

THINKING OUT OF THE BOX



US Army Corps
of Engineers



Photos: Walker Golder NAS

**A new paradigm needed for management
of dredged material islands in North Carolina**

New Concept: Dredging is for the Birds



IHC Holland



Photo: Walker Golder, NAS

- 1970's – Realization that dredge material islands were exceedingly valuable bird habitat in the North Carolina coastal zone.
- Dredged material, once thought of as “SPOIL” *something of no value*, became a rich and valuable resource.
- Innovative ways needed to manage material –
 - Control-of-effluent vs. diking

EARLY COORDINATION AND RESEARCH

- 1976 – USACE funded study conducted by UNC-Wilmington on the effects of diking of dredged material islands on coastal bird life in NC (Parnell et al. 1978).
- 1983 – USACE funded study and surveys of colonial waterbird habitats and nesting populations in NC (Parnell et al, 1986)
- 1988 – Wilmington District funded Dr. Parnell, UNC-W for the creation of a Colonial Waterbird Database.
- 1988- Present – Wilmington District continues to fund surveys and censuses on a 3 year cycle along with other resource agencies for the continuation of the database now managed by the NC Wildlife Resources Commission.

KEY TO SUCCESSFUL MANAGEMENT

- 1988 – COLONIAL WATERBIRD MANAGEMENT PLAN



Wilmington District, other federal and state agencies signed a Memorandum of Agreement to work toward the implementation of a management program for the protection and management of the colonial nesting waterbirds of coastal North Carolina.

MANAGEMENT STRATEGIES

- Knowledge of required elevation, size, timing considered for maintenance projects.
- Control-of-effluent method of disposal (no diking)
- Coordination of maintenance with key agencies.
- Surveys and census of bird population on islands.

1970's – 1990's (Yesterday)

MAINTENANCE EVENTS COINCIDED WITH NEED FOR MATERIAL ON DREDGE DISPOSAL ISLANDS USED BY NESTING COLONIAL WATERBIRDS, INCLUDING:

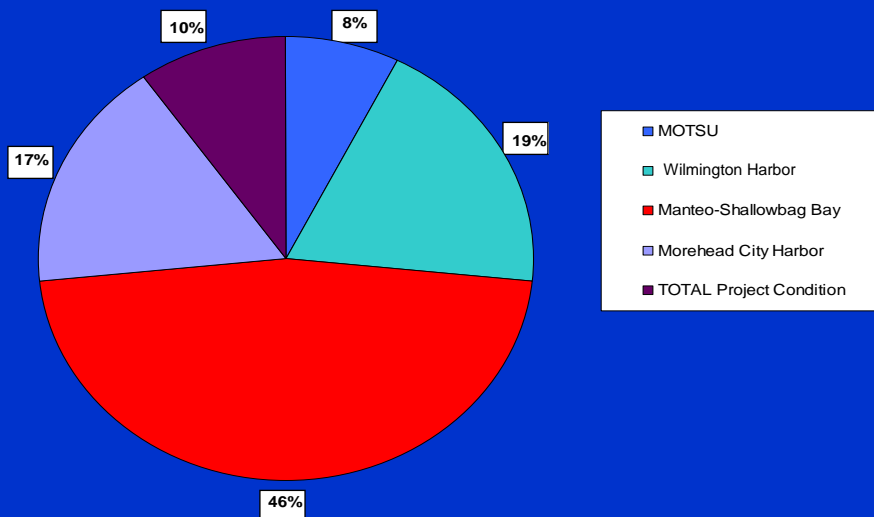
- Manteo, Old House Channel and Channel to Wanchese
- Big Foot Slough
- Wainwright Slough
- Hatteras/Rollinson Channels
- Back Sound
- Drum Inlet
- Cape Fear River

1991: 43% of NC CWB nesting on dredged material islands; 65% of the state's CWB population (NAS).

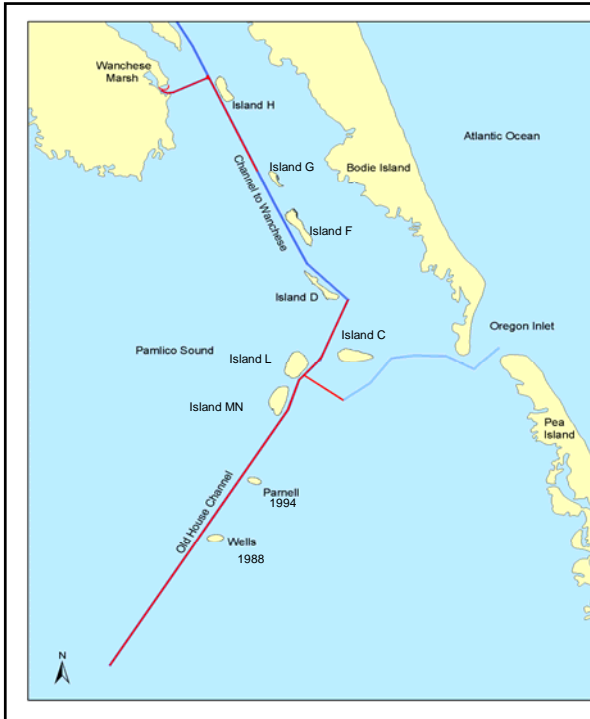
TODAY AND THE FUTURE

- Funding for shallow draft navigation projects minimal to non-existent.
- Federal channels becoming dangerous to navigate.
- Dredged material islands used by CWB suffering due to lack of available bare sand nesting habitat and vegetative growth.
- Island ownership becoming an increasing problem.

Wilmington District Budget Distribution FY 2005



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MANTEO (SHALLOWBAG) BAY

- Oregon Inlet
- Old House Channel
- Channel to Wanchese

DISPOSAL AREAS:

Oregon Inlet – Nearshore and Pea Island beachfront

Old House and Channel to Wanchese: Control-of-effluent on bird islands and upland – Island H

FUNDING: Currently funded for Oregon Inlet, interior channels may or may not be funded in future.

Wainwright Island

1997 Disposal



Sept 21, 2003 3 days after Hurricane Isabel



SCHEDULED MAINTENANCE: Routinely 4 year cycle.
Not funded in FY 05, 06, ????????

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A new paradigm needed for management of dredged material islands in North Carolina

Past: Management of nesting islands was an indirect accomplishment of the Corps maintaining federal navigation channels and beneficially placing material on the dredge islands.

Future: Management of bird nesting islands needs to be the main objective and goal; sediment from adjacent federal channel is an available source of sand.



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WHERE DO WE GO FROM HERE?

- **1988 Cooperative Agreement** - Continue surveys and census, annual meetings.
- **Resource Agency Participation:** It will take all resource agencies to work together to consider and discuss how to make it happen.
- **Funding:** Keeping the bird nesting habitat available within the state of NC and elsewhere will require innovative thinking regarding funding.
- **Island Ownership:** State ownership of islands as well as posting.



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QUESTIONS???



Photo: Walker Golder NAS