## Nonpoint Pollution Runoff Potential Model

As part of the development of the Long Island South Shore Estuary Reserve comprehensive management plan, the Department of State Division of Coastal Resources developed a nonpoint source pollution runoff potential model. This GIS-based model factors in land cover, elevation, soils, and distance to surface waters and graphically depicts the relative risk of pollution to nearby surface waters.

The model has been useful in prioritizing stormwater retrofit projects in the Reserve and has been incorporated into stormwater discharge identification and mitigation plans for the towns of Islip, Oyster Bay, and Babylon. The model has also been applied in the Lake George watershed.

Through a partnership with SUNY College of Environmental Science and Forestry (ESF), the Division further developed a pilot dynamic nonpoint pollution interactive model for the Carmans River watershed on the south shore of Long Island. ESF delineated the watershed, developed a database of hydrologic data, and wrote additional code to implement the model. The model can help decision makers evaluate storm intensity, pollutant loading, development in a watershed, and the potential effects of mitigation.







Coastal development in Long Island