

Look Around NEW YORK[®]



New York City Audubon Society • 71 West 23rd Street, N.Y.C. 10010 • 212-691-7483

WETLANDS

If you went to the beach this summer, and stood at the water's edge letting the waves come in and out over your toes, you might find it hard to say whether you were on land or in the water. If you had to draw a map showing where the land begins and where the water ends you would be joining the many scientists who make these decisions.

If you have been in the woods near a stream or a lake after a summer rainstorm you might draw the line between the land and the water one way. If you went back a week later on a hot day there might be a lot more dry land and you might want to draw the line quite differently.

Those regions where land and water join together, and are sometimes wetter and sometimes drier, are called *wetlands*. Near a beach where the water tastes salty, they are called *tidal wetlands*. In and around streams and lakes or in areas where the ground feels spongy with mosses, they are called *freshwater wetlands*. The land beyond a tidal or freshwater wetland is called the *upland*.

Because the water that flows in and out of wetlands is shared by many people, plants, birds and other wildlife, laws were passed to keep wetlands from being changed. In order to protect the wetlands, though, we need to know where they are. This means they need to be drawn on a map. Then people can read the map and know where the legal boundary line between the upland and the wetland is.

Scientists and cartographers (kar-TA-gra-fers) (mapmakers) are working together in Staten Island to decide where these lines should be drawn. These new maps will be used to help decide what areas between the water and the land should continue to be preserved and protected.

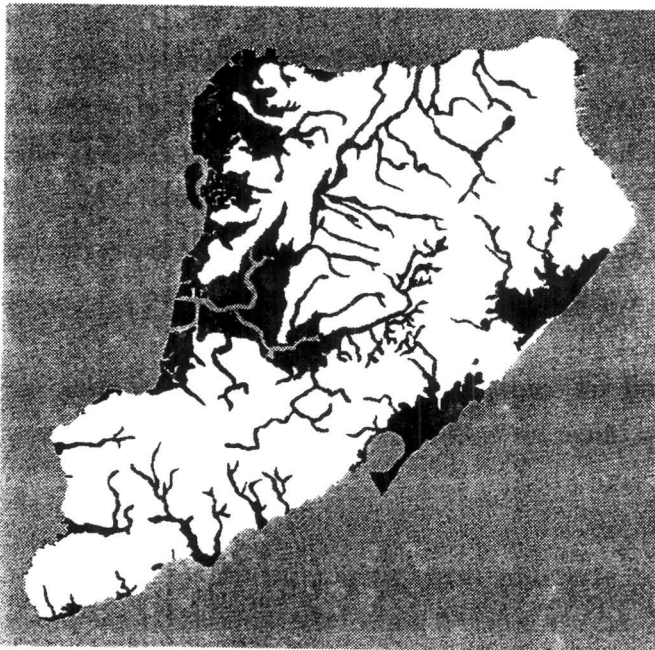
The maps are made by using many photographs taken with cameras that are placed at the bottom of an airplane (aerial photographs). The cartographer then uses the aerial photographs, together with older maps of Staten Island, to draw where the wetlands are found. After the draft maps are made, scientists visit and **LOOK AT** the wetlands to make sure the maps match what they see at the wetland boundary. They use not only the water, but also the plants and soils to check that the line will be correct no matter what the weather is. The maps can then be used in planning how to avoid building in wetlands as much as possible. The maps can be used to help preserve today's Staten Island freshwater and tidal wetlands, and the birds and other wildlife that depend on them.

INVESTIGATING WETLANDS ISSUES

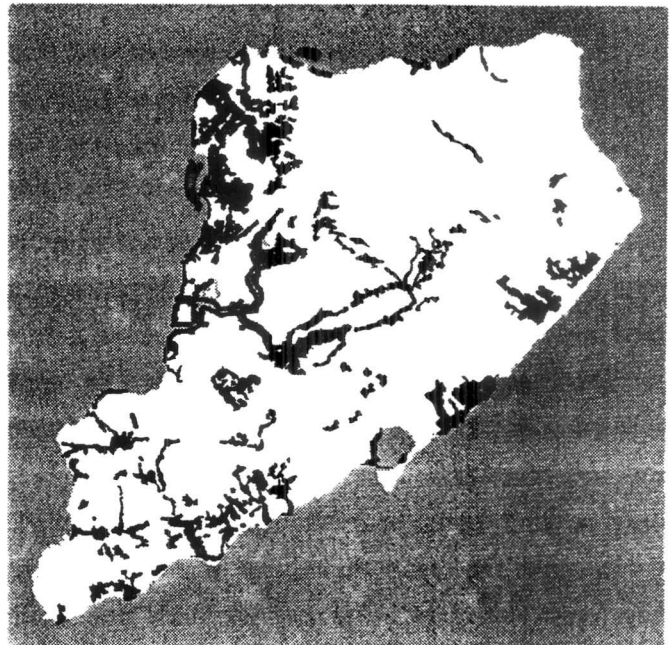
Background

The 25th anniversary of the federal Clean Water Act is October 18, 1997. Under this Act waters of the United States includes wetlands (marshes, swamps, bogs and similar areas, found between dry land and water along the edges of streams, rivers, lakes and coastlines), as well as deepwater habitats (6 feet deep or greater). Wetlands are valuable to people and wildlife for many purposes:

- Waterfowl use wetlands for feeding, breeding and resting (including the many diving and dabbling ducks and herons found increasingly in and around Staten Island).
- Wetlands act like a sponge and absorb rainwater during and after storms and, thereby, protect urban areas from flooding.
- Wetlands act as a filter to hold pollutants and prevent them from entering water bodies.



Staten Island As It Was - 1895
9000 Acres of Wetlands



Staten Island As It Is - 1995
3500 Acres of Wetlands

Activities

- Compare the map of Staten island showing wetlands that existed in 1895 with the recent map of Staten Island wetlands. The differences show that many wetlands in Staten Island were drained of their water and used for either farming, or building houses, stores, roads, schools and other structures.
- Estimate the percentage loss in wetland area during the past 100 years.
- Find out more about Staten Island wetlands through New York City Audubon Society's internet site: www.interboro.com/nycaudubon (click under environmental issues and activities).
- Call the EPA Wetlands Information Hotline (1-800-832-7828) to receive additional printed material for educational purposes and to answer your questions about wetlands.

LOOK AROUND thanks Ellen Hartig, Eymund Diegel and Anne Litke of the NYCAS Wetlands Subcommittee for providing the text and maps for this issue.

Funded by a generous donation from the Consolidated Edison Company of New York, Inc.

