

***BEYOND RESTORATION: THE
RUSSELL W. PETERSON URBAN
WILDLIFE REFUGE
WILMINGTON, DELAWARE***

Presented by:

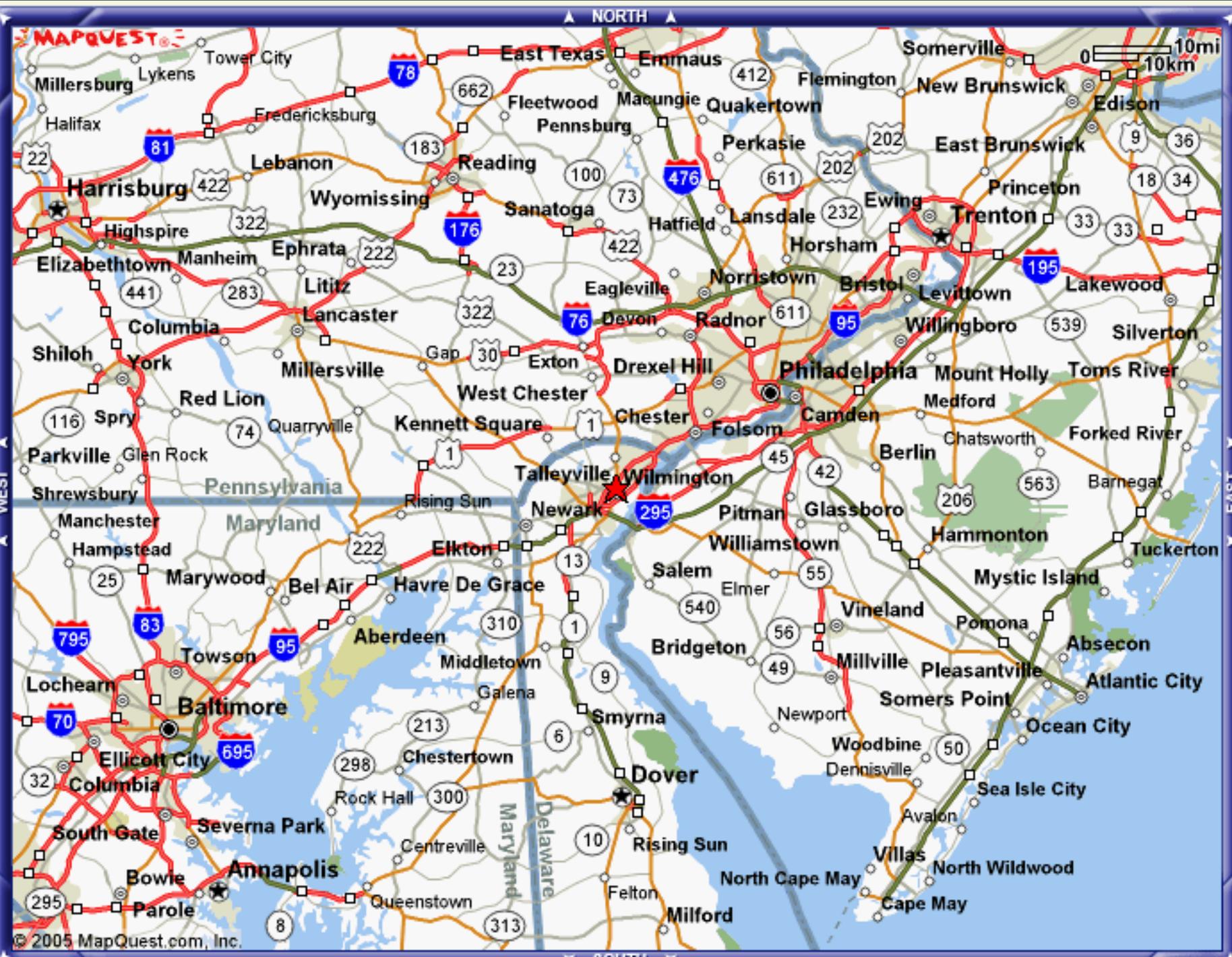
Thomas Moran

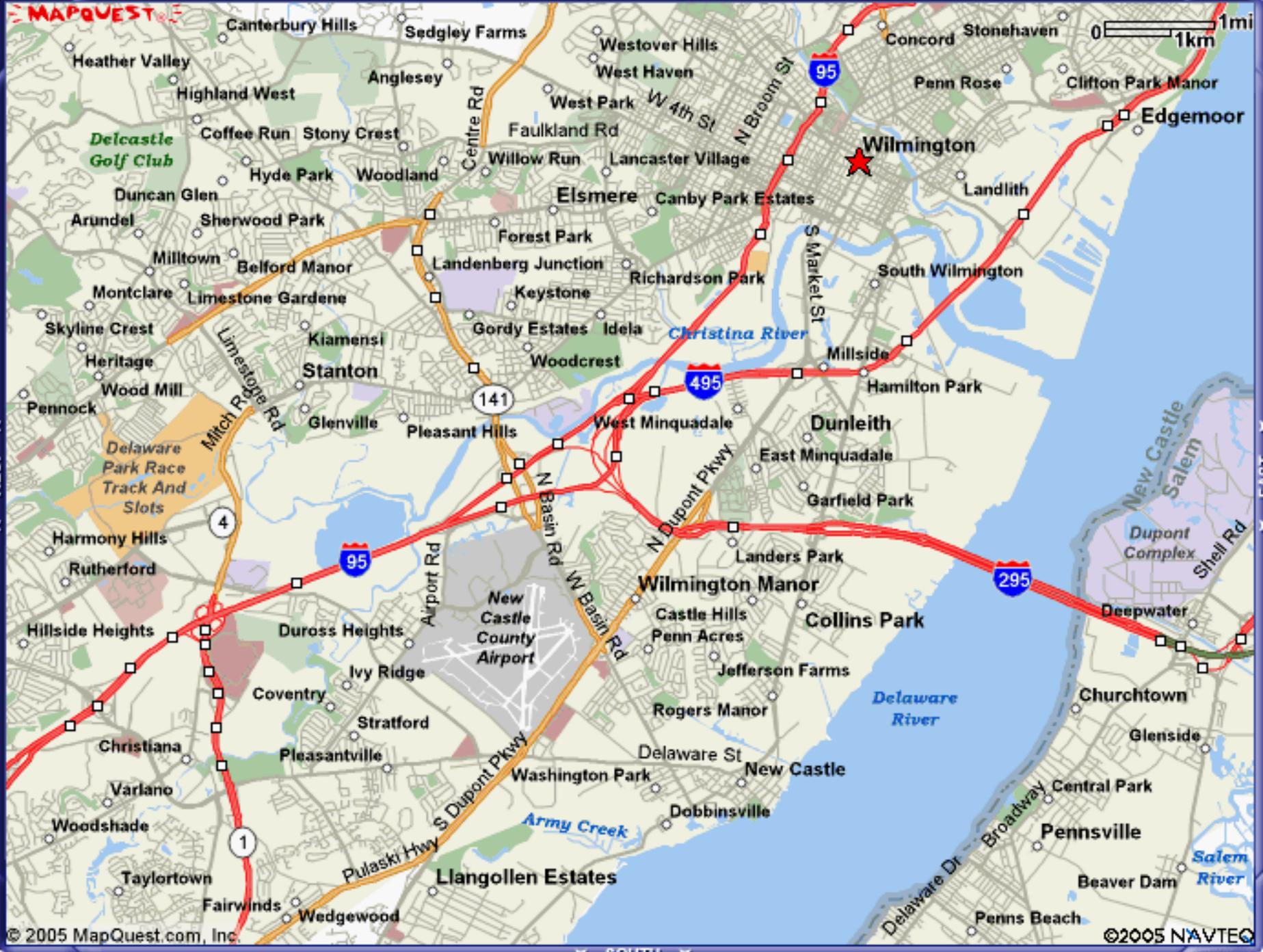
Photos by:

Robert Meadows

**Delaware Division of Fish and Wildlife
Mosquito Control Section**

January 2010

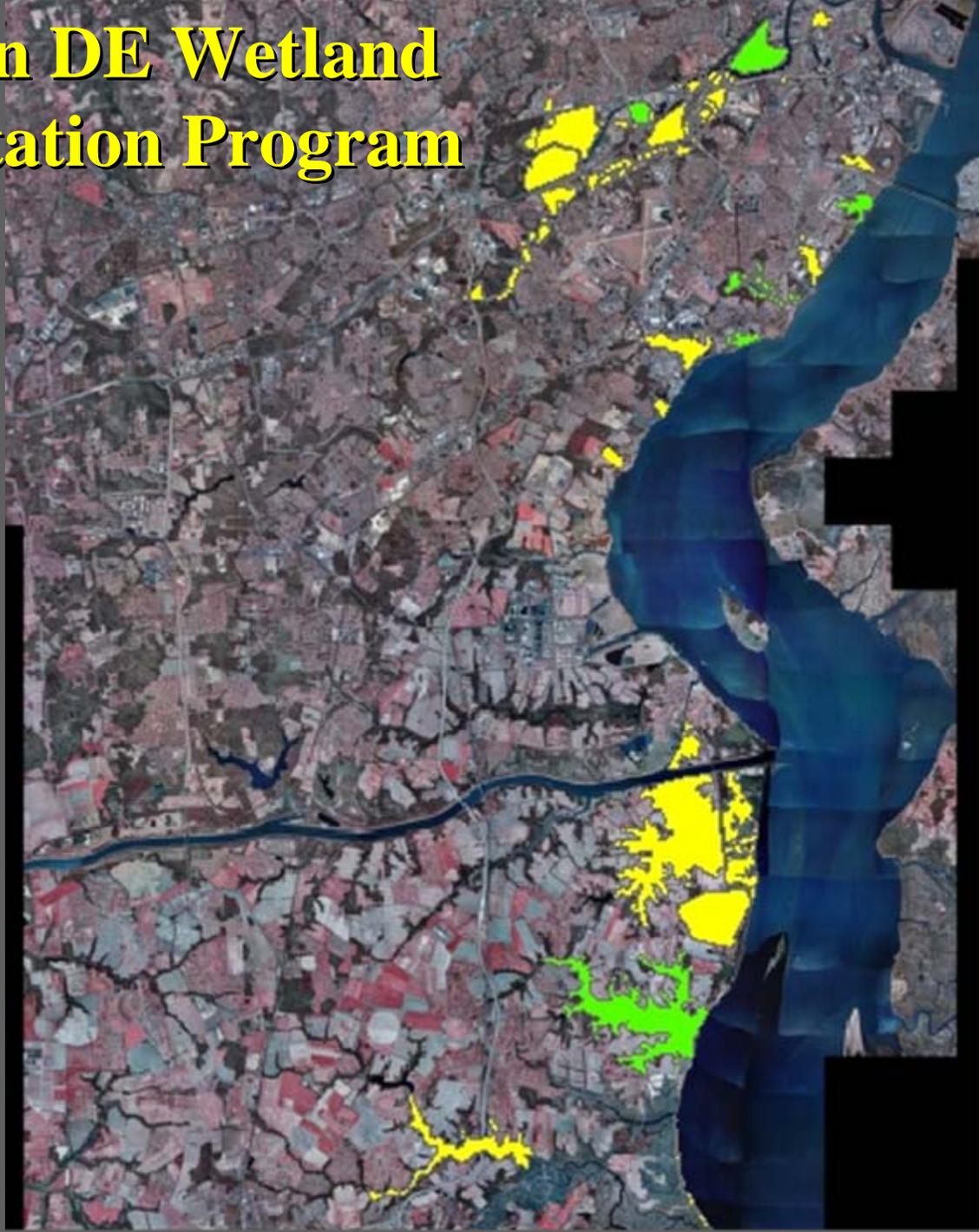




History of Project

- A “Vision for the River” plan developed, 1992.
- Rehabilitation of Old Wilmington Marsh and establishment of an urban wildlife refuge and environmental education center was identified as an integral part of a comprehensive redevelopment initiative for the Wilmington waterfront.”

Northern DE Wetland Rehabilitation Program



NDWRP Strategy

- **Rehabilitate numerous individual wetland sites within an urban landscape to:**
 - **create an ecologically interconnected corridor of freshwater, tidal wetlands**
 - **provide critical habitat for fish and wildlife**
 - **restore wetland values and functions**
 - **provide recreational and educational opportunities to an urban/suburban population (where possible)**

Site Restoration Objectives

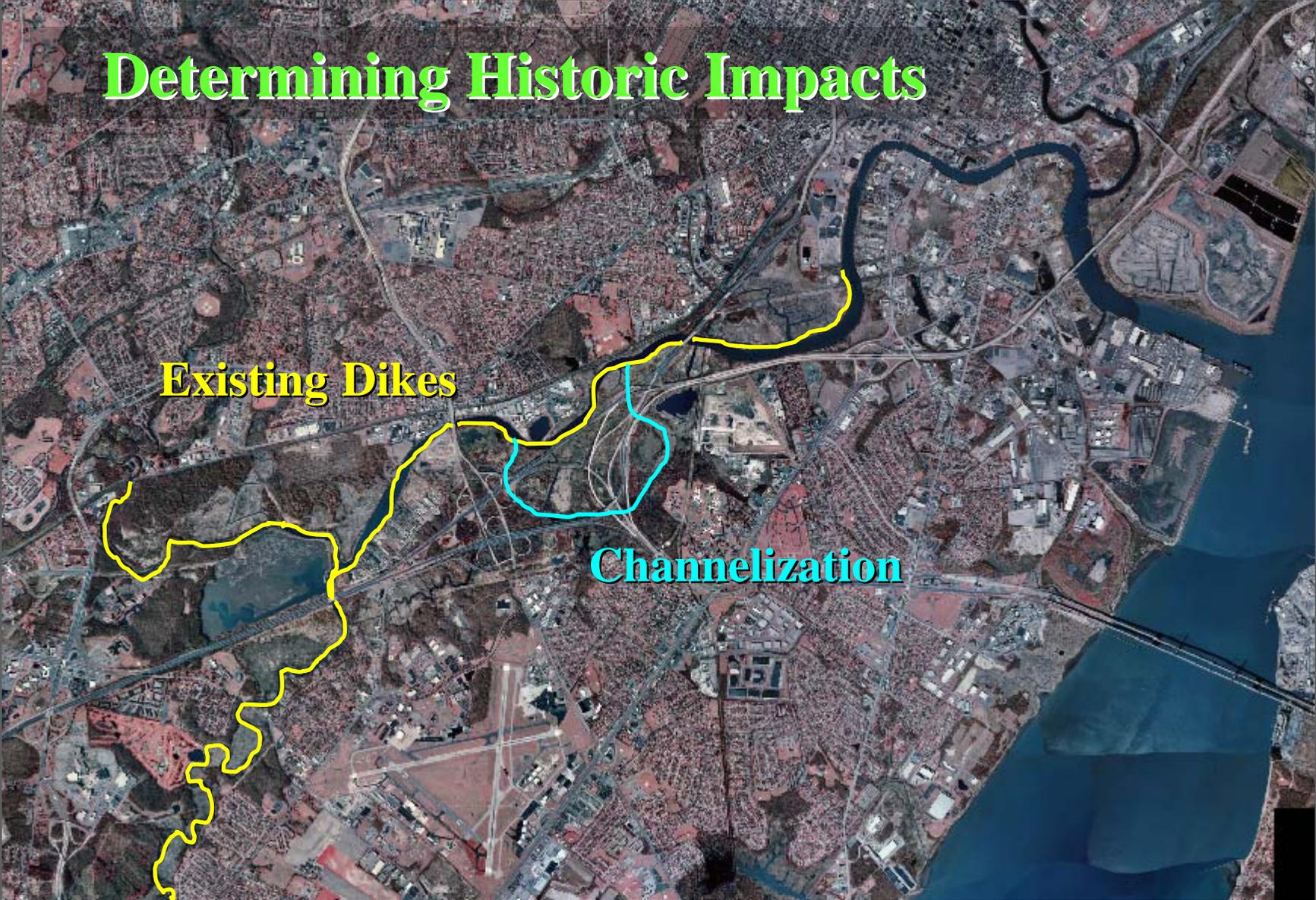
- **Restore Hydrology to Affected Areas**
- **Invasive Species Control**
- **Improve fish habitat/passage**
- **Habitat Enhancement-unique mosaic**
- **Provide Educational Opportunities**

Restoration Process...

Determining Historic Impacts

Existing Dikes

Channelization



Marsh Impacts: Present & Remnant

Rail Lines

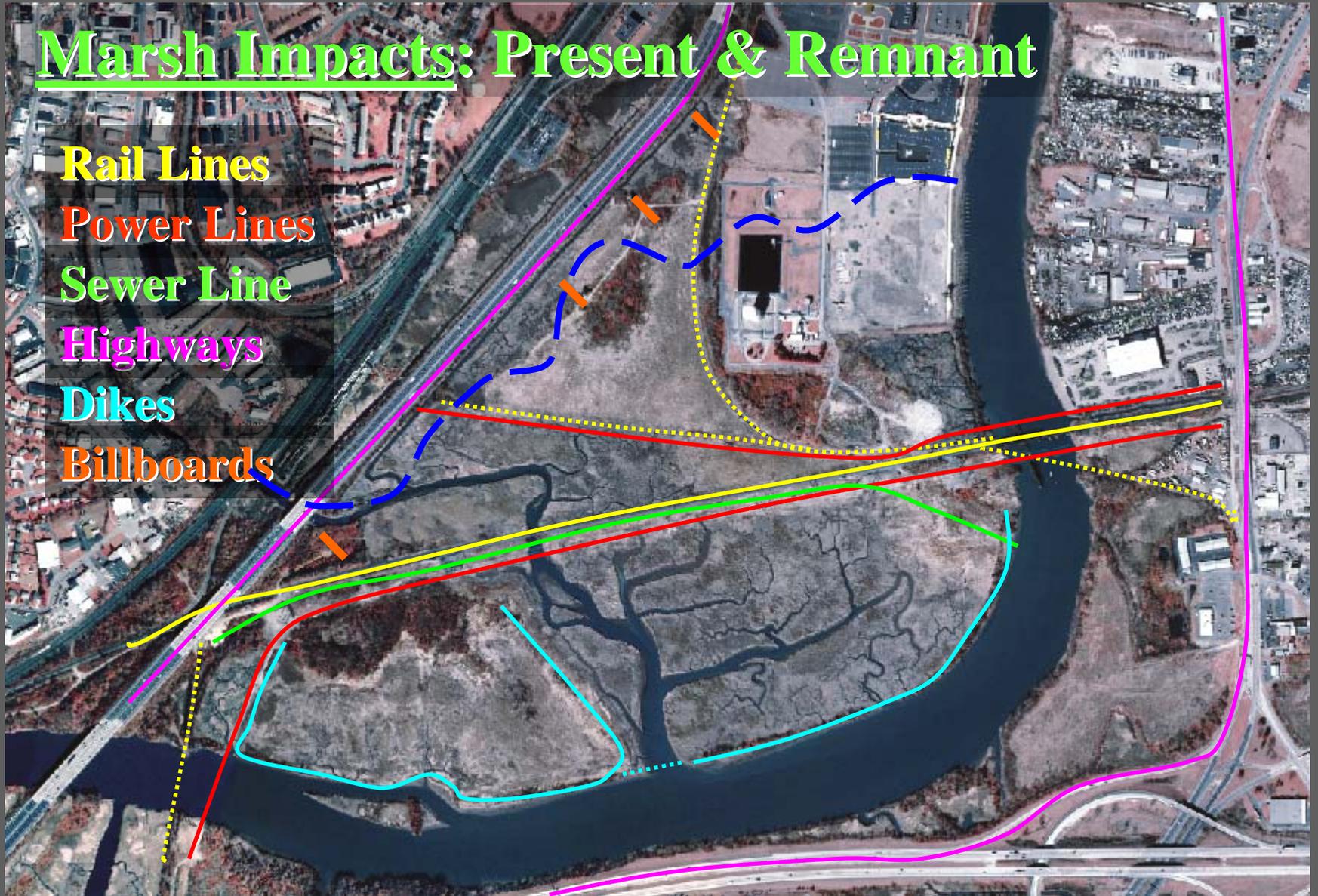
Power Lines

Sewer Line

Highways

Dikes

Billboards



Site Cleanup



Invasive Species Control:
Phragmites



Clearing the Way for Native Species





Contaminant Investigations:
PCB's

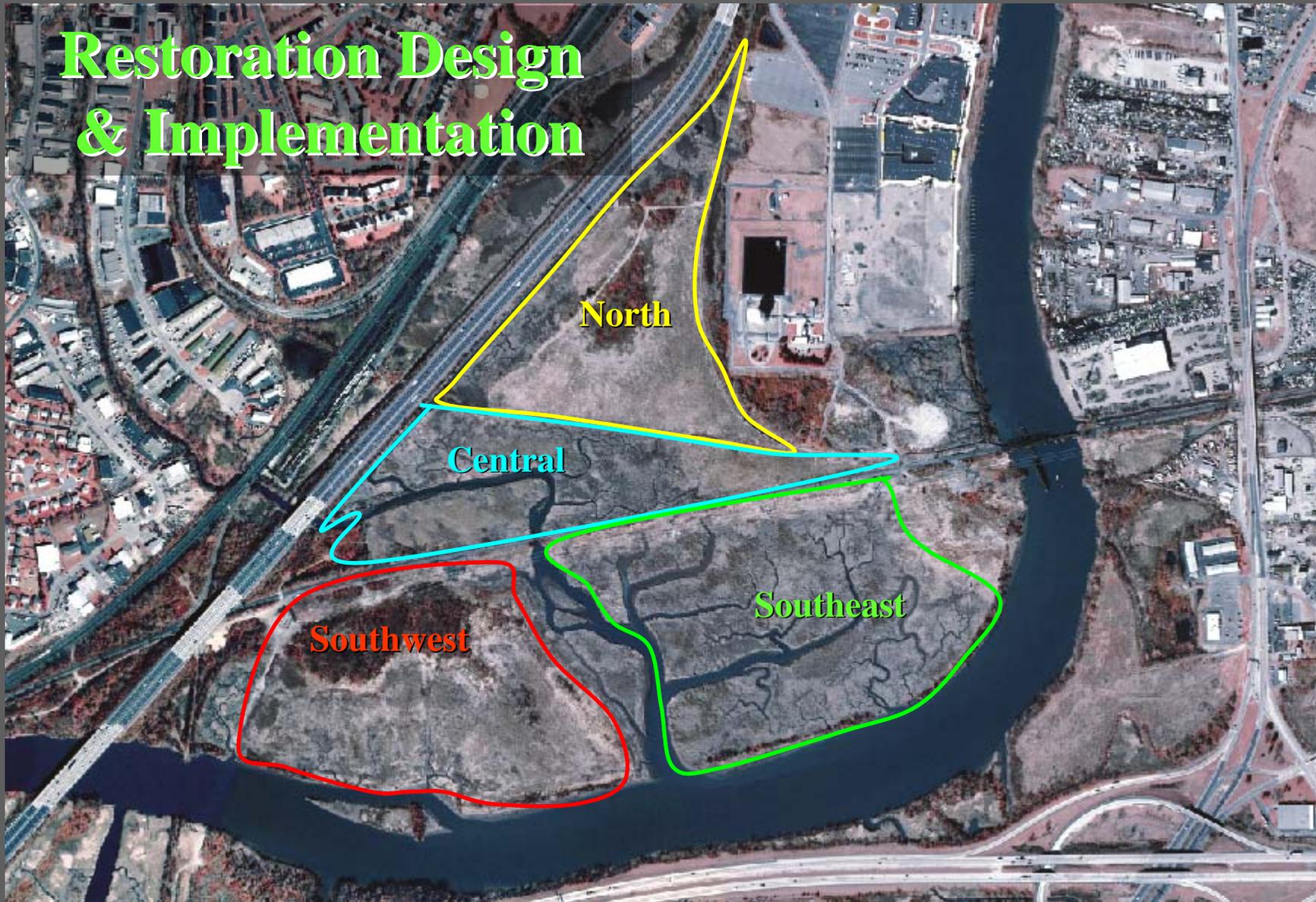
Restoration Design & Implementation

North

Central

Southwest

Southeast



Restoration Design





Excavation Phase



Stoplog Structure





Installing Wood Duck Nest Box

Restoration Results





Southwest Marsh: Pre-Restoration





Fish feeding in Restored marsh



Eastern Painted Turtle & Lilies Inhabit the Floor Pool Today!



A Gazillion Corbicula



Shorebirds Feeding on the Mudflats at Low Tide





Site Utilization



Post Restoration Issues



Invasive Species





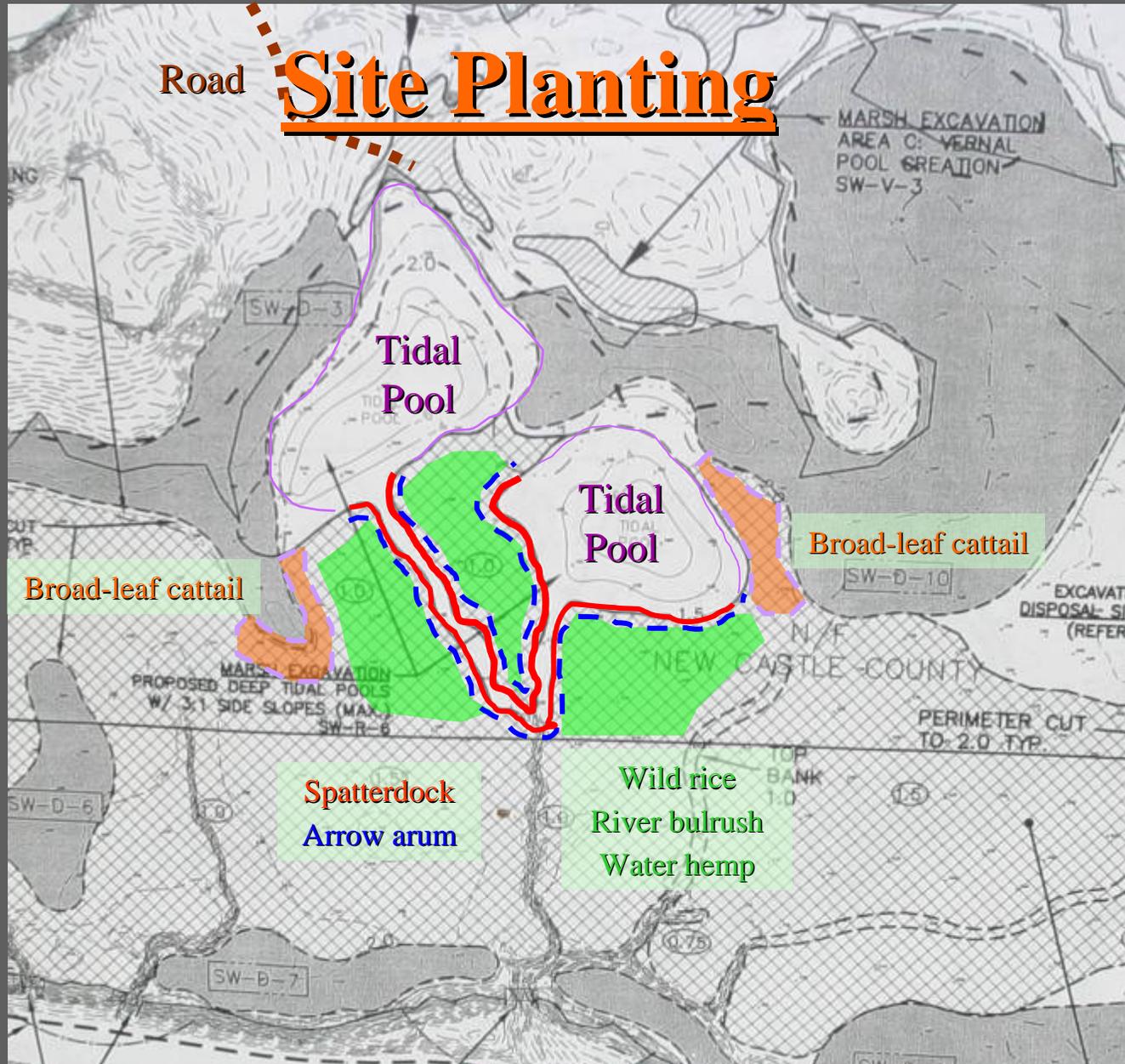
Insect biocontrol in an attempt to control Mile-a-Minute weed



Hand Pulling & Spraying

Road

Site Planting



Tidal Pool

Tidal Pool

Broad-leaf cattail

Broad-leaf cattail

Spatterdock
Arrow arum

Wild rice
River bulrush
Water hemp



Locally Harvested Native Wetland Plants



Setting Transplants



Site Security

Resource Management



DuPont Environmental Education Center



Center

Marsh Trails









BUILDING
FIRE SAFETY
EXIT

**In Case of Fire,
Don't Use
Elevators.
Use Exit Stairways**

UP
DN











Off to a Good Start...

- **Over 6,500 visitors since opening in early Oct. 2009**
- **All 4th grade students in the Christina School District have visited**
- **Work-study for 10th graders with Junior Achievement/DuPont's "Clear to the Future" initiative scheduled**
- **Latin American community center after school programming planned**

Sample Outreach Programming

- **Birding**
- **Exploratory marsh themed programs will be offered seasonally**
- **Canoe/kayak trips**
- **Build-a-bird feeder workshops**
- **Aquatic sampling**
- **Parents Night Out**



Fish Sampling

A photograph of Governor Peterson on a boat, wearing a blue shirt and a hat, looking out over a body of water. Other people are visible on the boat, and a marshy landscape is in the background. The text "Governor Peterson Visits the Restored Marsh" is overlaid in yellow.

**Governor Peterson Visits
the Restored Marsh**







For More Information...

- www.delawarenaturesociety.org
- www.dupont.eec.org

