Barnegat Bay

The ecological health of Barnegat Bay is in decline, threatening the economic health of the region. Intense development over the past 50 years has degraded the region's delicate habitat and compromised water quality in the shallow bay, where pollution filters out very slowly.

Background

Barnegat Bay estuary, approximately 42-miles long, is separated from the Atlantic by a long barrier peninsula and the north end of Long Beach Island. The 660-square-mile Barnegat Bay watershed encompasses most of the <u>33 municipalities</u> in Ocean County and four municipalities (Freehold, Howell, Millstone, Wall) in Monmouth County.

The Bay, a 75-square-mile estuarine system, has aquatic vegetation, shellfish beds, finfish habitats, waterfowl nesting grounds and spectacular vistas. The 550,000 population more than doubles during the summer season.

The dramatic growth in impervious cover has increased nonpoint source pollution, prevented infiltration to groundwater, and resulted in severe habitat loss, which impacts the estuary's fisheries and other biological resources.

Organizations Working to Restore the Barnegat

<u>The Barnegat Bay Partnership</u> is one of 28 congressionally designated National Estuary Programs in the United States working to improve the health of nationally significant estuaries. In 2019, The partnership has drafted a revised Comprehensive Conservation and Management Plan (<u>CCMP</u>) for the Barnegat Bay.

<u>Save Barnegat Bay</u> is a not-for-profit environmental whose mission is to restore and protect Barnegat Bay and its ecosystem through educational programs and targeted advocacy campaigns.

<u>Trust for Public Land</u> has worked to conserve the highly vulnerable land within the Barnegat watershed. The 2008 TPL's report, <u>Barnegat Bay 2020: A Vision for the Future</u> <u>of Conservation</u>, outlines the future of a rejuvenated watershed.

<u>American Littoral Society</u> empowers people to care for the coast through programs focused on education, advocacy, and conservation.

<u>The Jacques Cousteau National Estuarine Research Reserve</u> administered through Rutgers is one of the two national estuarine reserves created to promote the responsible use and management of the nation's estuaries through a program combining scientific research, education, and stewardship. In 2007, they issued the report <u>Barnegat Bay-Little Egg</u> <u>Harbor Estuary: Ecosystem Condition and Recommendations</u>.

State Action

On December 9, 2010, Governor Christie announced a comprehensive action plan to address the ecological health of Barnegat Bay. The Plan included passage of legislation,

land preservation and resolving the issue of a cooling system at the Oyster Creek nuclear power plant which permanently closed in September 2018.

Exelon, which owned and operated the plant, has transferred the plant to Holtec (a diversified energy technology company) who has a plan to decommission the reactor within 8 years by transferring the spent fuel into casks and then dismantling the reactor. This plan has been met with skepticism by environmentalists with regards to safety issues.

The New Jersey Legislature

Summary of current laws and introduced legislation that will help reduce pollution in Barnegat Bay and other waterways:

- <u>Fertilizer Law</u> was conceived to protect all New Jersey surface and ground waters from impairment by minimizing nitrogen and phosphorus loading that may be derived from lawn fertilizer by limiting application rates and dates in order to best manage nutrients.
- Legislation was introduced in 2018 for DEP to adopt total maximum daily loads for Barnegat Bay ecosystem, and requirement for DEP to adopt nutrient standards for NJ marine waters. This legislation has yet to pass.
- The <u>Soil Restoration law</u> requires the State Soil Conservation Committee to adopt standards to restore soils that have become compacted due to development activities. Compacted soils do not absorb rainfall and snowmelt, thus increasing the amount of surface runoff that flows into streams and wetlands.
- The <u>Stormwater Basins law</u> requires the state Department of Transportation to study stormwater basins in Barnegat Bay watershed and requires DOT and NJ Turnpike Authority to include repairs of stormwater structures associated with their roads in capital project plans.
- <u>Stormwater Utility Bill</u> permit municipalities, counties, and certain authorities to establish and operate stormwater utilities. New Jersey faces an extensive set of problems due to inadequate stormwater infrastructure and management

The New Jersey Department of Environmental Protection

Currently the DEP is in Phase II of the Barnegat plan <u>Moving Science into Action Plan</u>. The 2017 <u>Barnegat Bay Restoration, Enhancement, and Protection Strategy</u> is built upon the data, modeling results, and research from the <u>Phase I 10-point plan</u>.

The strategy under phase II encompasses restoration, enhancement, protection, and monitoring/assessment. Key elements under each are:

- Restoration establishing a maximum TMDL load; addressing stormwater impacts; developing/implementing watershed restoration plans.
- Enhancement- improving ecosystem health, educating and engaging public, reducing pollution
- Protection promoting sustainable use, protecting natural resources
- Monitoring/Assessment ambient, biological and stormwater monitoring; assessment to track water quality for improvements

DEP has also prioritized <u>grants</u> for implementing Water Quality Projects in the Barnegat Bay