

SIGNIFICANT, SENSITIVE, OR DESIGNATED RESOURCES IN NEW YORK CITY

The following are considered significant, sensitive, or designated resources in New York City:

WATERS

All of the waters of New York City— both surface and ground waters—are considered important resources and are regulated by the State. This includes tidal and freshwater wetlands, coastal estuarine waters, and all other water resources.

JAMECO AND MAGOTHY AQUIFERS

Beneath Brooklyn and Queens, these aquifers are designated sole source aquifers (i.e., they are used to supply drinking water) and are thus afforded special protection under the Clean Water Act.

COASTAL RESOURCES

In New York City, all coastal resources are considered important and are protected by the State's Coastal Management Program. Any area within New York City's coastal zone boundary, as defined under the City's Waterfront Revitalization Program, is considered an important coastal resource.

GATEWAY NATIONAL RECREATION AREA

This National Park Service property encompasses some 26,200 acres of coastal area, almost all of which (24,500 acres) is in New York City. It includes the following areas:

- A stretch of shoreline along southeastern Staten Island (about 1,210 acres, including the Oakwood, New Dorp, Midland, South Beaches, Great Kills Park, Miller Field, Fort Wadsworth, and two small islands);
- About 1,000 acres at Breezy Point, the western end of the Rockaway peninsula south of Jamaica Bay;
- Jamaica Bay (described below), comprising about 4,500 acres (including Floyd Bennett Field; shorelands at Bergen Beach, Plumb Beach, and Dead Horse Bay; the parklands at Canarsie, Frank Charles, and Hamilton Beach Parks; land at Spring Creek Park; the landfills at Pennsylvania and Fountain Avenues; and the waters, lands, marshlands, and islands within Jamaica Bay itself).

JAMAICA BAY

The Jamaica Bay ecosystem is described in detail within the [2007 Jamaica Bay Watershed Protection Plan](#) and subsequent updates. Jamaica Bay is one of the largest coastal wetland ecosystems in New York State, and provides a variety of habitats, including surface waters, tidal wetlands, grasslands, beach, dunes, thickets, and woodlands. Jamaica Bay is used by nesting birds and wintering waterfowl in concentrations of statewide importance. Islands in Jamaica Bay are important rookeries for a variety of heron species. The only population of laughing gulls in the state is also found in Jamaica Bay, as are numerous other gull colonies. The islands and shorelines of Jamaica Bay are used by a variety of reptiles, amphibians, and small mammals. In addition to these significant wildlife concentrations, Jamaica Bay is a productive area for marine finfish and shellfish. For these reasons, Jamaica Bay has been designated by NYSDEC as a State Significant Fish and Wildlife Habitat (defined below) and a State Critical Environmental Area, as part of the Gateway National Recreation Area, and by the U.S. Department of Interior as a National Wildlife Refuge. In addition, the City has designated its shorelines as a Special Natural Waterfront Area under the City's Waterfront Revitalization Program. The exact area encompassed by each of these designations differs, as described below.



- *SIGNIFICANT COASTAL FISH AND WILDLIFE HABITAT.* Approximately 10,000 acres of the Jamaica Bay area (bordered by the mean high water line along the shorelines, including the fringing tidal marsh and adjacent upland areas) are designated as a significant coastal fish and wildlife habitat.
- *CRITICAL ENVIRONMENTAL AREA.* All of the mapped tidal wetlands in Jamaica Bay, including the various basins, are designated as a State Critical Environmental Area.
- *SPECIAL NATURAL WATERFRONT AREA.* The majority of the outer shoreline of Jamaica Bay is included in the designation as a Special Natural Waterfront Area. This designation includes the shorelines of Breezy Point; Fort Tilden; Riis Park; the north shore of the Rockaway peninsula; Vernam and Barbadoes Basins; Brant Point; Motts Point; Motts Basin; Head of Bay; Hook Creek and Marsh; the northeast shore of Grassy Bay; Hawtree Basin; Old Mill Creek and Spring Creek; Fresh Creek; Paerdegat Basins; and the vicinity of Mill Creek and Gerritsen Creek.

OTHER STATE SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

As part of the New York State Department of State's Significant Coastal Fish and Wildlife Program, the NYSDEC recommends for designation by the Department of State areas it considers significant coastal fish and wildlife habitats. These are habitats that are essential to the survival of a large portion of a particular fish and wildlife population; support populations of protected species (see below); support fish and wildlife populations that have significant commercial, recreational, or educational value; and/or are types not commonly found in the state or region. In New York City, there are 15 designated significant coastal fish and wildlife habitats. In addition to Jamaica Bay, described above, these are as follows:

- *LEMON CREEK, STATEN ISLAND.* A 70-acre area of salt marsh and coastal fresh marsh that is the only undisturbed tidal wetland area on the south shore of Staten Island.
- *FRESH KILLS, STATEN ISLAND.* About 1,000 acres of tidal wetlands, including those on Island of Meadows and along Great Fresh Kills, Little Fresh Kills, Richmond Creek, and Main Creek. These wetlands, although degraded, are valuable habitats for concentrations of fish and wildlife species, and they are also a wintering area for a threatened species (Northern harrier).
- *PRALL'S ISLAND, STATEN ISLAND.* An 80-acre, uninhabited island maintained by the City of New York Department of Parks and Recreation. This island has historically been used by large numbers of colonial waterbirds, including herons, egrets and ibis.
- *SAWMILL CREEK MARSHES, STATEN ISLAND.* These marshes, including Chelsea Marsh and Merrell's Marsh in northwestern Staten Island, although greatly affected by human activities, is one of the largest remaining population of southern leopard frogs in NY State. Also one of the few areas in the City where Virginia Rail breed.
- *GOETHALS BRIDGE POND, STATEN ISLAND.* A large shallow freshwater pond and wetland system that is an important feeding area for colonial waterbirds and shorebirds, and waterfowl.
- *SHOOTER'S ISLANDS AND THE ISLE OF MEADOWS, STATEN ISLAND.* These islands were occupied by the City's largest heronries, and are protected as potential colonial waterbird nesting habitat. Related habitats, including the Harbor Herons Bird Conservation Area, are located near these islands.
- *OTHER ISLANDS IN THE HARBOR HERONS COMPLEX.* There are over 14 additional islands in NY/NJ Harbor and surrounding waterways that support vital populations of long-legged wading birds, cormorants and gulls. These include South Brother Island, Canarsie Pol, Hoffman Island and others.



- *LOWER HUDSON REACH.* The portion of the Hudson River extending 19 miles from Battery Park to Yonkers, including deep water, shallows, piers, and interpier basins. This habitat sustains a diverse community of benthic, planktonic, and pelagic species, and provides important wintering habitat for large numbers of striped bass.
- *PELHAM BAY PARK WETLANDS, BRONX.* Two major coastal areas within Pelham Bay Park: a 475-acre area of high marsh, intertidal marsh, and salt flats; and the lagoon, a 275-acre narrow bay and wetland complex. This area is used as feeding or resting area for a large number of birds.
- *LITTLE NECK BAY, QUEENS.* The open water in the bay, which is of regional significance as one of five major waterfowl wintering areas on the north shore of Long Island, is a significant striped bass nursery areas in the region.
- *ALLEY POND PARK, QUEENS.* Including salt marsh, tidal flat, and freshwater wetlands, which are used by concentrations of fish and wildlife species, including the Northern harrier, which overwinter here, as well as one of only two sites in NYC with remaining populations of spotted salamanders.
- *UDALL'S COVE, QUEENS.* One of the last undeveloped tidal salt marshes in the northern Queens County and East River area, it is rare in the county and rare in an ecological subzone in New York.
- *MEADOW AND WILLOW LAKES, QUEENS.* Two freshwater lakes and a connecting channel that are one of the largest expanses of fresh water in Queens County.
- *BREEZY POINT, QUEENS.* The 290-acre westernmost tip of a 10-mile-long barrier beach, including the dune areas and sand beaches. This is the only relatively undeveloped barrier beach in the City, and provides an important habitat for breeding colonies of endangered and threatened shorebird species. Breezy Point is also part of the Gateway National Recreation Area, described above.

In addition to these areas, New York City has recognized certain areas within the City as possessing unique natural features that should be protected. These are designated through special zoning districts in the City's Zoning Resolution designed to preserve their natural characteristics, as follows.

- *SPECIAL NATURAL AREA DISTRICT 1.* Emerson Hill, Dongan Hills, Todt Hill, Lighthouse Hill, and the central wetlands area of Staten Island. The hills are characterized by steep slopes, rock outcrops, erratic boulders, and ponds, lakes, swamps, creeks, and trees. Many of the high and low central wetlands are still in their natural state.
- *SPECIAL NATURAL AREA DISTRICT 2.* Riverdale, Spuyten Duyvil, and Fieldston (the Bronx). This area includes a ridge with steep slopes, rock outcrops, ponds, brooks, swampy areas, and mature trees; marshes; and the Hudson River shoreline.
- *SPECIAL NATURAL AREA DISTRICT 3.* Shore Acres Area (Staten Island). This area surrounds and includes Shore Acres Pond, and is a resting area for migratory and local fowl.
- *SPECIAL FORT TOTTEN NATURAL AREA DISTRICT 4 (QUEENS).* This area protects open areas, historic resources, and natural resources, including the shoreline along Little Neck Bay and Long Island Sound.
- *SPECIAL HILLSIDE PRESERVATION DISTRICT.* This district was established to preserve the hilly terrain and unique natural features of New York City. The City's goals are to reduce hillside erosion, landslides, and excessive stormwater runoff by conserving vegetation and protecting natural terrain; preserve hillsides with unique aesthetic value; protect areas of outstanding natural beauty; and protect neighborhood character.



- *SPECIAL SOUTH RICHMOND DEVELOPMENT DISTRICT (STATEN ISLAND)*. Established to guide the development in the southern half of Staten Island, it mandates tree preservation, planting requirements, and controls on changes to topography. It defines a network of open space for preservation in its natural state. An owner of such space is permitted to transfer its development rights to the remainder of his/her property.

SPECIAL NATURAL WATERFRONT AREAS

Under the City’s Waterfront Revitalization Program. New York City has also designated a number of Special Natural Waterfront Areas. In addition to those described for Jamaica Bay, above, these include:

- The shoreline from the mouth of the Bronx River at Hunts Point and Soundview Park, stretching along the shoreline to the mouth of Westchester Creek and Ferry Point Park.
- The shoreline along Hammond Cove and the mouth of Wier Creek.
- The shoreline along Palmer inlet.
- The shoreline adjacent to Pelham Bay Landfill, following the shoreline along the banks of the Hutchinson River and stretching east along the Westchester County border in Pelham Bay Park.
- The shoreline of Hart Island.
- The shoreline along the west coast of Little Neck Bay, Alley Pond Park, Udall’s Ravine, Udall’s Cove, and stretching along the Nassau County border to the East River.
- The shoreline along Powell’s Cove.
- The shoreline along North and South Brother Islands.
- The shoreline of Shooters Island.
- The shorelines of the marshes, creeks and islands on western Staten Island, starting just north of the Goethals Bridge, stretching south along the eastern shoreline of the Arthur Kill, continuing south along Prall’s Island to the south shoreline of Great Fresh Kill, then stretching east along the south shore of Great Fresh Kill and both shores of Richmond Creek, then turning north and weaving around the boundaries of Fresh Kill Marsh, Sawmill Creek Marsh, Mariners Marsh, and Old Place Creek Marsh.

WILDLIFE REFUGES AND SANCTUARIES

New York City has a number of wildlife refuges and sanctuaries, and NYCDPR manages over 50 “Forever Wild” nature preserves within the City. In addition to the Jamaica Bay Wildlife Refuge (above), examples of wildlife refuges and sanctuaries include:

- Thomas Pell Refuge and Wildlife Sanctuary, in Pelham Bay Park,, a 50-acre tidal wetland area.
- Hunter Island Marine Zoology and Geology Sanctuary, in Pelham Bay Park, with woodlands used by numerous wildlife species.
- Udall's Cove Park Preserve, in Queens and Nassau County, covering about 90 acres, some 33 of which are in New York City.
- Clay Pit Ponds State Park Preserve, on Staten Island. This 260-acre park includes ponds, wetlands, woodlands, including sandy oak barrens, and streams. About 70 acres of this preserve were designated a Unique Natural Area under the State Nature and Historical Preservation Trust.



- William T. Davis Wildlife Refuge, on Staten Island. This 260-acre area includes wetlands around New Springville Creek.
- High Rock Park Conservation Center, on Staten Island. This hilly 94-acre park rises to 225 feet above sea level, and includes a variety of forest, meadow and wetland habitats.
- Mount Loretto Unique Area and North Mount Loretto State Forest, on Staten Island. These areas collectively contain over 150 acres of grasslands, freshwater and tidal wetlands and upland forest communities.