

Asharoken Coastal Storm Damage Risk Reduction Feasibility Study

***Megan Jadrosich
Project Manager
U.S. Army Corps of Engineers
New York District***



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Outline

- **Summary of Studies/Projects & Feasibility Study Purpose**
- **Preliminary Plan for Coastal Storm Damage Risk Reduction**
- **Economic and Environmental Challenges for Sand Source**
- **Future Study Tasks**

Study Area



Study Authorization:

- **1993 - House Resolution for Study of Beach Erosion Control, Storm Damage Reduction and Related Purposes, North Shore of Long Island, NY.**
- **September 1995 - North Shore of Long Island, NY Reconnaissance Study for Asharoken Beach**
- **Identified potential Federal interest and the need for a more detailed study.**
- **2001 - New York State Department of Environmental Conservation & U.S. Army Corps of Engineers sign Feasibility Study Cost-Share Agreement**

Study Purpose

Evaluate alternatives to select an optimal plan to provide hurricane and storm damage protection for the Village of Asharoken, NY.

Other Corps Project

- **Emergency Section 103 Project for Shoreline Protection following 1992 storm.**
- **Asharoken Avenue – vital access road. Project addressed roughly 900 feet of shoreline. First completed in 2006-2007.**
- **Rehabilitated with Federal Emergency funding in 2007-2008.**
- **15-year Project Life**



Comprehensive Plan for Storm Damage Risk Reduction



Alternative Evaluation

- **No Federal Action**
- **Non-Structural**
(buyouts, relocation, floodproofing)
- **Structural**

Structural Alternatives

Road raising

Beach nourishment

Seawalls

Dunes

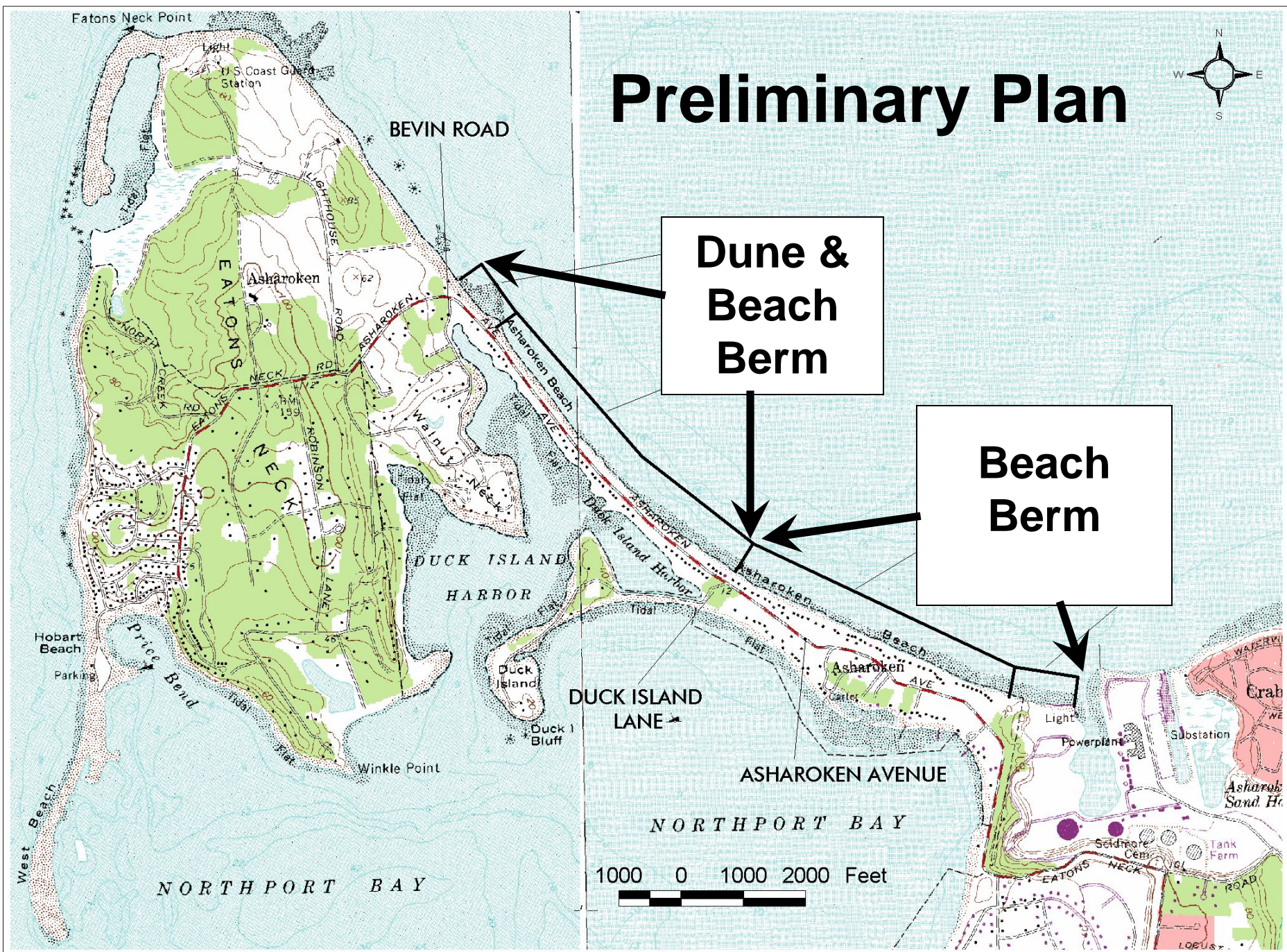
Interior drainage features

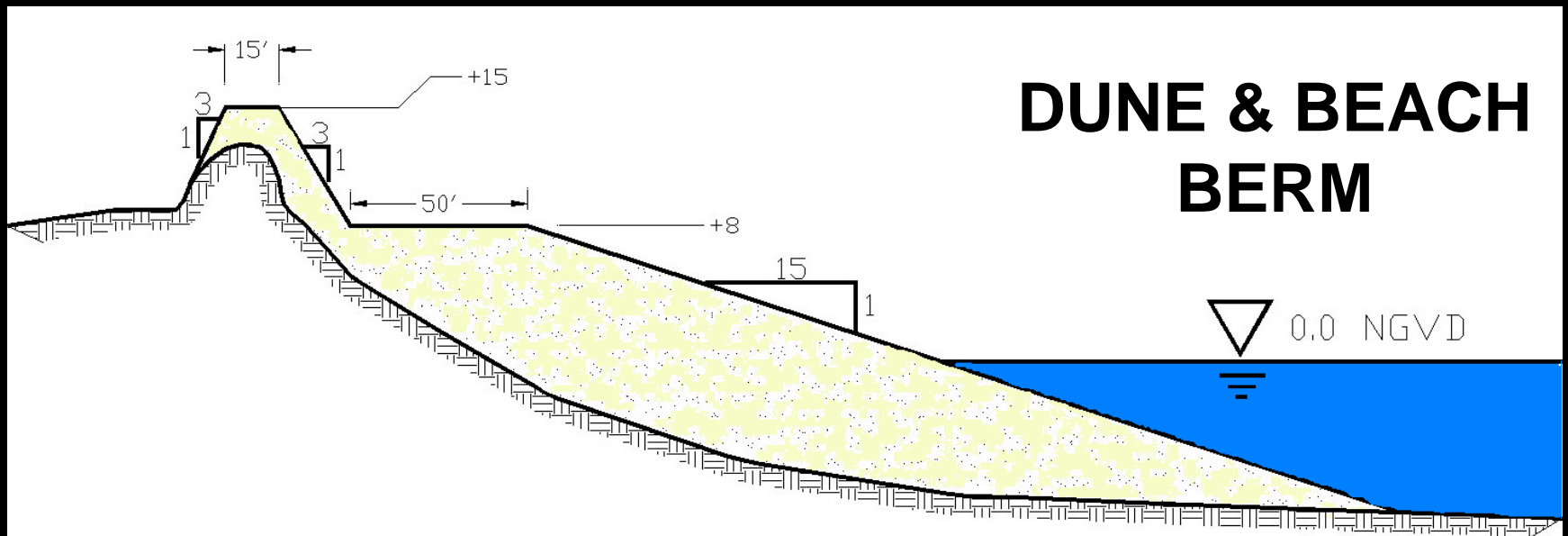
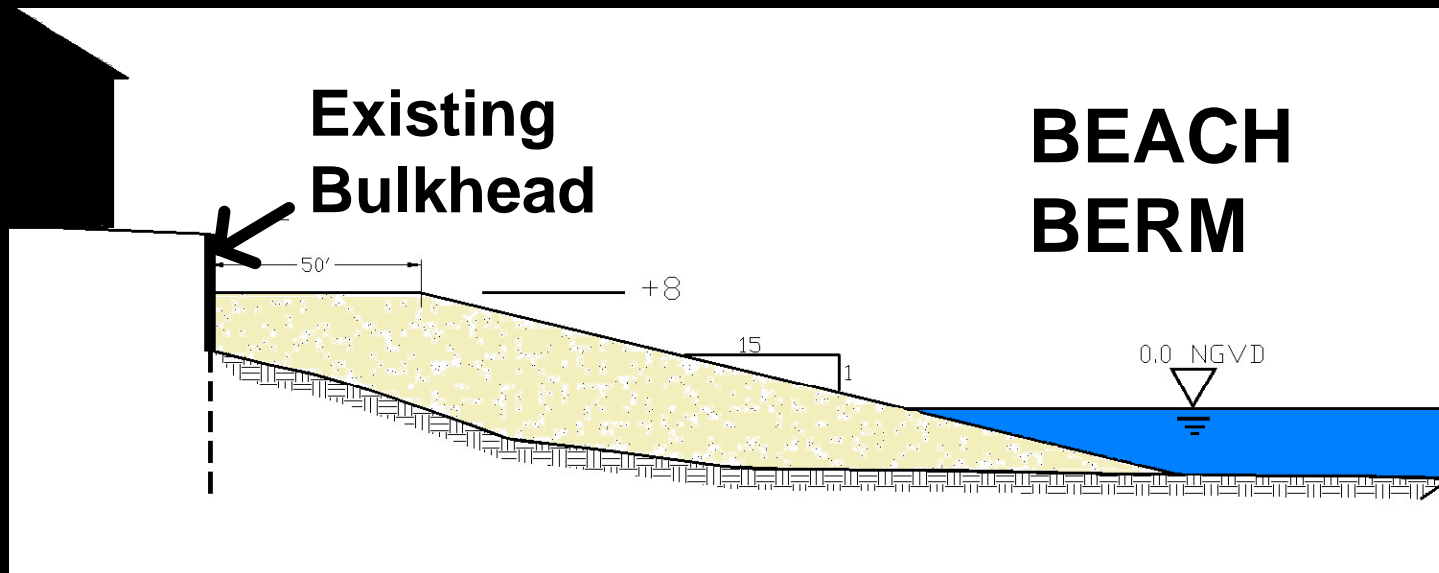
Sand bypass system

Breakwaters

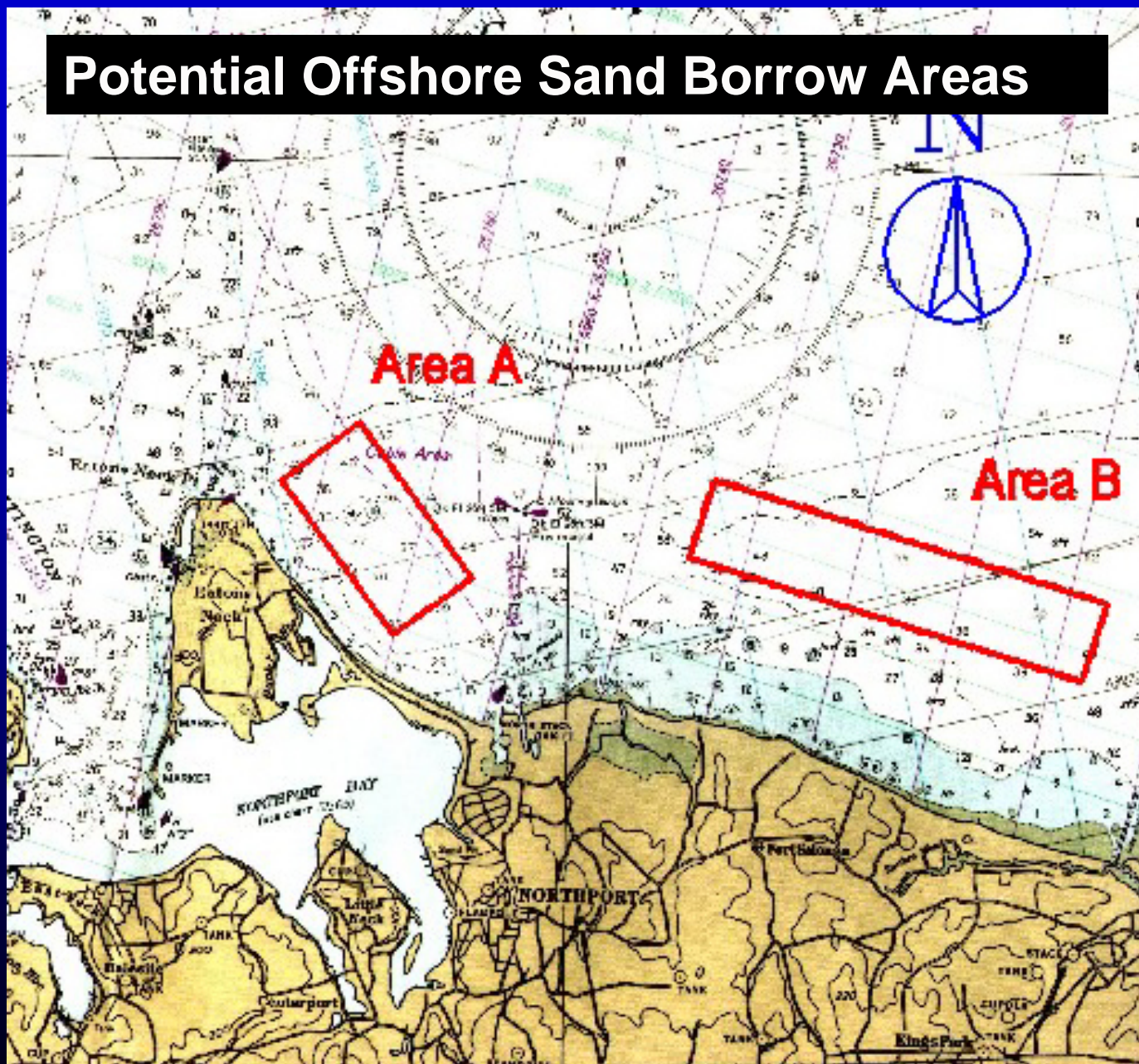
Groins

Combinations of the above





Potential Offshore Sand Borrow Areas



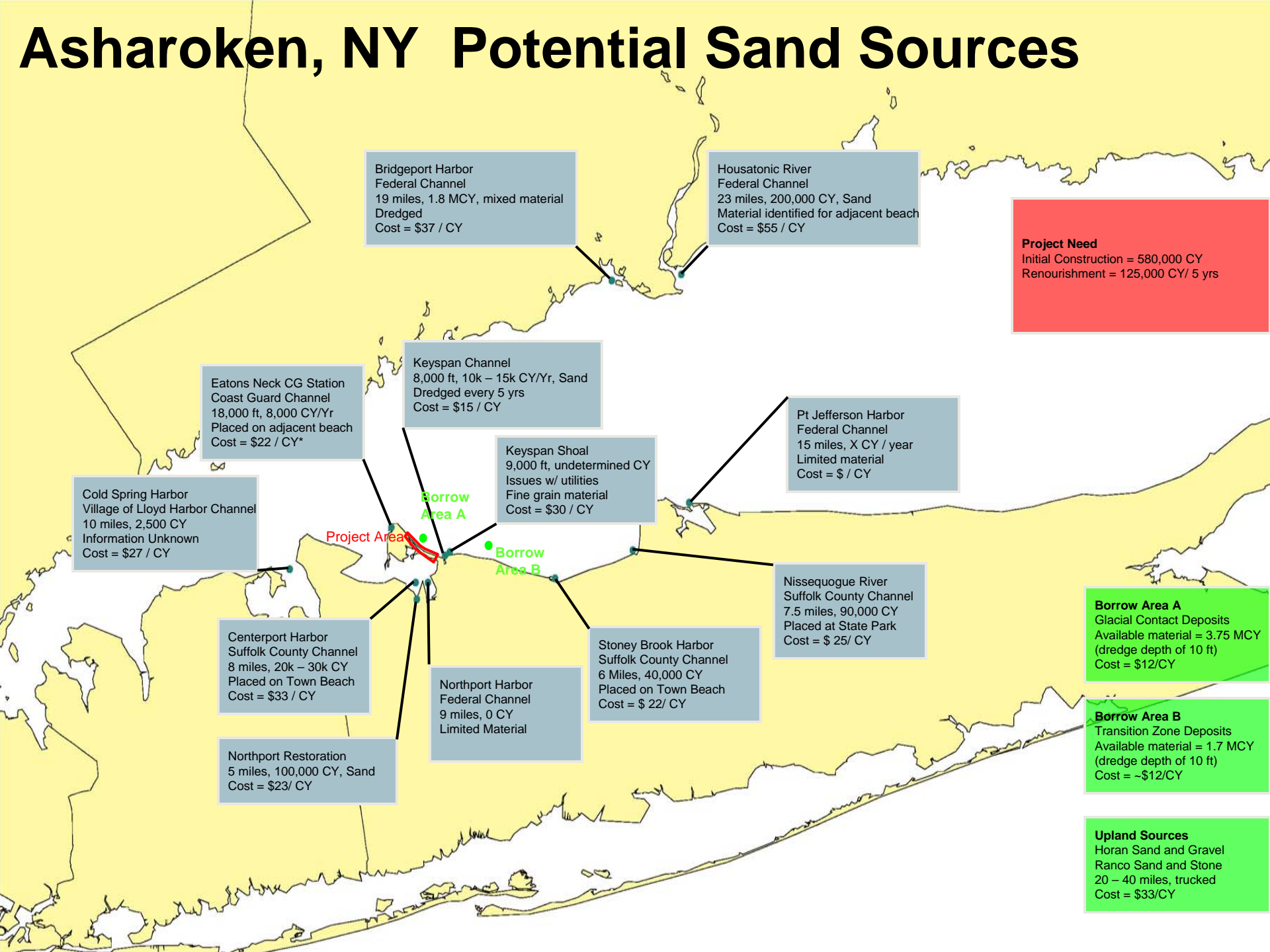
Environmental Concerns Offshore Sand Borrow Area in Long Island Sound

- **Finfish and Shellfish**
 - * **Lobster & Winter flounder**
- **Water quality – Dissolved Oxygen**
- **Sediment type – Infill of Borrow Area**

Alternative Sand Sources

- Upland
- Huntington Harbor
- Nearshore - National Grid
- Eatons Neck Spit
- ~~Inlet Dredging~~
- Duck Island Harbor

Asharoken, NY Potential Sand Sources



Economics

- **Offshore Sand Borrow Area**
Benefits exceed Costs
 $B/C > 1$
- **Upland Sand Source**
Costs Exceed Benefits
 $B/C < 1$

Primary Next Steps

Document Sand Source Alternatives & Constraints (Environmental, Economic, Other)- Corps work together with NYSDEC

Scope of Work & Funding for Study Conclusion

Overview of Studies Undertaken

➤ 2001 Aerial Photography	April 2001
➤ 2001 Topographic Survey	April 2001
➤ Environmental Scoping Document	March 2002
➤ Screening of Alternatives Report	September 2003
➤ Borrow Area Identification and Investigation Report	January 2003
➤ Wind, Storm Surge and Wave Hindcast Modeling	January 2003
➤ Sediment Transport Analysis,	August 2004
➤ Cultural Resource and Remote Sensing Survey	April 2004
➤ Nearshore Investigation, 2005 Finfish, Invertebrate Infauna and Water Quality Summary Report	July 2005
➤ Long Island Sound, Borrow Area Investigation, Final 2004 Finfish/Epibenthic Invertebrate Summary Report	July 2004
➤ Long Island Sound, Borrow Area Investigation, Draft Finfish/Epibenthic Invertebrate Summary Report, 2004 Sampling	February 2005
➤ Long Island Sound, Borrow Area Investigation, Draft Finfish/Epibenthic Invertebrate Summary Report	October 2005
➤ Long Island Sound, Borrow Area Investigation, Final Finfish/Benthic Invertebrate Summary Report	August 2007
➤ Air Quality Analysis	December 2005
➤ Draft Fish and Wildlife Coordination Act Report	August 2005
➤ Draft Essential Fish Habitat Assessment	November 2006
➤ Asharoken Feasibility Study Economic Analysis	August 2006

Timeline

- **Additional Study Funding*** **Aug 2009***
- **Economic, Engineering, Cost Estimate** **Mar 2010**
- **NEPA Document Prep – EIS/EA** **Jun 2010**
- **Draft Feasibility Report for Reviews** **Sep 2010**
- **Draft Feasibility Report – Public Doc** **Jun 2011**
- **Final Feasibility Report** **Sep 2011**
- **HQ/OMB Approval** **Mar 2012**
- **Pre-Construction Engineering & Design** **2013-2014**
- **Project Partnering Agreement** **2014**
- **Congressional Authorization for Construction** **2014**
- **Construction Funding** **2015**
- **Construction** **2015-2016**

Thanks for your time!

Contact Information:

www.nan.usace.army.mil

Megan Jadrosich

Megan.Jadrosich@usace.army.mil

917-790-8618



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