

**Cohansey River Corridor Important Bird Area (IBA)**  
Conservation and Management Plan

**Site name:** Cohansey River Corridor Important Bird Area (IBA)

**Location:** Cumberland and Salem Counties, New Jersey. The majority of the IBA is within Shiloh, Hopewell, Stow Creek, Greenwich and Fairfield Townships. Alloway, Upper Pittsgrove and Upper Deerfield also contain portions of the IBA (Figure 1 and Figure 2). Fringes of the IBA are located in Pilesgrove, Bridgeton City and Quinton Townships.

**Area:** 65,425 acres

**Ownership and Managing Agencies:** The majority of land within this IBA is in private ownership.

Public lands include the Public Service Electric and Gas (PSEG) Bayside Preservation Tract, Dix Wildlife Management Area (WMA), Clarks Pond WMA and Bridgeton City Park in historic Bridgeton and several federally-owned parcels managed by PSEG. (Figure 3)

**Description:** The Cohansey River is a tidal river in the Delaware Estuary that is bound by extensive tidal salt marsh, mixed woods, cultivated fields and orchards. The IBA consists primarily of open water and tidal wetlands and the associated grasslands, scrub-shrub areas, agriculture lands and forested wetlands (Figure 4). The river originates in Salem County and meanders through Cumberland County before reaching the Delaware Bay. It contains stands of wild rice marshes, tidal marshes, freshwater wetlands, and upland pine-oak forest.

**Historic and Current Land Use:** The Cohansey River itself has a long and varied history. A considerable portion of the CRCIBA is categorized as wetlands (Figure 5). The area is characterized by large expanses of agriculture, consisting mostly of wetlands that were drained and converted to farmland (Figure 4). Nursery production also constitutes a significant portion of the CRCIBA. Forested and scrub-shrub areas are also present. Compared to other Delaware Bay region IBAs, the CRCIBA contains the least amount of public land. However, opportunities for preserving farmland and maintaining vast areas of tidal marsh exist.

**Key IBA Criteria:**

Criterion	*Species
Conservation Concern – State-endangered	Bald Eagle (B)
Conservation Concern – State-threatened	Osprey (B)
Conservation Concern – State-threatened	Cooper's Hawk (B)
Regional Responsibility Species – BCR 30 Salt Marsh/Wetland	American Black Duck, Saltmarsh Sharp-tailed Sparrow, Seaside Sparrow, Clapper Rail, Marsh Wren, Virginia Rail, Willet, Osprey (B)
Significant Congregations	Waterfowl (W)
Significant Migrant Stopover/Flyover	Shorebirds (SM)
Long-term Research/Monitoring	

\* B=breeding; W=wintering; FM=fall migration; SM=spring migration

**Vision Statement:** To protect and conserve the Cohansey River Corridor IBA, we will work to protect water quality, increase the quality of riparian habitat, restore natural wetlands and grasslands, maintain the agricultural character of the community, promote ecotourism and engage the community in protecting its natural resources through education and outreach efforts and the establishment of habitat demonstration sites.

### **Operation and Management Considerations:**

#### Habitat Management Needs

*Riparian zone restoration:* Much of the littoral zone of the Cohansey River Corridor IBA is dominated by a monoculture of *Phragmites*. Restoration of native species of vegetation is recommended to increase diversity of habitat types to support the broad community of waterfowl, marsh birds and other avian species that depend upon the IBA for breeding, wintering, and stop-over habitat. In addition, funding is available from various incentive programs to take marginal crop land out of production and restore to riparian habitat.

*Wetland restoration:* Some of the farmland in the IBA is converted wetlands. In addition, the hydrology of many forested wetlands within the IBA has been modified by ditching. Funding is available from various incentive programs to engage farmers and landowners in wetland restoration.

*Restore hydrologic flow:* The hydrology of the Cohansey River Corridor has been altered over time by water control structures, tile drains and impoundments.

*Management of grassland habitat:* The majority of the Cohansey River Corridor IBA is agricultural land, which is modeled as potential grassland in the DEP's Landscape Project. Funding is available from various incentive programs to compensate landowners who voluntarily choose to engage in grassland restoration or management of hay fields for increased productivity of grassland birds.

#### Threats or potential problems

Increased development pressure and non-compatible agriculture practices, including numerous nursery operations, are threatening water and habitat quality (and availability) throughout the Cohansey River Corridor. The Upper Cohansey River Watershed Restoration Plan aims to improve water quality by reducing fecal coliform and phosphorus through monitoring and the adoption of conservation and management practices. Partners of this plan include NJ Department of Environmental Protection, Rutgers University and the Natural Resource Conservation Service. Management activities include the installation of water recovery systems that prevent herbicide and pesticide laden waters from entering the estuary and creating riparian buffers. Public Service Electric and Gas (PSEG), a group of energy-related businesses, has targeted wetlands in the Delaware Estuary for restoration and preservation through its Estuary Enhancement Program (EEP). This program was initiated in 1994 as a component of Salem Generating Station's water discharge permit. Restoration activities include removal of dikes originally constructed by early settlers for cultivating salt hay and control of the common reed (*Phragmites australis*) using herbicides and controlled burns. At its Cohansey River Watershed Wetland Restoration Site, PSEG is controlling the nonnative, invasive common reed that has

outcompeted beneficial marsh plants, on 1055 acres. PSEG also manages the 4500 acre Bayside Tract Natural Viewing Area adjacent to the mouth of the Cohansey in Greenwich.

Protection and restoration of agricultural and upland forests adjacent to the Cohansey River and its wetlands is also necessary to prevent residential development and non-compatible agricultural practices from threatening the health of this estuary. This can be accomplished by promoting landowner incentives for protecting and managing habitat and by prioritizing parcels for acquisition. NJ Audubon Society and the American Littoral Society are currently conducting outreach to communities and private landowners throughout the Cohansey River Corridor. Long-term monitoring at the Cohansey River Corridor IBA includes several years of wintering raptor and waterfowl surveys.

*Invasive species:* Habitat diversity has been reduced by an invasion of non-native species primarily in the *Phragmites* genus, common reed.

*Development pressure:* The Cohansey River Corridor is experiencing fragmentation and loss of grasslands due to development expansion from Bridgeton. Impacts The Cohansey River's associated wetlands and forest patches are also impacted by increased development and human activity.

*Agricultural runoff (non-point source pollution):* Agricultural runoff is a concern in the Cohansey River Corridor due to the amount of land in crop rotation and nursery production. The conversion of grasslands and annual agriculture fields to nursery stock sites is of particular concern because of the inability of such areas to support nesting birds.

### Birds and Other Wildlife

The Cohansey River Corridor supports one federally threatened species (Bald Eagle), five state endangered species (Northern Harriers, Red-shouldered Hawks, Vesper Sparrows, Cope's Gray Treefrogs, and Bronze Coppers), seven state threatened species (Barred Owls, Bobolinks, Cooper's Hawks, Grasshopper Sparrows, Ospreys, Red-headed Woodpeckers, and Savannah Sparrows), and 48 special concern and regional priority wildlife species. Special concern wildlife includes grassland birds, scrub-shrub birds, forest passerines, reptiles and amphibians.

The Cohansey River Corridor supports one of the densest populations of both wintering and nesting Bald Eagles. Additionally, the region serves as a major migration thoroughfare for songbirds, water birds and raptors.

*Nongame species of conservation concern include:* Acadian Flycatcher, American Kestrel, Baltimore Oriole, Black-and-White Warbler, Black-billed Cuckoo, Blue-winged Warbler, Broad-winged Hawk, Brown Thrasher, Chimney Swift, Chuck-will's-widow, Common Barn Owl, Dickcissel, Eastern Kingbird, Eastern Meadowlark, Eastern Screech-owl, Eastern Towhee, Eastern Wood-pewee, Field Sparrow, Gray Catbird, Great Blue Heron, Great Crested Flycatcher, Great Egret, Horned Lark, Indigo Bunting, Kentucky Warbler, Least Bitter, Louisiana Waterthrush, Mallard, Marsh Wren, Northern Flicker, Pine Warbler, Prairie Warbler, Prothonotary Warbler, Scarlet Tanager, Seaside Sparrow, Whip-poor-will, Willow Flycatcher,

Wood Thrush, Yellow-billed Cuckoo, Yellow-breasted Chat, Yellow-throated Vireo, Yellow-throated Warbler

*Game species of Regional Priority:* American Black Duck, American Woodcock, Bufflehead, Canada Goose, Clapper Rail, Northern Bobwhite Quail, Northern Pintail, Virginia Rail, Wood Duck

*Suites of Wildlife:* coastal high marsh, coastal low marsh, colonial waterbirds, forest passerines, forest raptors, freshwater wetland, grassland, migratory songbirds and raptors, shrub-scrub/open field (3-7 years), early succession/open field (0-3 years), waterfowl

*Other:* Lepidoptera of Special concern, amphibians of special concern, vernal pool and vernal sinkhole breeders, reptiles of special concern,

## **Education, Outreach, and Research**

### Education and outreach

Private lands biologists will work to increase awareness of incentive programs and best management practices by hosting informational workshops, disseminating informational materials and publishing articles in the media. NJAS will also assist landowners to implement conservation practices that conserve soil, improve water quality, and increase availability of wildlife habitat. Outreach should also target nursery owners to provide information about opportunities to create wildlife habitat while reducing maintenance costs (Figure 6).

Build partnerships with public and private landowners to increase opportunities for outdoor education and recreation.

Establish demonstration sites to increase awareness of the importance of grassland habitat and for soil conservation and biodiversity. Demonstration site will also serve to educate land managers about grassland, scrub-shrub and wetland management techniques for grassland birds, waterfowl, shorebirds and migratory birds.

Encourage development and progress of the Early Successional Habitat Working Group, a coalition of partners working together to restore or improve early successional habitats within the CRCIBA. Grasslands and other early successional habitat are New Jersey's most critically endangered habitats. New Jersey has lost agricultural and grassland habitat at an alarming rate, from nearly 1 million acres in 1972 to less than 850,000 acres in 2001, based on the latest available state data. From 1995 to 2001 – nearly 26,000 acres of agricultural lands were lost to development. The goals of the working group are to increase the available habitat between the Maurice and Cohansey Rivers for Northern Bobwhite, American Woodcock and other early successional species by 1) identifying focal area(s) for targeted outreach/restoration/monitoring; 2) conducting targeted outreach to landowners and partners about habitat incentive programs for wildlife and the best management practices for early successional species; and 3) implementing appropriate habitat practices. One product of the first meeting is a map of all past, current and ongoing restoration projects in the region. This will facilitate the identification of gaps as well as

opportunities to connect current projects (Figure 7). The IBBA Program has used this map to targeted landowners for outreach and conservation planning in the CRCIBA.

### Research

Potential research questions include:

What are the effects of *Phragmites* on biodiversity and water quality?

What are the effects of mowing on the establishment of native cord grasses?

What are the effects of habitat management on Northern Bobwhite in the CRCIBA?

### **Implementation Strategies:**

1. Protect, enhance and/or restore habitat for endangered, threatened and special concern wildlife and fish populations
  - Focus on restoration/management of early successional habitats for grassland, scrub-shrub and migratory bird communities
  - Focus on restoration/management of forested and open habitats near waterways for species such as the bald eagle and osprey
  - Focus on restoration/management of tidal wetlands to enhance water quality and the availability of wetlands
  
2. Increase the use of soil, water, and wildlife conservation practices on private lands.
  - Build partnerships with resource management agencies, private land owners, and farmers to facilitate enrollment in voluntary incentive programs.
  - Increase the proportion of Farm Bill dollars and other financial assistance allocated to NJ, and specifically to the CRCIBA.
  - Provide landowners with information about the various incentive programs for which they may qualify.
  - Assist landowners who are interested in incentive programs with designing grant proposals and provide support during the application and implementation process.
  
3. Maintain agricultural character of the community by encouraging sustainable growth.
  - Encourage nature based tourism by promoting utilization of NJAS' Birding and Wildlife Trails Guide and supporting the leasing of hunting rights.
  - Work with partners to support development of heritage trails and identification of cultural values
  - Work with land use planners and county officials to prioritize areas for farmland preservation and open space
  - Work with land preservation partners to direct more funding to private lands within the IBA
  
4. Engage community in stewardship of its natural resources
  - Implement educational programs about the value of the communities' natural resources
  - Provide opportunities for volunteers to participate in restoration projects
  - Enlist citizen scientists to monitor IBA (habitat, threats, populations)
  - Empower community to advocate for their natural resources
  
5. Provide outdoor educational and recreational opportunities

- Increase access to open space
  - Increase educational programs
  - Increase access to bird-watching areas and other recreational opportunities
  - Increase availability of information through interpretive signage and informational materials
6. Establish demonstration sites for model stewardship activities
- Identify and implement restoration activities at a riparian site
  - Identify and implement management and/or restoration activities at grassland site
7. Monitor avian and vegetation response to management and restoration activities.
- Establish database
  - Adapt activities as needed
8. Promote ecotourism in the region
- Increase wildlife watching opportunities
  - Increase awareness of recreational opportunities on public lands
  - Promote distribution and use of NJAS' Delaware Bayshore Birding and Wildlife Trails Guide

#### *Implementation Partners*

In the CRCIBA, partners include: The Nature Conservancy, Trust for Public Land, Delaware and Raritan Greenway, Conserve Wildlife of NJ, New Jersey Conservation Foundation, USFWS, NJDEP, Natural Resource Conservation Service, Farm Service Agency, Cohansey Area River Protection, Ducks Unlimited, the NJ Quail Project, the Southern NJ Chapter of Quail Unlimited, American Littoral Society and a variety of public and private landowners. NJAS will continue to consult with these organizations to help guide private land acquisitions, state land acquisitions through Green Acres, environmental policy and advocacy, regulatory protection through the Landscape Project, municipal planning and zoning, and support for Smart Growth and watershed protection.

#### **How You Can Help**

*Restoration on Your Property:* NJAS has an active stewardship program that promotes effective stewardship on both private and public lands throughout the state. For more information on NJAS' stewardship program and restoration opportunities on your property, please contact Cristina Frank, Coordinator for NJAS' Important Bird and Birding Areas Program. To learn more about how you can become involved in habitat restoration on your own land, check out the following link:

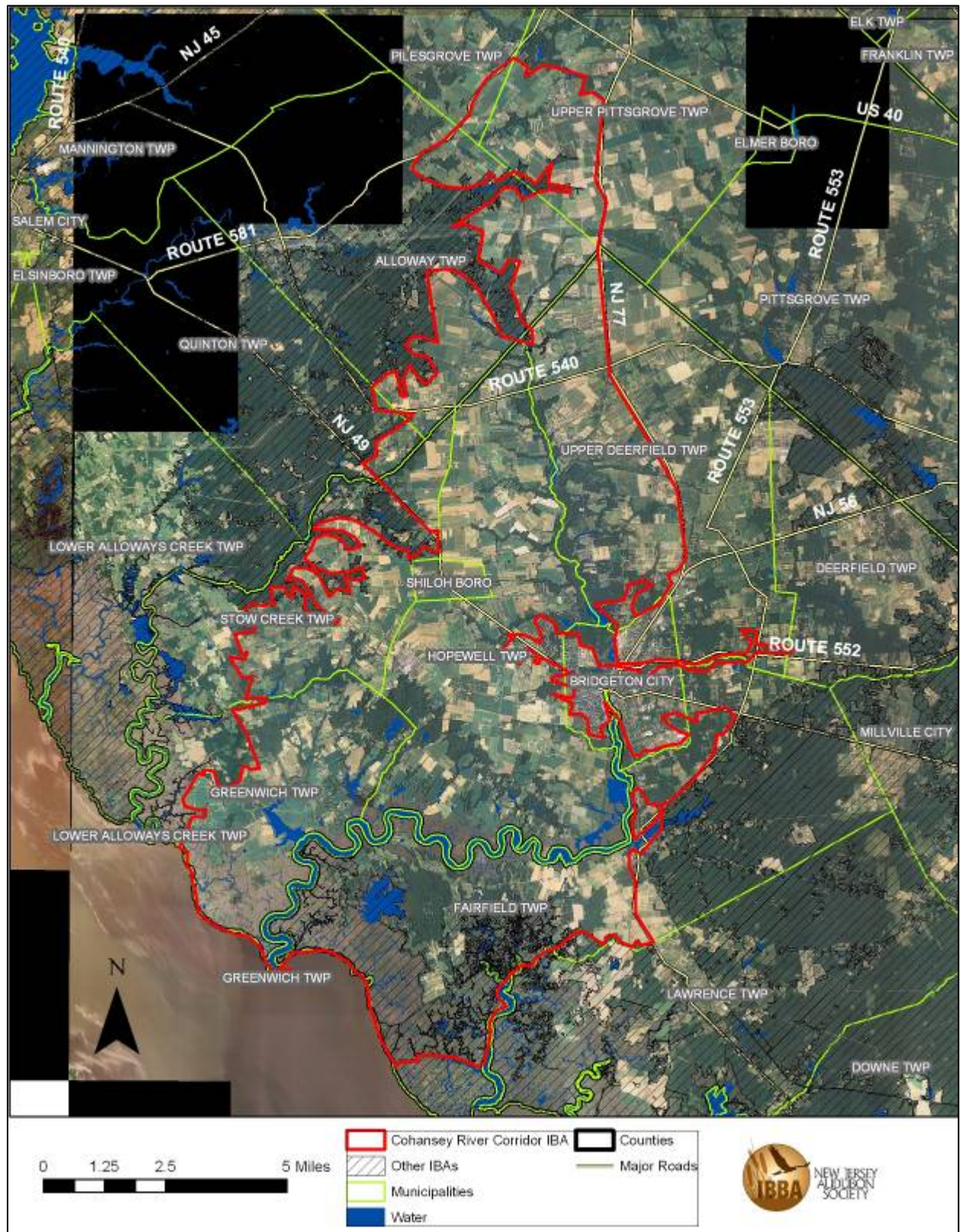
- [New Jersey Audubon Society's Guide to Conservation Incentive Programs for New Jersey Landowners and Farmers](#) (PDF format)

*Become a Volunteer Steward:* Are you looking for an opportunity to make a real difference for wildlife and wildlife habitat? Do you enjoy being outdoors and getting your hands dirty? Then

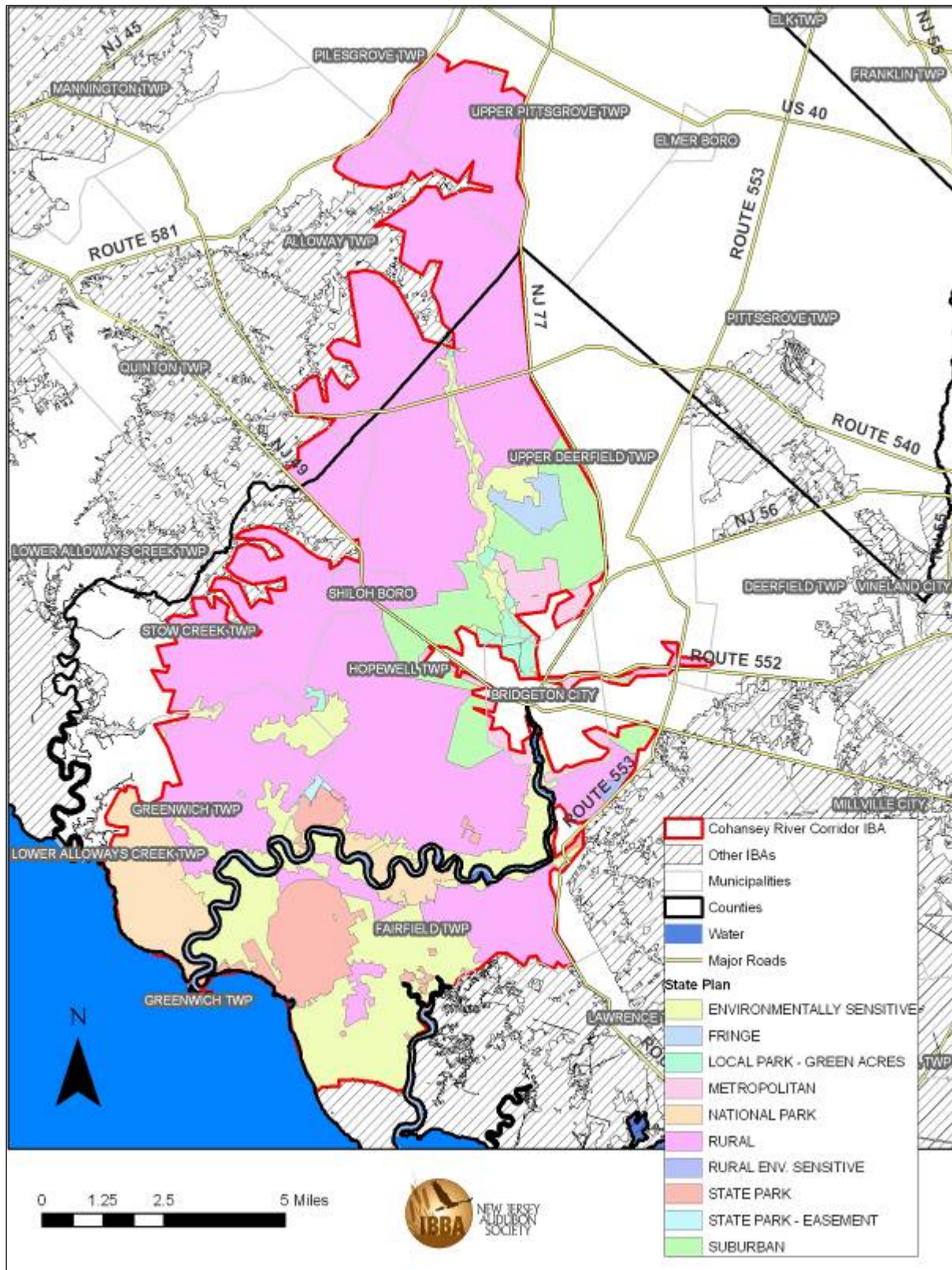
we have the job for you! We are currently recruiting volunteers to assist with the program's expanding conservation initiatives. Volunteer opportunities include: data entry, gis/mapping, invasive plant removal, plantings, habitat/vegetation monitoring, threat monitoring and more!!! To learn more, visit <http://njudubon.org/Conservation/IBBA/GetInvolved.html>.

*Advocate for Land Protection:* Advocate for land protection and conservation in your area. Join NJAS in the effort to advocate against inappropriate development. Use the following link to view the [“10 Steps for Opposing Bad Development.”](#) You may also wish to subscribe to [NJAS’ Get Active Action Center](#). This free subscription service will help you to take action to guide critical environmental issues, become a part of special projects like our citizen scientist program to conduct important wildlife research, or our birding and wildlife trails project. You will receive periodic news about New Jersey Audubon Society's field trips, workshops, nature tours and events, and much more!

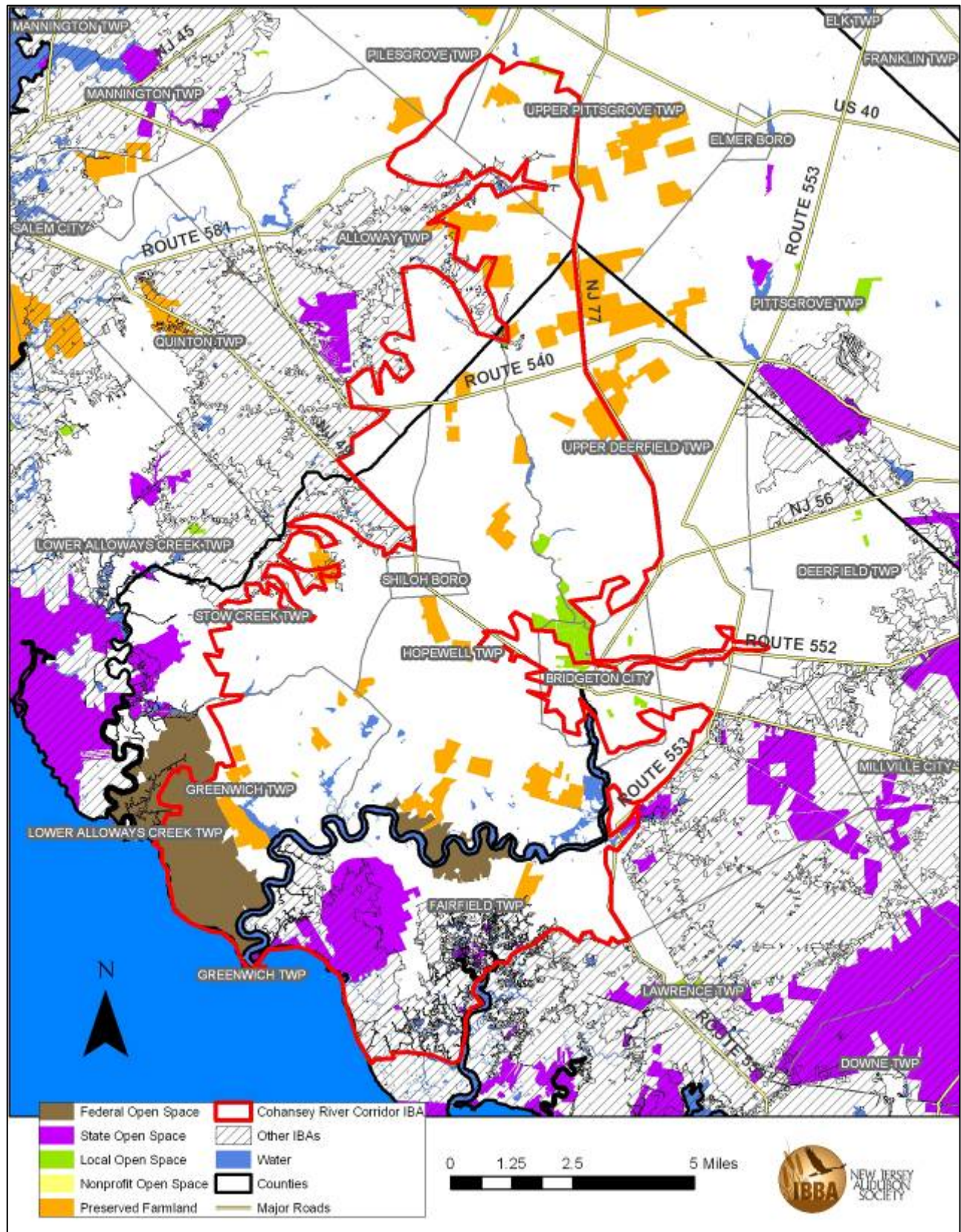
**Figure 1.** Boundaries of the Cohansey River Corridor Important Bird Area.



**Figure 2.** State plan designations of the Cohansey River Corridor Important Bird Area.



**Figure 3.** Preserved land and open space in the Cohansey River Corridor.



**Figure 4.** Habitat types in the Cohansey River Corridor. Rankings are designated by NJDEP's Landscape Project.

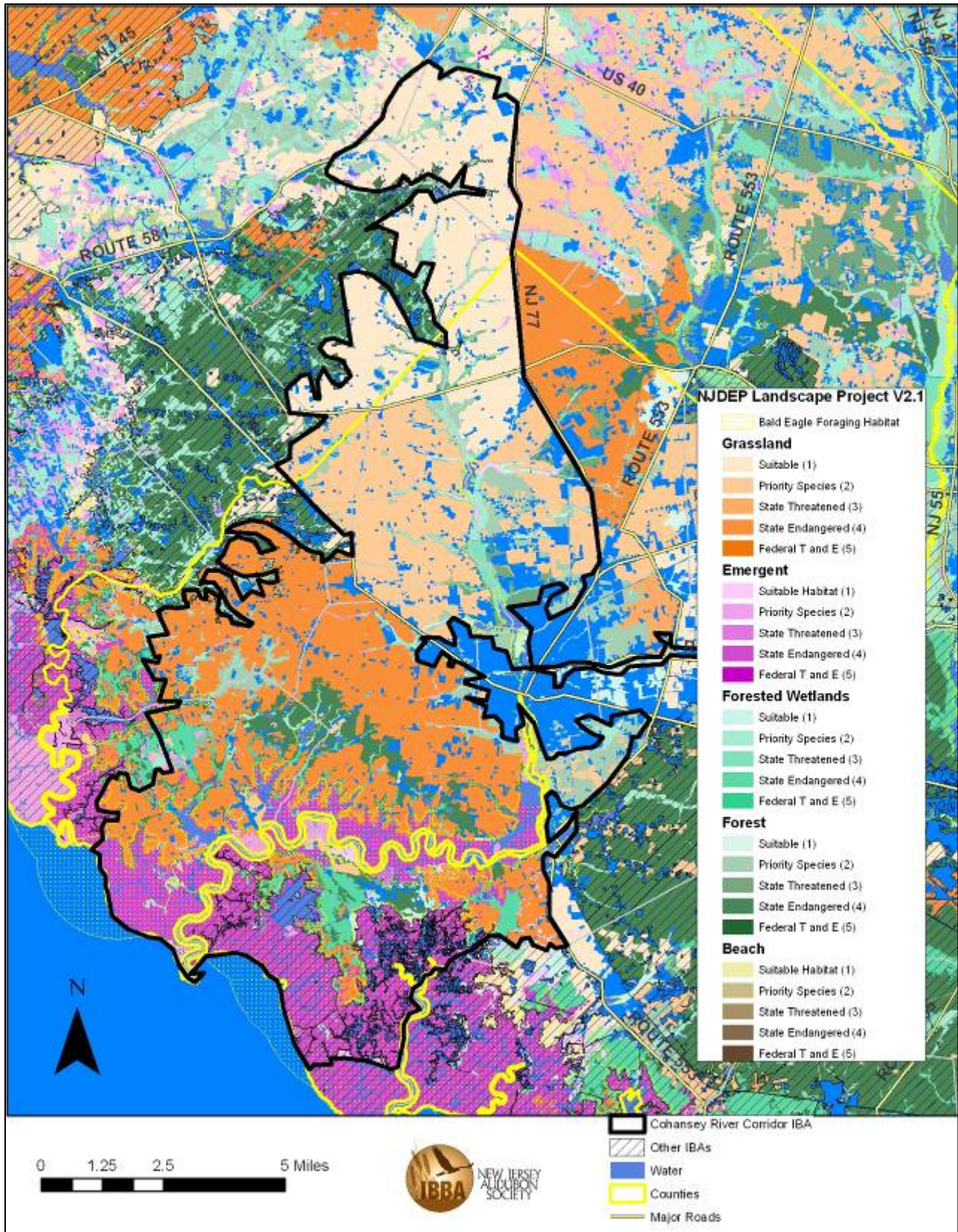


Figure 5. Distribution of existing wetlands in the Cohansey River Corridor IBA.

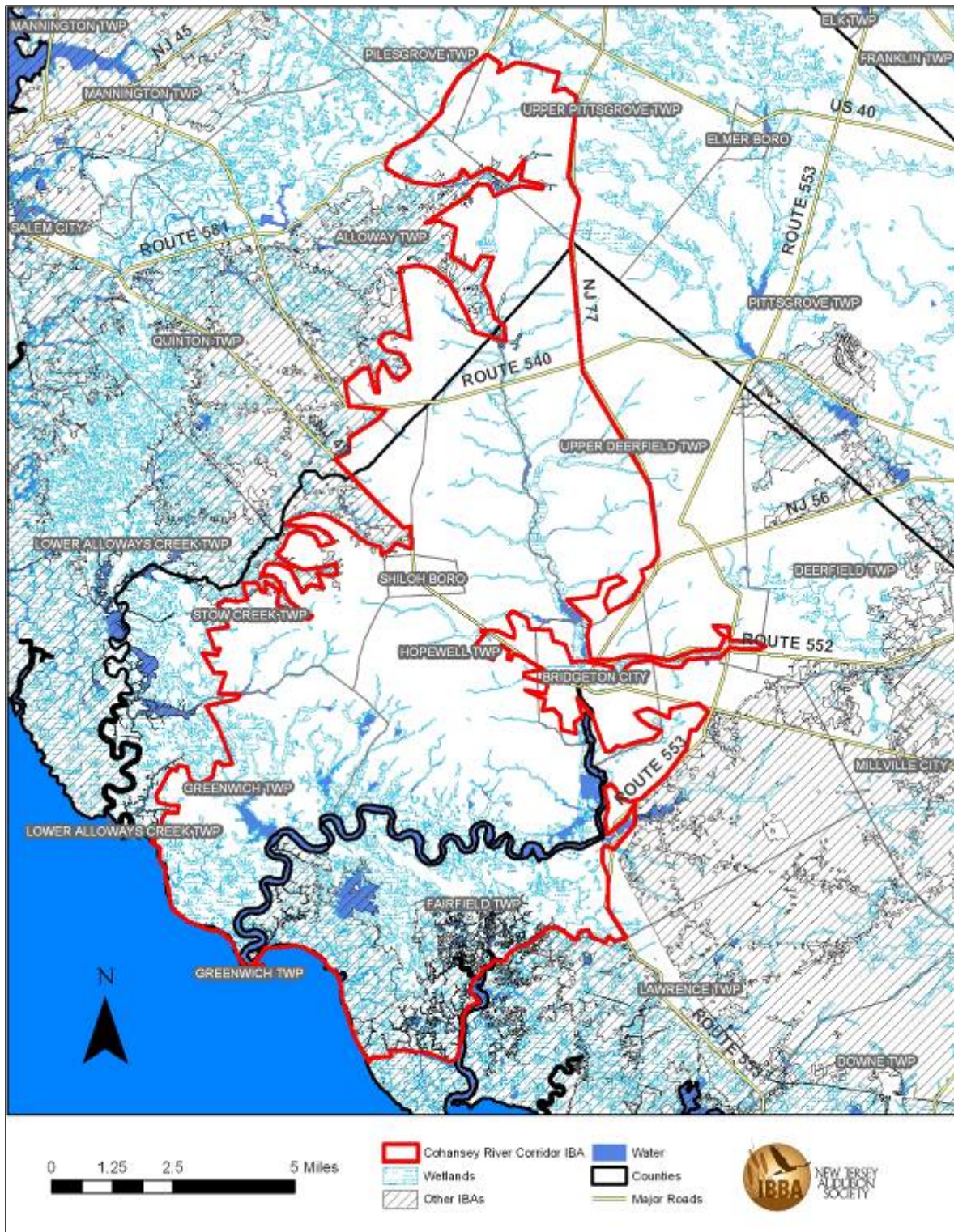
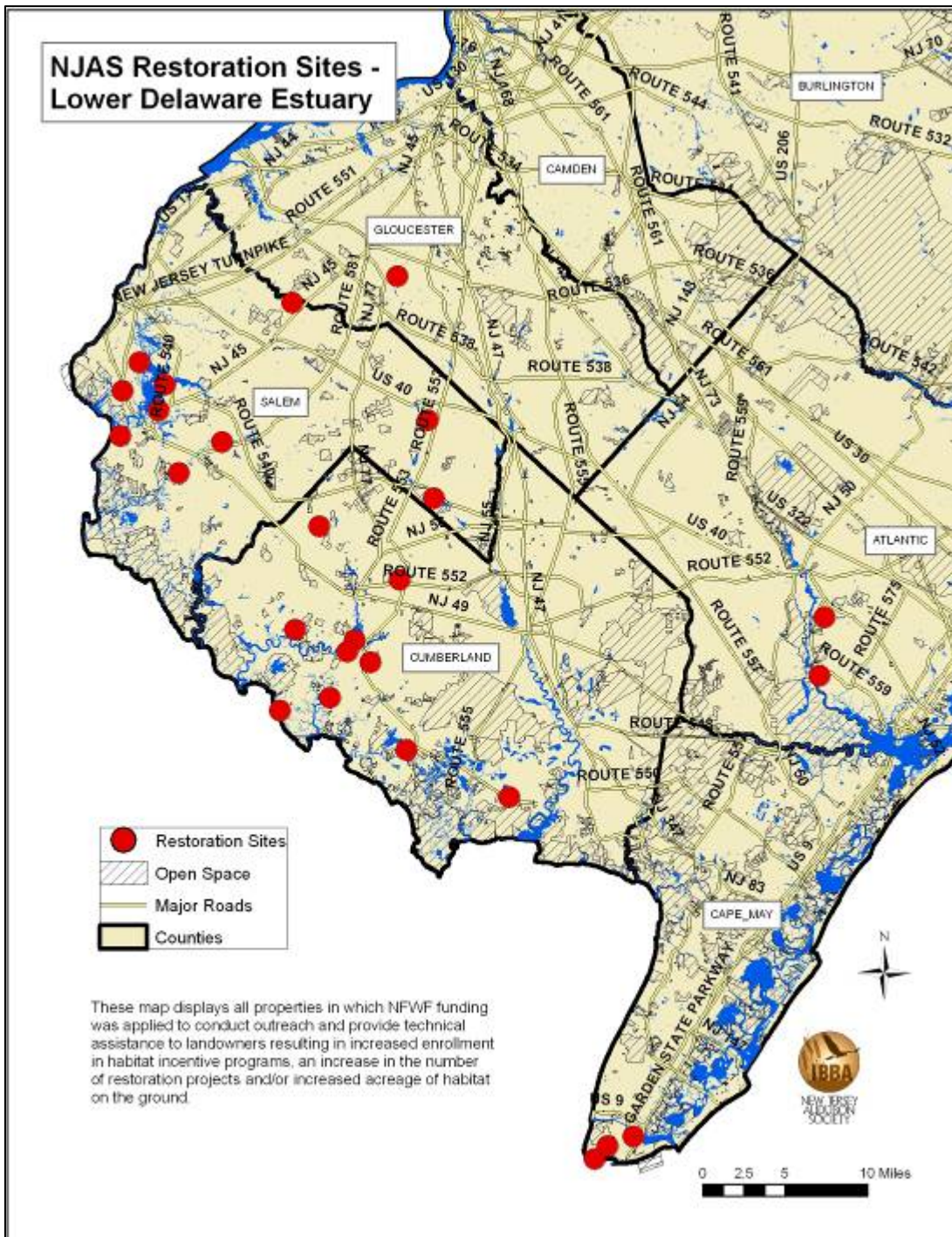


Figure 6. NJAS projects in the lower Delaware Estuary.



**Figure 7.** Current projects implemented by all a variety of partners in the Cohansey River Corridor. The two focal areas identifying as gaps and opportunities for restoration and outreach were developed through collaboration of the Early Successional Habitat Working Group.

