# **New York Sea Grant IMPACTS**



# For 40 years, New York Sea Grant has been "Bringing Science to the Shore"

**New York Sea Grant** (NYSG) is a statewide network of integrated research, education, and extension services promoting coastal economic vitality, environmental sustainability and citizen awareness and understanding about the State's marine and Great Lakes resources.

These three elements, **economics**, **environment**, and **education**, are the foundation of our Strategic Plan and cross-cut all of our goals within four focus areas important to the citizens of New York. Through your continued support, Sea Grant can work for you in realizing these goals:

# HEALTHY COASTAL ECOSYSTEMS

## **GOALS OF NEW YORK SEA GRANT**

- Reduced or mitigated impacts of aquatic invasive species
- Improved coastal water quality and increased citizen understanding
- Restored and well-managed habitat

### **OUTCOMES REALIZED IN 2010:**

Supported innovative research into the causes and mitigation of HYPOXIA, a condition of depleted oxygen, in LONG ISLAND SOUND and LAKE ERIE where low oxygen affects the environmental health and economic productivity of these important water bodies.

Convened a succeessful two-day workshop to bring together scientists and managers to discuss the issues of nutrients, such as nitrogen, and their effects on the water quality of the NEW YORK BIGHT, making sure that research is providing the best possible answers for managers.

Funded world class research about VHS, a serious disease in GREAT LAKES fish, and translated it directly into practical techniques used by fishers, fish processers and aquaculture operations to stop VHS spread and minimize its effects.

Managed the NYSG NEMO Program whose consultations, on-site visits, workshops, and listserv helped Long Island municipalities meet the challenges of stormwater management and facilitated getting funding to coordinate two inter-municipal initiatives.

By using the "teach the teacher" approach, NYSG helped over 45,000 students statewide learn about critical environmental issues such as water quality and invasive species.

# HAZARD RESILIENCE IN COASTAL COMMUNITIES

## **GOALS OF NEW YORK SEA GRANT**

- Improved response to coastal hazards
- Adaptive responses to climate change and sea level rise impacts

### **OUTCOMES REALIZED IN 2010:**

Sponsored research that paired computer models of weather patterns and ocean currents to more exactly predict storm surge and flooding aftermath in the New York metro area. Such predictions can avert billions in flood damage.

Coordinated statewide climate change literacy training for 42 outreach professionals, helping them develop climate change outreach and adaptation strategies for diverse audiences.

Prepared emergency planners and managers with the technical tools they need to anticipate nor'easters; NYSG and NOAA partners developed the East Coast Winter Storm website with over 550 federal, state, and local government officials, coastal managers and emergency personnel alerted. Says one planner, "We were surprised at how well the site worked during the past northeasters. It is being put to good use."







# **New York Sea Grant IMPACTS**

## SAFE AND SUSTAINABLE SEAFOOD SUPPLY

## **GOALS OF NEW YORK SEA GRANT**

- Sustainable coastal fisheries stocks for commercial and recreational fishers
- Safe, high quality, seafood products from profitable seafood businesses

#### **OUTCOMES REALIZED IN 2010:**

Sponsored breakthrough research in the cause and prevention of QPX disease in hard clams, one of NY's most economically important shellfish.

The I FISH NY program, bringing education about fisheries resources to youngsters, expanded to economically challenged parts of NYC, giving at-risk students an opportunity to become aware of the important resources at their doorstep. Long Island park and summer program events reached over 3,550 people.

NYSG continues to be a national leader in ensuring that consumers have sparkling fresh seafood from catch to plate; in 2010 approximately 1,100 seafood processors and regulatory agency members received training managed by NYSG. The seafood industry contributes \$7.9 billion annually to NY's economy and employed 96,000 according to a Sea Grant study.

Funded cutting-edge genetic research that addressed the critical needs of managing winter flounder stocks in northeast waters.



HACCP Hazard Analysis and Critical Control Point Training and Education



Mid-Atlantic

# SUSTAINABLE COASTAL DEVELOPMENT

### **GOALS OF NEW YORK SEA GRANT**

- Robust coastal business development
- Effective community land use planning which integrates watershed issues
- Effective coastal spatial planning and utilization of coastal waters for commerce and conservation

### **OUTCOMES REALIZED IN 2010:**

Two NYSG studies found that increasing the fishing activity of residents along NY's Lake Ontario shoreline is especially important to sustain the region's coastal businesses. According to one study, tourist anglers spent \$43 million in communities along the Lake's shoreline. The estimated indirect and induced economic impacts of those recreational fishing expenditures to shoreline communities were on the order of \$60 million and were associated with approximately 1,000 jobs.

Brought a successful "Clean and safe boating" campaign along 2500 miles of New York's upstate shoreline where 1400 boaters pledged to be "clean and safe" in their boating practices.

Partnered with Natioinal Sea Grant Law Center to train 40 Hudson Valley leaders who gained the most current scientific information about the possible impacts of climate change on the Hudson River to aid in their management decisions.



