

Coast

The Next 'Phase'

Contaminated stormwater, a key concern in Long Island's estuaries, can result in restricted bathing, reduced fishing, poor surface water quality and degraded wetlands and wildlife habitats. Storm drains in parking lots and streets can convey contaminants such as sediment, debris, fertilizers, oil, gas and pesticides to water bodies. NYSG NEMO specialists are assisting Long Island's elected and appointed officials in complying with the EPA Phase II stormwater regulations to address these issues.

Photo by Anita Kusick

With a shoreline of over 1,000 miles and a wide range of natural and recreational resources, Long Island's coastal environment is integral to its residents' quality of life. Its two counties, Suffolk and Nassau, topped 2.8 million inhabitants in 2000, a figure greater than that of 19 States. Nearly completely developed to the west, Long Island faces mounting water quality concerns and, on its east end, strenuous development pressure.

"Long Island's three estuary management programs – the Long Island Sound Study, the South Shore Estuary Reserve Council and the Peconic Estuary Program – have identified the pollutants carried by stormwater as a primary cause of the declines seen in the Island's coastal resources," says **Eileen Keenan**, New York Sea Grant's Nonpoint Education for Municipal Officials (NYSG NEMO) Program Manager.

"These conditions are impacting the quality of life Long Islanders have traditionally enjoyed." NEMO specialists like Keenan in nearly 32 states across the U.S. have been educating local officials about linkages between land use and water quality issues for close to 15 years. Why? Because local elected and appointed officials, such as trustees and planning and zoning board members, make important land-use decisions that determine the social, economic, and environmental health of their communities. Further, given that contaminated stormwater flows across jurisdictional boundaries, local land use decisions can often result in regional impacts.

NYSG's NEMO Program began in May 2000, with Keenan assisting the watershed protection committees for Hempstead Harbor and Manhasset Bay in reducing the impacts of polluted runoff along western Long Island's urbanized north shore. Keenan now oversees two additional water quality specialists, **Christy Witters** and **Steve Mikulencak** (see sidebar, page 9), and says of the program, "We're expanding its reach throughout Long Island in support of consistent, effective approaches to natural resource protection."

According to Witters, NEMO's lead educator for the South Shore Estuary Reserve, "This program is uniquely situated to provide education on innovative land use practices to protect water quality while assisting municipalities with the new EPA Stormwater Phase II requirements." Effective in 2003, the U.S. Environmental Protection Agency's municipal Phase II regulations require Long Island municipalities to develop and fully implement stormwater management programs by 2008.

Within the Island's two counties are two cities, 13 towns, and 95 incorporated villages. So, NYSG NEMO's stormwater management recommendations emphasize intermunicipal approaches to ensure cost-effective, optimal resource protection. "Through our workshops, consultations, and role as a liaison, we have supported advancement of regional approaches to alleviating stormwater issues on Long Island," says Keenan.

NYSG's NEMO specialists assist Long Island officials in building on their natural resource protection efforts while achieving Phase II regulatory compliance. "The EPA Phase II regulations present an impetus to expand on existing efforts, to strengthen ties between Long Island's estuary programs and local governments and to implement proactive approaches that will also ensure the future vitality of Long Island's very special communities," says Keenan.

Out off the east end of Suffolk County, the Peconic Bay's blue waters are rich in natural resources. The Osprey, perched atop a Shelter Island dock post (above), is symbolic of resource protection advancements in the Northeast. NYSG NEMO specialists are extending their program in Suffolk County to support continuing water quality protection and restoration.



Watch

Nassau County has taken the lead in forming a storm-water coalition of over 50 municipalities. "The County's Stormwater Management Program is an example of smart government at work," says Nassau County Executive **Thomas R. Suozzi**. "This program has helped to reduce the duplication of services and costs while providing more comprehensive services."

NYSG NEMO has provided support to Nassau County officials on illicit discharge detection and elimination, municipal pollution prevention and Phase II program evaluation and reporting guidelines. "NEMO has been a tremendous asset to the Nassau County Department of Public Works (DPW) through their assistance with the implementation of a public education program to both residents and municipalities on how to best protect our coastal resources in Nassau County," says DPW Sanitary Engineer **Ken Arnold**. "In addition to this outreach, NEMO has also been a strong supporter of the County's efforts to launch the Adopt-A-Waterway Campaign to help remediate the impacts that storm water runoff has on local bodies of water."

Municipalities in Suffolk County are now engaged in intermunicipal management strategies as well. For example, the Town of Southampton formed a Phase II stormwater management partnership with its five villages. Elsewhere in Suffolk, joint runoff control efforts are underway in the Town of Huntington and in the Nissequogue River drainage basin.

In May, Suffolk County Executive **Steve Levy** unveiled \$4.5 million in stormwater remediation projects that were approved by the County Legislature. "The County's stormwater runoff remediation program will utilize natural filtration systems along with specially landscaped



drainage swales and basins that rely on biological processes to remove oil, silt and sediments from road runoff before being discharged into waterways," says Levy, in a May 2005 press advisory. "Stormwater is a major concern on Long Island, as evidenced by this recent Suffolk County initiative," adds Keenan.

"Long Island municipalities continue to make major strides with respect to resource protection," says Keenan. "They have provided pollution prevention services, policies and projects for many years." "However, she cautions, "the cumulative affects of increased development and population now require improvements in efforts to protect and restore Long Island's fisheries, beaches, bays and harbors. Proactive, preventive measures are key," she says.

"Stronger connections are needed between jurisdictions in order to ensure the effectiveness of municipal resource protection measures. More community members and local decision makers need to recognize that, to protect coastal resources, land use practices need to be modified. And this is not limited to waterfront properties. Stormwater transports contaminants across distances, particularly when it flows through constructed conveyance systems."

— **Paul C. Focazio**

EPA's Phase II stormwater regulations address construction activity and land development in order to minimize the ongoing impacts that alterations to the landscape can cause. NYSG NEMO specialists support local governments in their oversight role. Photos courtesy of Eileen Keenan and NYSG's NEMO Program

Look who's new...

This past February, Water Quality Educator Christy Witters joined the NYSG NEMO program. Witters is assisting Long Island municipalities within the South Shore Estuary's drainage area.

"Through presentations and workshops, we will help local governments to amend their land use and sediment and erosion control ordinances to reflect innovative Best Management Practices to reduce contaminated stormwater runoff," says Witters. "One of my goals is to foster inter-municipal coordination and promote a watershed approach to stormwater management." A watershed is the entire area of land that drains into a single stream or body of water (see "Reaching a Watershed", Fall '99 *Coastlines*).

Steve Mikulencak began work as the program's second water quality educator in late March. His goals will parallel Witters', with a primary focus within the Peconic Estuary drainage area. "With our target audience being local land use decision makers," Mikulencak says, "our challenge is to take the complexities of land-use planning, ecology, and environmental regulation and translate that into practical, succinct, understandable language for planners, public works personnel and town trustees."

Both Witters and Mikulencak (pictured above with Keenan, in middle) are producing fact sheets to help local officials establish procedures for stormwater management. Says Mikulencak, "We're not only informing decision-makers about non-point source (NPS) water pollution, but also about strengthening their own critical role in protecting Long Island's water quality."

NPS occurs when rainfall, snowmelt, or irrigation flows over land or through the ground, picks up pollutants, and delivers them into rivers, lakes, coastal waters, or ground water. "If we can convince local decision-makers that reduction of non-point sources of water pollution is solidly linked to sound planning, community character, and close working relationships across political boundaries, then we've made progress," says Mikulencak.

For all things NEMO-related, log-on to: www.nyseagrant.org/nemo.

