Distribution of Piping Plover and Coastal Birds in Relation to Federal Activities on the Southern Coast of Long Island
Outline

• Corps Activities on LI

• Distribution of Piping Plover, Migratory Shorebirds, and Waterbirds on Southern LI

Implications:
• Impact Assessment - Applicable Federal Laws, Available Data, Conservation Plans, etc

• Habitat Management
Long Island Federal Projects Around LI

(Source Corps Digital Project Notebook)
Federal Project Breakdown

- 90% Navigation Projects
- 6% Flood Control Projects
- 2% Flood Control Studies
- 2% Beach Erosion Projects

(Source Corps Digital Project Notebook)
Maintenance of Stabilized Ocean Inlets

Jones Inlet Navigation Project

Shinnecock Inlet Navigation Project
Democrat Point - Fire Island Inlet
Federal Navigation Channel
Beach Nourishment and Groin Maintenance

Urban Area Ocean Shoreline Flood Control Project – East Rockaway, NY
Addendum - Digital Project Notebook Does Not Reflect All Corps’ Projects on Long Island

- Westhampton Interim Project – 1.5 mi
- West of Shinnecock Inlet Project – 1.5 mi
- FIMP
- Long Beach Island Project – 9 mi
- Breach Contingency Plan - TBD

U.S. Fish & Wildlife Service
Area Impacted by Project Type

- Digital Project Notebook does not provide areas to allow calculation

- However, fairly self-evident that although beach nourishment projects are fewer in number than navigation projects, they impact far greater area of habitat.
Over 250 Permits reviewed each year
**Non-Federal Dredging Projects**
Pier and Dock Structures
U.S. Fish & Wildlife Service

Non-Federal Maintenance Dredging in Suffolk County (n=136 Sites; 1995)

*Total area is 1,582 acres

U.S. Fish & Wildlife Service

Number Spoil/Fill Sites by Landform
LI Total

- Peninsula Spoil Fill: 32, 53%
- Barrier Island Spoil Fill: 10, 17%
- Bay Shoreline Spoil Fill: 9, 15%
- Island Spoil Fill: 1, 2%
- Riparian Spoil Fill: 8, 13%

Source: Downer and Liebelt (1990)
Spoil Sites By Landform - South Shore

5, 11% 1, 2% 9, 20%

30, 67%

Source: Downer and Liebelt (1990)
Plover Distribution by Landform (1989)
2004 Piping Plover Distribution - Fire Island Inlet to Montauk Point Storm Damage Control
60 out of 202 Long Island Colonial Waterbird and Piping Plover survey sites described as spoil/fill sites.

Source Downer and Liebelt (1990)
Colonial Waterbird Breeding Sites on LI

Legend
- Colonial Waterbird Sites on LI

Source NABCI Website
Waterbird Use Sites - South Shore

Source NYSDOS and USFWS 1998

Yellow Crowned Night Heron
Black Crowned Night Heron
Great Egret
Snowy Egret
Least Tern
Common Tern
Roseate Tern
Herring Gull
Glossy Ibis
Black Skimmer
Migratory Shorebird Concentration Areas – Jamaica Bay to Shinnecock Bay

- 230,000 birds; 31 species (Burger 1984)
- 50,000-100,000/yr
- 800/yr
- 7,000/yr
- 17,000/yr

Source: NYSDOS and USFWS (1998)
Implications For Impact Assessment
Implications for Impact Assessment

Federal Laws

- **Section 7 of the Endangered Species Act – Requires Federal agencies consult w/FWS & NMFS when proposed action may affect listed species. Also authorizes Fed. agencies to utilize their authorities to promote recovery of endangered species.**

- **Fish and Wildlife Coordination Act – Ensures equal consideration of fish and wildlife resources in the planning of water resource development projects.**
Conservation/Recovery Plans

Shorebird Conservation Plans (e.g., piping plover, red knot, willet, dunlin, whimbrel, ruddy turnstone, short billed dowitcher)

Waterbird Conservation Plans (e.g., black skimmer, gull-billed tern, common tern, roseate tern, least tern, snowy egret)

Listed Species Piping Plover and Roseate Tern Recovery Plans

Should be considered in project planning and impact analysis.
Utilize Existing Local Conservation and Management Plans; Initiatives; Agency/Organization Expertise

• e.g., The majority of the south shore of Long Island is included in the South Shore Estuary Reserve. A Technical Management Group was formed consisting of environmental managers and biologists and they developed recommendations pertaining to bird conservation. This and other plans should be adopted whenever possible into project planning.
Implications for Habitat Management

South Shore Corps Projects that overlap piping plover and colonial waterbird breeding sites and migratory shorebird concentration areas.
Democrat Point - Fire Island Federal Navigation Channel
Long Term Planning and Commitments to Habitat Management – Case Study

- About 9 of the 44 Navigation Projects (~20%) have been maintained over the last 10 years.

- Of these nine, two projects (Moriche Inlet Navigation and Intracoastal Waterway Project) have provided material for back bay island habitat enhancement on the south shore of LI.
Time Series Moriches Inlet

1966

1984

2005

1997

1996
Summary

Invite Resource Agencies Early in Planning Process
Consider Cross Program Activities
Assemble/Incorporate Regional Physical and Biological Databases/Conservation Plans
Incorporate Research Design/Results into Project Plans
Develop Case Studies to Assist in Future Planning
Develop Funding Commitments
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