

## CONSERVATION IN ACTION:

# Inventory of tidal inlets shows Forsythe's Little Egg is a big natural asset

## Product: Beach and Tidal Habitat Inventories

This set of resources provides a comprehensive look at the location, status, and condition of potential piping plover breeding grounds from Maine to Virginia in three periods: before Hurricane Sandy, immediately after Hurricane Sandy, and three years after post-storm recovery efforts. The inventory was developed using imagery from Google Earth, Google Maps, state agencies, municipalities, and private organizations. It includes:

- Google Earth files and metadata of Pre-Sandy Tidal Inlets, Beach Fill, and Beach Armoring (Me. to Va.); Excel spreadsheet of Pre-Sandy Beach Development, Armoring, and Fill by Community
- Report providing Inventory of Habitat Modifications to Sandy Beaches, Me. to Va.
- Report providing Inventory of Habitat Modifications to Tidal Inlets, Me. to Va.
- Inventory of Habitat Modifications to Sandy Beaches for Coastal Migration and Wintering Range in Continental U.S.

### DEVELOPED BY:

Tracy Monegan Rice,  
Terwilliger Consulting, Inc.

### WHO IS USING THE BEACH AND TIDAL INLET HABITAT INVENTORIES?

Wendy Walsh, Endangered Species Biologist, U.S. Fish and Wildlife Service New Jersey Field Office



Little Egg Inlet on the coast of New Jersey provides important habitat for three endangered species found at Forsythe National Wildlife Refuge.  
Credit: Google Earth

### HOW IS IT ADVANCING HER WORK?

As the lead biologist for the recovery of the threatened red knot and the New Jersey state lead for the threatened piping plover, Wendy Walsh spends a lot of time thinking about managing human influences that will affect habitat these species depend upon: sandy beaches and tidal inlets.

***Little Egg Inlet is not just of high value, it is unique. It may be the only baseline for comparing managed and natural inlets.***

During Hurricane Sandy, barrier beaches overwashed around Little Egg Inlet, an opening into Great Bay in the wilderness portion of Forsythe National Wildlife Refuge. And that turned out to be a good thing for plovers.

“It created great habitat,” Walsh said. “Plover numbers really increased.” Did they ever. Today, Walsh said, “Beaches around Little Egg Inlet provide habitat

for about a third of the plover population in New Jersey, as well as habitat for migratory concentrations of red knot and the listed plant seabeach amaranth.”

Now proposed activities in the inlet threaten to interfere with natural processes necessary to maintain this habitat complex.

“There has been drift of sand from nearby beach fill, and a plan to dredge the inlet,” Walsh explained. It’s not yet clear how these activities may affect the habitat.

In the face of these threats, Tracy Rice’s inventory has provided valuable perspective to make the case for careful management around this inlet. Although Little Egg Inlet was previously considered important plover habitat in New Jersey, the Tidal Inlet Inventory revealed something new.

“Little Egg Inlet is the only unmodified inlet between Montauk, New York, and Gargathy Inlet in Virginia, a shoreline distance of nearly 350 miles,” said Walsh. “That means that every other inlet along that entire stretch of coastline has been stabilized, dredged, sand

mined, or altered in some way. This is the only one that is more or less in its natural condition.”

It seems Little Egg Inlet is an even rarer natural asset than anybody realized, and that’s important to know in the context of the Service’s new policy for mitigating impacts to habitats that are considered to be of high value to at-risk species. Little Egg Inlet is not just of high value, it is unique. It may be the only baseline for comparing managed and natural inlets.

All three of Forsythe’s listed beach-dependent species thrive in the shifting habitats that surround the natural inlet.

“We knew these species favor these kinds of sites, and we knew most of them were altered, but we didn’t know it was all but one,” said Walsh. “The data provided a landscape perspective that enabled us to say Little Egg Inlet is unique, at least in the Mid Atlantic. It just took someone adding it all up.”

That someone was Rice, and the new report dovetails with her previous



The federally listed piping plover depends upon sandy beaches and tidal inlets for nesting habitat. Credit: FWS

work to inventory coastal habitat in the Southeastern portion of the United States. Together, the reports provide a complete inventory of the red knot’s coastal habitat, and Walsh is already anticipating using the information in an upcoming project to develop a recovery plan for red knot.

“The recovery outline will give us good perspective to think about future habitat availability for red knot: how much habitat is available, how much of that is managed, and how much is undisturbed,” she said.



## FOR MORE INFORMATION:

- **Beach and Tidal Habitat Inventories Product page:**  
<http://northatlanticlcc.org/products/habitat-inventories>
- **U.S. Fish and Wildlife Service New Jersey Field Office:**  
<https://njfieldoffice.fws.gov/>
- **Edwin B. Forsythe National Wildlife Refuge:**  
[https://www.fws.gov/refuge/edwin\\_b\\_forsythe/](https://www.fws.gov/refuge/edwin_b_forsythe/)