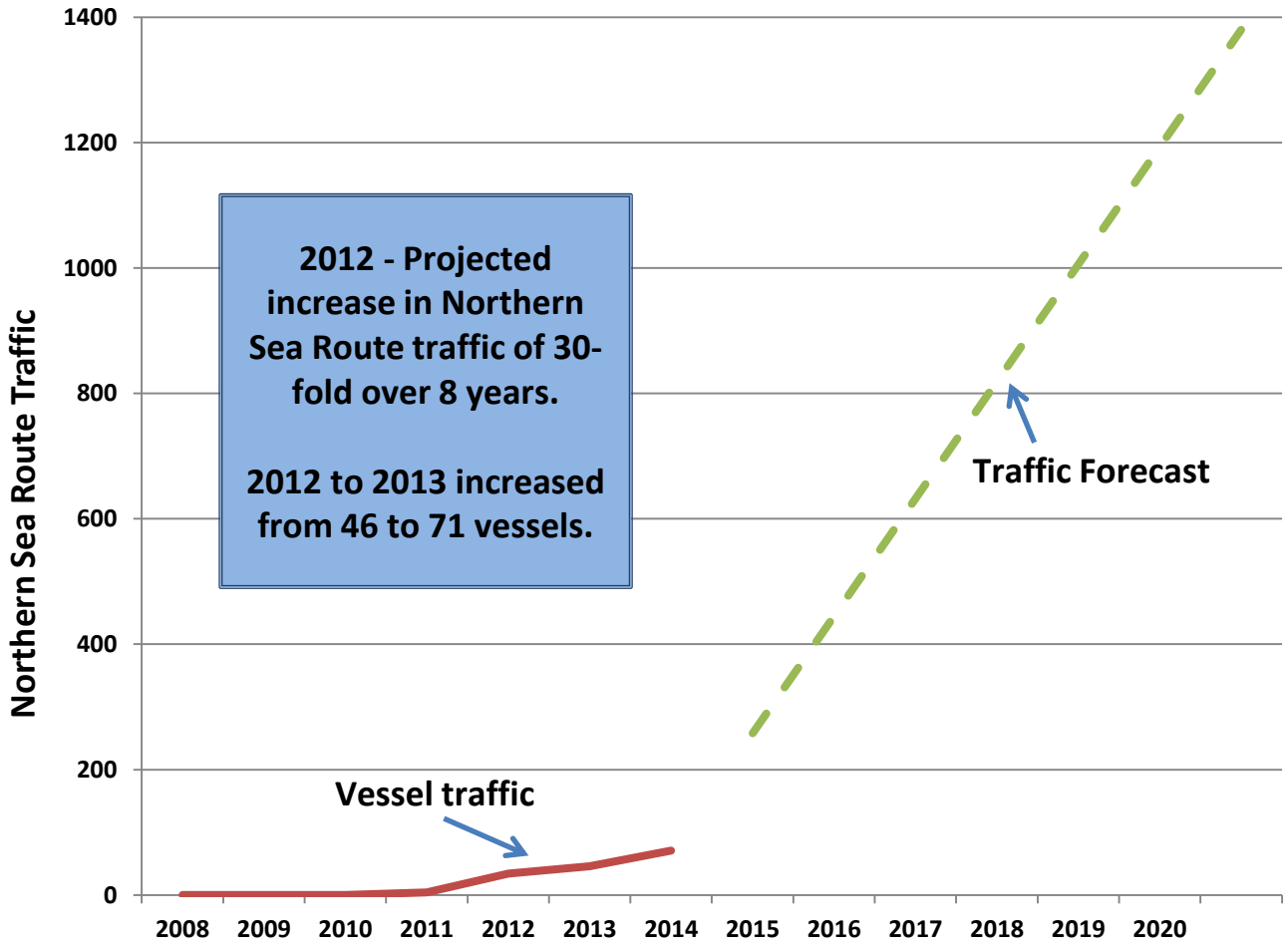
Arctic Traffic Trends



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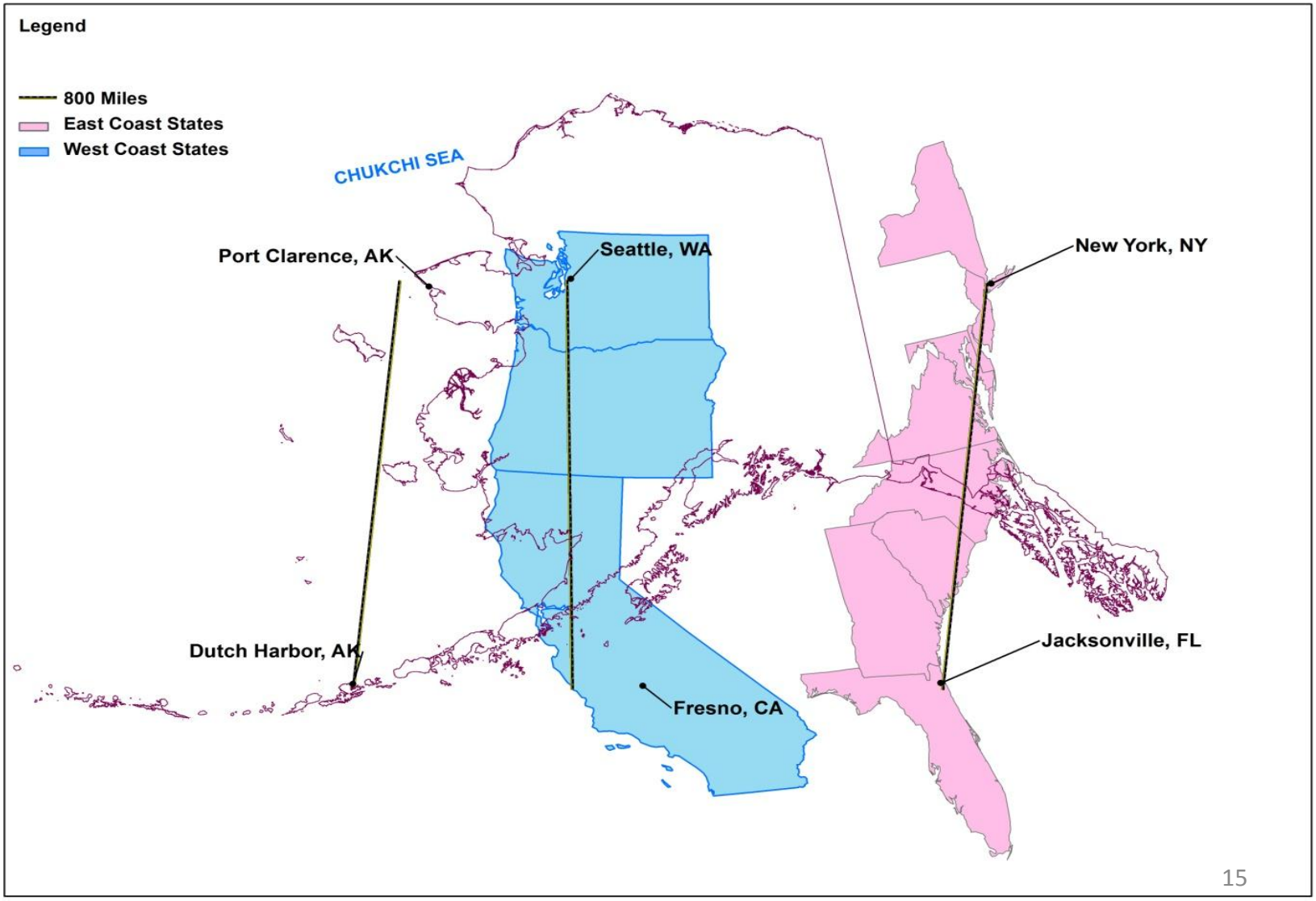
What does 800 miles look like?



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Nome proposal

- Will accommodate line haul fuel barge, ice breakers, cargo barges, tanker, Coast Guard cutters, NOAA, research vessels, landing craft, tugs
- Extend existing causeway 2,150 feet
- Demolish existing spur breakwater
- Construct 600-foot concrete caisson dock, (maybe an additional 400-foot caisson dock)
- Connect City Dock and West Gold Docks
- Dredge outer channel and maneuvering area to minus 35-feet, dredge between existing causeway and main breakwater to minus 22-feet. Disposal in existing offshore disposal area or used for beach nourishment.
- Extend utilities to caisson dock
- Armor stone on seaward face is 22-ton average and harborside face is 8-ton average

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Port of Nome

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Point Spencer proposal

- Will accommodate line-haul barge, tug assist, ice breakers, oil and gas support vessels, heavy lift barge
- Construct 200, 600, or 1,000-foot caisson dock
- Turning basin and entrance channel dredged to minus 35-feet
- Upland facilities include fuel tanks and 15-acre laydown area
- No connecting road to Nome/Teller Hwy.

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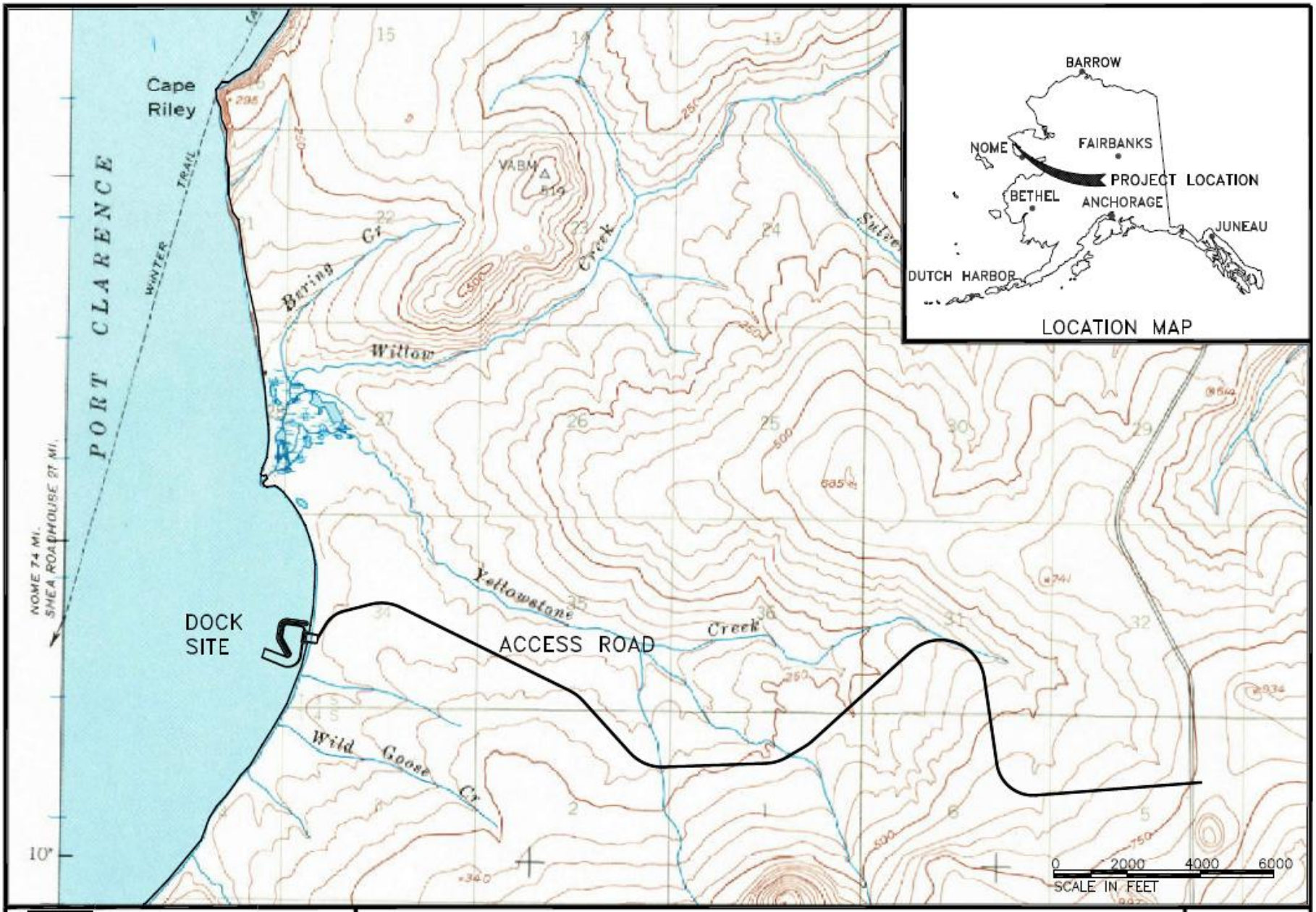
Cape Riley proposal

- Can accommodate shallow draft mineral extraction vessels, lightering vessels
- 250-foot by 40-foot concrete caisson dock
- 200-foot by 360-foot staging area
- 550-foot turning basin with minus 12.5-foot depth
- 305-foot entrance channel with minus 12.5-foot depth
- Armor stone weighing 3 to 6 tons
- 5.5 mile road connecting to Nome/Teller Hwy.



ALASKA DISTRICT
CORPS OF ENGINEERS
CIVIL WORKS BRANCH

CAPE RILEY SHALLOW-DRAFT MINERAL EXTRACTION DOCK
ARCTIC DEEP DRAFT FEASIBILITY STUDY

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Timeline (USACE Process Schedule)

- Alternatives Milestone – May 15, 2013 (Actual)
- Tentatively Selected Plan concurrence – November 2013 (not yet)
- Public Review – March 2014
- Agency Decision Milestone – June 2014
- MSC Submittal final report – July 2014
- Civil Works Review Board – August 2014
- Chief's Report – December 2014

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What happens then?

- Once Tentatively Selected Plan concurrence received
  - State DOT&PF has opportunity to select different plan
  - Narrows the footprint for H&H, Econ, Geotech, NEPA work and coordination
  - Public, Agency, IEPR review starts

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What happens after feasibility study signature?

Once the Chief of Engineers signs the feasibility study:

- Final feasibility report goes to Congress for action:
  - Authorization to construct (WRDA type action)
  - Appropriations to construct (funding)

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More Information….

State website and email

http://www.dot.alaska.gov/stwddes/desports/arctic.shtml

dot.jhq.arcticportstudy@alaska.gov

Federal website and email

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

Akregports@usace.army.mil

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Thank You

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