



***Long-Term Bird use of the Craney Island Dredged Material Site  
In Portsmouth, Virginia 1974-2005***

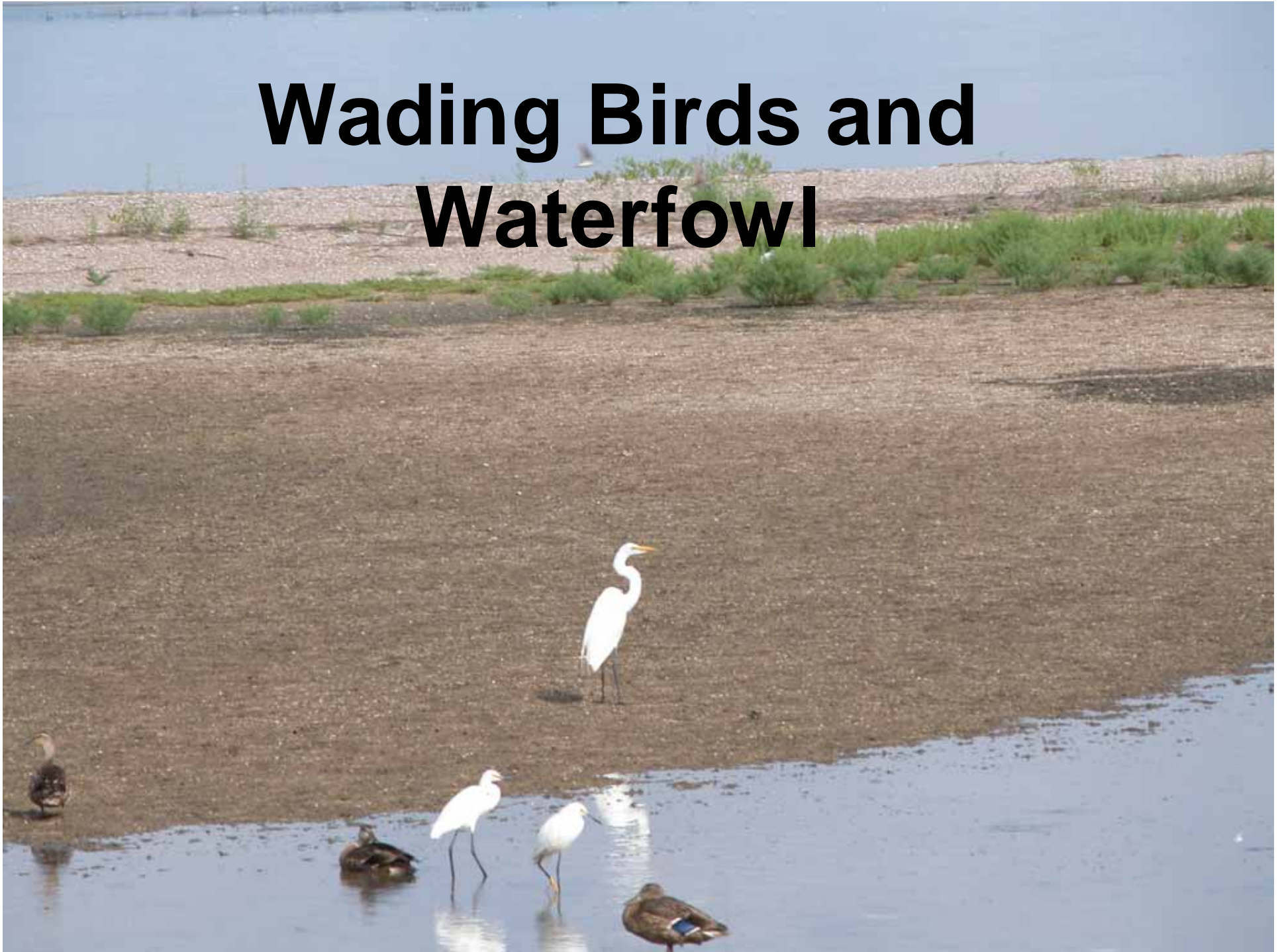
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# Introduction

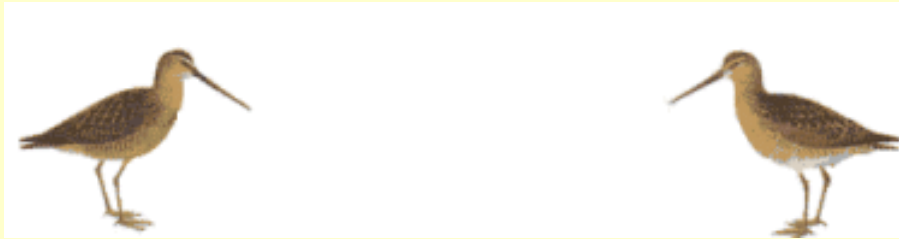
- Craney Island, Portsmouth, VA - An ever changing and dynamic site
- Long-term monitoring project (since 1974)
- Avian utilization of site (Nesting, Migrating and Wintering)
- Major threats to the birds
- Uncertain Avian Future at Craney

# Wading Birds and Waterfowl



# Shorebirds





# Brief History of Craney Island Combat

- |                |  |
|----------------|--|
| 1974 – 1987    | Mutual Lack of Understanding and Cooperation ---<br>Varying degree of avian nesting success  |
| 1988           | Initiated Bird Habitat Management Effort --- Led to the<br>Establishment of Appropriate Least Tern Nesting Habitat <ul style="list-style-type: none"><li>• Corps Created Sites</li><li>• W&amp;M Decoyed Least Terns to 3 of 5 sites</li><li>• Strong Public Outreach Effort Initiated</li></ul> |
| 1989           | First Pair of Nesting Piping Plovers led to a<br>Management MOU Between Corps and W&M  |
| 1989 - Present | Close Cooperation with Periodic Planning Meetings  |

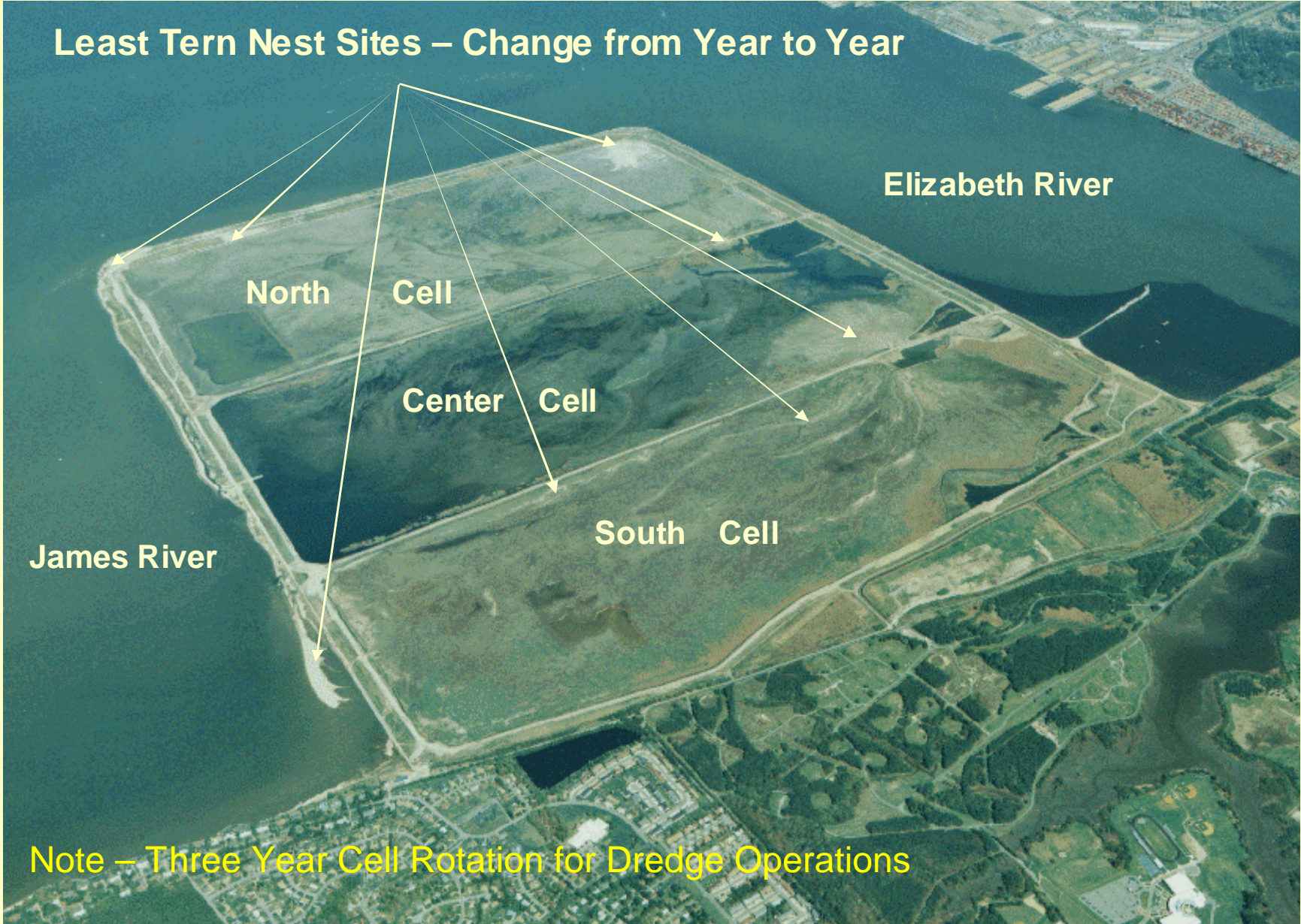
# Current Major Threats and Concerns

- Changing Habitat
- Avian and Mammalian Predation
- Human Disturbance
- Flooding





# Least Tern Nest Sites – Change from Year to Year



Note – Three Year Cell Rotation for Dredge Operations

# Create Habitat with Appropriate Substrate



# Vegetation Control



# Least Terns on Territory



## Typical nest at Craney Island at Prepared Site



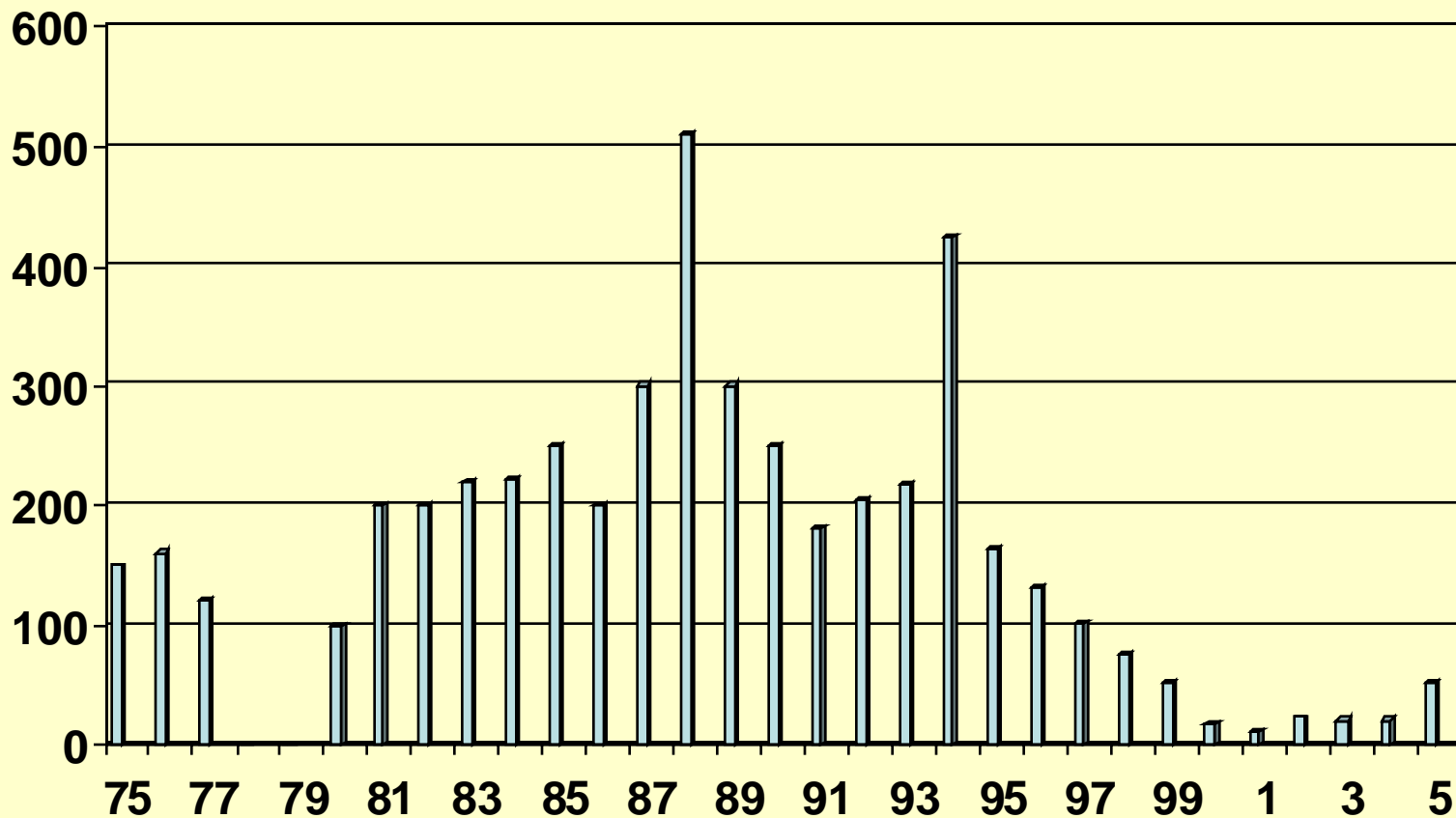
# Newly Hatched Least Tern



# Least Tern with Prey



# Least Tern Adult Count at Craney Island 1975-2005





# Least Tern Colony 2000



500 0 500 Feet

■ Nest Locations  
▭ Colony Boundary

Boundary Area ~39 acres

## 0.88 Least Tern Fledged Young/Nest in 2005



## Piping Plover Nesting on Craney 1989-1997



# Continual Change / Disturbance



# Nesting Areas Posted and Closed During Breeding Season



# Buffer Zones



Buffer Zone

Keep  
Out  
Sign





# Continuous Dredging Operations





# Dredge Material Operations and Nesting Birds Can Co-exist



# Managing Cells for Nesting, Migrating and Wintering Species



**Habitat Creation**

**Depth of Water**

**Vegetation Control**

# Red Fox Primary Predator



# Avian Predators



# Avian Predation



## Current Management Approach

- Yearly Joint Planning Session with Corps
- Create Suitable Habitat for Beach Nesting Species.
- Maintenance of Sites.
- Identify / Post / Protect All Active Sites.
- Frequent Monitoring.
- Predator Management.
- Weekly Report / Recommendations to On-site Management

# The Good, The Bad, The Ugly

**GOOD:** Created Habitat Works – Maximum of 287 Pairs of Nesting Least Terns; 5 Pairs of Nesting Piping Plovers

**BAD:** Foxes, Feral Cats, Wild Dogs Destroyed Nesting Birds

**UGLY:** Greater than Half of Shoreline Foraging Area Lost to Plovers by Installation of Rip Rap

Increased Dredging Operations Adversely Impacting Previously Successful Nesting Sites

# **Uncertain Avian Future at Craney**

**Mammalian Predation – Outlook Bleak Unless  
Neighboring Facilities Actively  
Control Foxes, Feral Cats and  
Dogs**

**Increased Dredging Requirements - The Continuous  
and Simultaneous Use of All Three Cells will Negate the  
Management Strategy Employed since 1988**

**Future of Craney Island for Avian Use is Uncertain –  
Facility may be Enlarged or may be Converted to Other  
Uses**

**\* New Management Strategy Under Development \***



# Acknowledgements

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