THE NIANTIC RIVER

A Treasure Worth Protecting

The Niantic River is a shallow marine estuary that was formed when the receding glaciers raised the sea level sufficiently to flood a low coastal valley. Several small local streams empty into the Niantic River, the largest of which is Latimer Brook. The Niantic River forms the political boundary between the towns of East Lyme and Waterford.

The river has historically supported healthy populations of marine animals, like shellfish, crustaceans and finfish. Important shellfish species include bay scallops, hard shell clams (quahogs), softshell clams (steamers), blue mussels and oysters. Crabs include blue crabs, green crabs and spider crabs. Among other finfish species, a winter flounder population has historically inhabited the river.

In past years, the Niantic River supported extensive eelgrass beds. Eelgrass serves as an important sanctuary for marine animal species, particularly as a refuge for the juveniles of many species. Young finfish inhabit eelgrass beds to avoid predation. Juvenile scallops attach themselves to eelgrass stalks to grow until they can safely survive on the bottom. Years ago, before its critical role in supporting marine life in the river was understood, eelgrass was actually blasted out of the way for man-made development. In the late 1980s, the flourishing eelgrass beds were attacked by a wasting disease and died off. The natural bay scallop population signficantly decreased shortly thereafter, and despite efforts to re-establish it, has not recovered. Experts believe that poor water quality may be a factor in preventing its recovery.

Due to its shallow depths, the Niantic River has escaped most commercial development. A few marinas and marine-related businesses occupy the southern end near where the river empties into Niantic Bay and Long Island Sound. The remnants of an old quarry dock remain along the northwest portion of the river.

The Niantic River is protected by a long sand bar and consequently has only a narrow outlet to Long Island Sound at its southeastern extremity. This channel under the rail and highway bridges may carry a rapid current due to its constriction at this point. The Niantic River supports a variety of recreational activities, including sailing, kayaking, waterskiing, clamming, crabbing, fishing and scalloping. It is also excellent bird habitat.

Ospreys, herons, kingfishers, swans, geese, cormorants and ducks may be observed at times throughout the year.

In short, the Niantic River is a unique resource but a fragile one that needs our help to protect it, so all may enjoy it in the future.

A River Threatened

The river is threatened in many ways, but working together, we may be able to reduce negative impacts on the river and maintain its health. Protecting and improving water quality is a key factor in ensuring a healthy river ecosystem is sustained.

Excess nutrients, like nitrogen or phosphates from laundry detergents, are detrimental to the river's water quality. Nutrients enter the river through the groundwater from poorly maintained or failing septic systems, inadequate sewers, and runoff from land surfaces in the Niantic River watershed. Excess nutrients can lead to algal (phytoplankton) blooms, which obstruct sunlight to the marine ecosystem. When the algae die, they sink to the bottom and decompose, which could seasonally lead to lower oxygen levels in the water in localized areas.

Unchecked rain and flood overflow from the Latimer Brook watershed can cause excess silting and sediment deposits in the upper river. Residential development and activities within the river's watershed must be closely monitored for possible causes of runoff. Runoff can contain lawn fertilizers, pet droppings, sediments, and motor oil, fuel and antifreeze from paved surfaces.

On the river, operators of boats and personal watercraft should be aware that excess speed in these shallow waters can increase turbidity, further reducing water clarity. Large wakes from passing boats can add to erosion of the river banks. Propellers can cut the blades of eelgrass, threatening their recovery. Marine toilet dischage adds unwanted nutrients to the water and can contribute to the closure of shellfish beds.

Feeding of waterfowl, such as ducks, geese and swans, is detrimental both to the birds and water quality. Feeding can encourage the birds to abandon their natural migration patterns and cause year-round problems. Swans and geese are very strong birds that can be dangerous, especially to young children.

How Can YOU Become an Environmental Steward of the Niantic River?

- Take steps to ensure that your activities around your residence do not negatively affect the river water quality.
  - Minimize use of household chemicals and properly dispose of them
  - Apply lawn fertilizer sparingly and only as needed
  - Dispose of used engine oil, fuel, and antifreeze properly
- Support sewering in existing and future developments in the Niantic River watershed. New development should have adequate setbacks and natural barriers to lawn, laundry and driveway runoff.
- Support environmentally friendly measures along Latimer Brook, such as setbacks, catch basins and natural barriers to runoff.
- If you operate a boat or personal watercraft in the River:

  - Observe the speed limit (6 miles per hour in the channel)
  - Don't cut through eelgrass beds
  - Properly maintain your boat engine and boat
  - Work to make the Niantic River a no-discharge zone for treated marine sewage
- Avoid feeding waterfowl.
- Work to preserve undeveloped areas in the river watershed as open space.
- Share your knowledge with your friends, neighbors and children and recruit them to be environmental stewards.

For more information, contact:
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