



# Dredging in North Carolina

# Overview

- Type of Inlets in North Carolina
- State & Federal Funding for Dredging Operations
  - Shallow Draft Navigation Channel & Lake Dredging Fund
- Memorandums of Agreement with Army Corps
- Other Dredging Alternatives

# Why Do We Need Dredging?

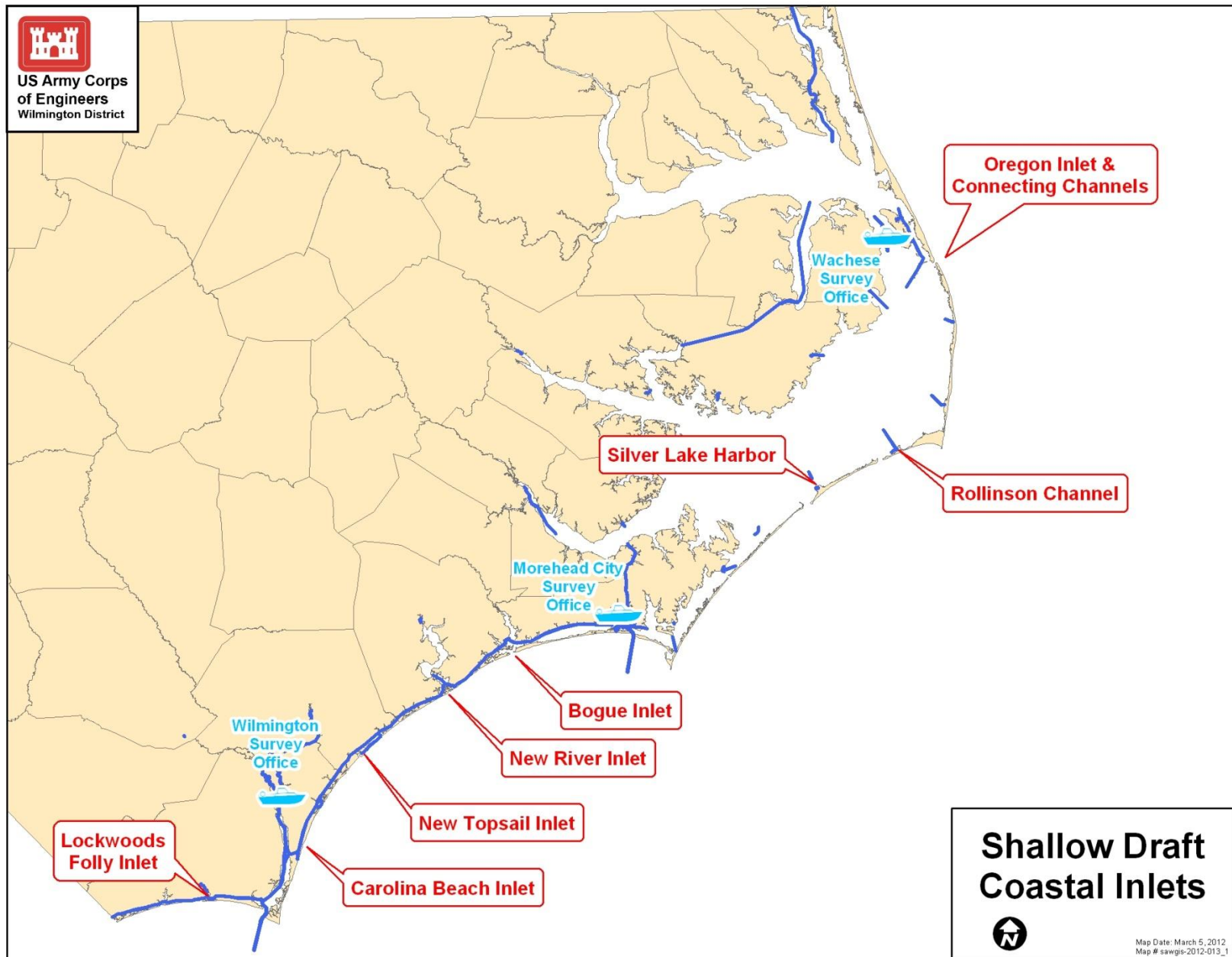
- NC Coastline has a wide variety of inlets that are critical to coastal commerce – coastal highways
  - Commercial traffic at NC Ports / Commercial fishermen/ Charter fisherman / Recreation & tourism
- These inlets constantly shoal & fill in with sand
- Only through routine dredging and maintenance can these inlets remain open to support NC's economy

# Two Types of Inlets in NC

- Shallow Draft Inlets:
  - Authorized depths of 15 feet or less
  - Many shallow draft inlets in NC
  - Historically have been the biggest problem due to their tendency to shoal rapidly
- Deep Draft Inlets:
  - Authorized depths greater than 15 feet
  - Two in NC: Wilmington Harbor & Morehead City
  - Historically have not been as big a problem in NC



US Army Corps  
of Engineers  
Wilmington District



Oregon Inlet &  
Connecting Channels

Wachese  
Survey  
Office

Silver Lake Harbor

Rollinson Channel

Morehead City  
Survey  
Office

Bogue Inlet

New River Inlet

New Topsail Inlet

Carolina Beach Inlet

Wilmington  
Survey  
Office

Lockwoods  
Folly Inlet

## Shallow Draft Coastal Inlets



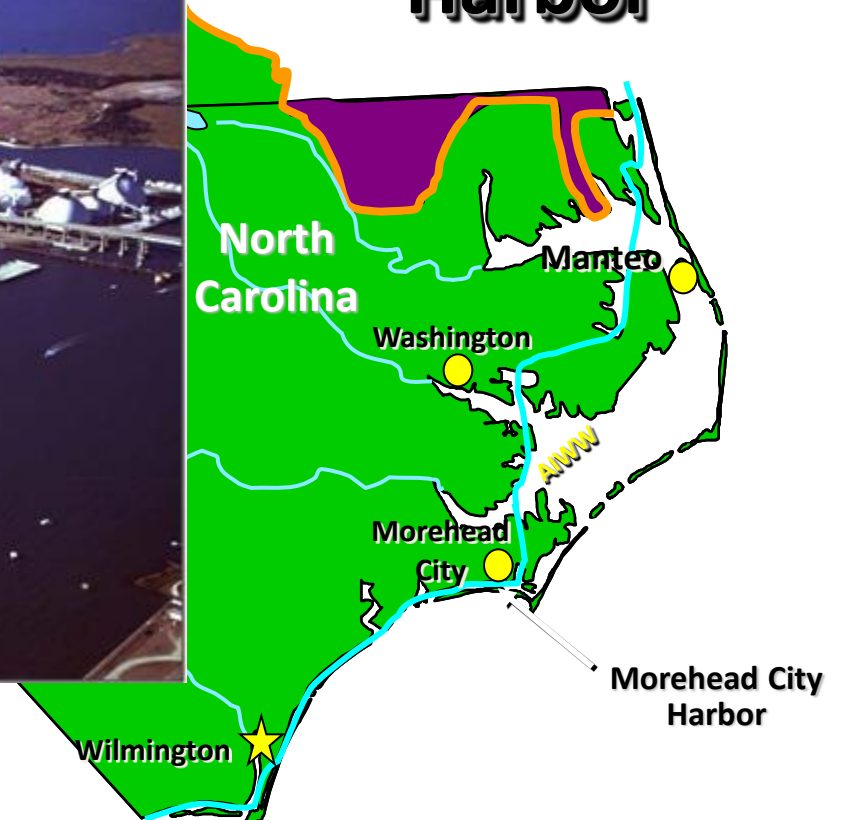
Map Date: March 5, 2012  
Map # sawgis-2012-013\_1



# US Army Corps of Engineers



## Morehead City Harbor



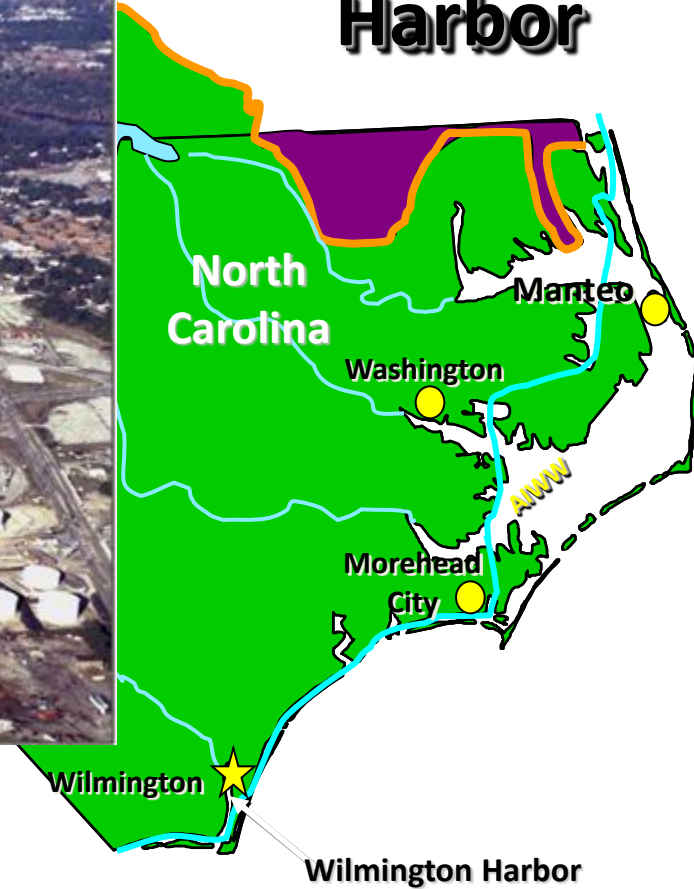




# US Army Corps of Engineers



## Wilmington Harbor



# Funding for Dredging Operations



# Background

- Inlets are “federally authorized” – feds maintain if funding is available.
- NC used to receive substantial federal funding to maintain shallow draft and deep draft inlets
- Federal funding supplemented occasionally for both Deep Draft & Shallow Draft Channels w/State funds
- Federal funding has declined in recent years

# Federal Dredge Funding FY 2011 - 2015

Project	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Wilmington Harbor	\$11.9M	\$20.4M	\$16.5M	\$18.0M	\$14.0M
Morehead City	\$4.0M	\$8.7M	\$10.1M	\$6.3M	\$8.9M
Shallow Draft Inlets	\$12.7M	\$22.3M	\$19.8M	\$8.8M	\$6.4M

# Alternatives to Federal Funding

- Develop Memorandum of Agreement (MOA) with Army Corps
- Provide State funding to Corps to conduct dredging
  - Corps already has permits for dredging & experience and trained staff for project management
  - State needs funding source

# Memorandum of Agreement (MOA)

- Corps can not accept non-federal funding without a MOA
- MOAs are usually drafted for a specific project, i.e, dredging project, beach nourishment project, study...
- MOAs can cover a one-time activity (short term MOA) or may cover a number of activities over several years (long term MOA)
- MOAs must go through Washington DC for approval and normally take 6 months or longer to be finalized

# Shallow Draft Inlet Dredging (Non-Oregon Inlet)

- NC realized it could no longer depend upon federal govt for routine dredging of shallow draft inlets
- Two actions were taken
  - Long-term MOA developed
  - Shallow Draft Navigation Channel & Lake Dredging

# Shallow Draft MOA

- In place for 5 years
- Allows NC to contribute up to \$4M per year to Corps for dredging of all shallow draft channels
- Contributed money is made up of State & local funds
- MOA does not have enough capacity to keep Oregon Inlet open year round (OI needs \$7M - \$10M/yr)
- Dredging is performed (usually) by Corps dredges
- MOA allows for Corps to contract w/private dredges
- Dredging done at request/discretion of NC

# Shallow Draft Navigation Channel & Lake Dredging Fund

- Established by G.S.143-215.73F
- Provides State share for Shallow Draft MOA
- Also provides State share for Non-Corps & interior lake dredging projects
- State funds must be matched 50-50 with local funds
- Funds provided by small percentage of gas tax & percentage of boater registration fees
- Provides approximately \$6M per year
  - About \$1.5M per quarter



## Shallow Draft Navigation Channel & Lake Dredging Fund

- \$8,717,521 received in fund since its establishment
- \$6,766,946 encumbered in 7 grant contracts
- One additional grant for \$517,250 pending for N. Topsail
- \$300,000 pending for Oregon Inlet dredging
- One grant request only partially filled
  - Requested \$4.25M
  - \$1.25M provided to date (remainder will follow this year)
- No request denied to date

# Outstanding Issues

- Dredging of Morehead City / Wilmington Channels
  - One time MOA in development (Morehead City)
  - Long Term MOA may be necessary
  - Source for State funding
  - Other potential sources for funding
- Dredging of Oregon Inlet
  - Potential MOA in development
  - 340 days of dredging @ OI per year for \$7.2M
  - \$3.6M local funds / \$3.6M State match
  - State funding source

# Other Alternatives

- State obtains federal dredge authorizations
  - This process underway for some shallow draft inlets
- Allows State to contract with private dredges independent of Corps
- State procures its own dredges

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