NEW YORK SEA GRANT'S
IMPLEMENTATION PLAN 2001-2002

This Implementation Plan describes research, extension, education and communication activities for both years of a biennial omnibus proposal that initiates a four-year award cycle. It identifies milestones and expected outcomes for the implementation of NYSG's Strategic Plan program goals and objectives. These milestones listed below are to be completed in fiscal years 2001 or 2002 that ends January 31, 2002.

Special Note: This Implementation is organized to coincide with NYSG's Strategic Plan. Where Objectives are skipped, it indicates that no activities are currently planned for the two-year term of the Implementation Plan.

(* = Selected for funding under NYSG's 2002-2003 Core Research Program)

ISSUE A. ECONOMIC LEADERSHIP ISSUES

Goal 1. Increase the Viability of Coastal-Dependent Businesses:

Objective a. Assist water-dependent businesses in improving management, operation programs, marketing strategies and responses to regulations, and management policies to enhance business efficiency, effectiveness, cost competitiveness, and profitability.

Activities to plan-develop, and provide overall guidance for implementation of a research effort quantifying the statewide economic impact of boating and recreational facilities have been postponed until we are sure that the 2002-2003 legislative add is sufficient to sustain NYSG staffing. At that time, probably in autumn 2002, an advisory committee will be appointed and a process will be chosen to accomplish the economic analyses.

Objective b. Design and evaluate approaches to enhance tourism and eco-tourism opportunities that help develop and/or promote environmentally sustainable, economically stable tourism markets.

As part of the eco-tourism committee of the Long Island Visitors and Convention Bureau, Sea Gant Extension has assisted in the development of a web page (natureonli.com), that will help residents and visitors learn of outdoor programs and activities.

Objective c. Identify, assess, and encourage the use of innovative techniques and technologies to prevent, control, or reduce the environmental impact of marina operations, boating and other coastal-dependent businesses in a cost-effective manner.

New York Sea Grant has assisted New Jersey in the develop of a best management practices program for marinas in that state, modeling its program on materials and techniques developed by New York Sea Grant. Funding for this work is supported by a grant from New Jersey.

With a grant from Hudson River Estuary Program, New York Sea Grant is helping marina operators along the Hudson River implement best management practices, and is educating boaters on environmental stewardship. This has been done by developing two informational brochures and 3 workshops.

Goal 2. Facilitate Sustainable Use of Economically Important Coastal Fisheries:

Objective a. Develop new or use existing tools to evaluate the effects of recent ecosystem changes on current and future sport and commercial finfish and shellfish fisheries and to identify harvesting and management policy responses to overcome barriers to sustainability.

***Researcher(s) - Rudstam/Sullivan/Horne**
Title - ***From Echo to Fish: Analysis of Bias and Uncertainty Associated with Hydroacoustic Populations Estimates***
This project will help scientists and managers better understand the limitations involved in fish population estimates made using hydroacoustics and how to incorporate these uncertainties into projections based on models.

***Researcher(s) – Rivara/Cerrato/Barnes/Aldred**
Title – ***Analysis of Long Island Field Plantings of Young Cultured Hard Clams, Mercenaria mercenaria (Linne), in Long Island, NY***
This project will help scientists and managers evaluate aspects of stocking of young hard clams into various Long Island waters. The unique research team will evaluate trade-offs between growth and survivorship and then effects on productivity to determine whether more small-sized seed planted earlier in the year can be as effective as less, larger seed planted later and whether either provides a good means of recovery for hard clam stocks.

Objective b. Identify and evaluate modifications that will maintain or restore fisheries health by reducing inadvertent fishing mortality in recreational fisheries, bycatch in commercial fisheries, and overall gear effects on habitats.

NYSG worked with a renowned natural history artist to produce anatomically correct color artwork of the nine prime salmonid species of Lake Ontario. This artwork was commissioned to assist the recreational angler in more conclusively identifying their catch at different life stages. The artwork is being shared with the angling public via articles, posters, and brochures.

Objective f. Examine the effects of various physiological and behavioral processes on the dynamics of fished populations and their predators.

***Researcher(s) – Sullivan/Rudstam**
Title – ***Changes in Stock Composition of Chinook Salmon Under Changing Management Regimes***
The results of this project will help scientists and managers evaluate the anecdotal claims of increased Chinook salmon from wild reproduction and the effects of controlled changes in the Salmon River's water flow.

Objective g. Develop a process understanding of population, system, and community-level changes in ecologically or economically important living coastal resources.

***Researcher(s) – Essington**
Title – ***Multi-Species Fisheries in an Ecosystem Context: Evaluating the Ecological Effects of Cephalopod Fisheries***
By developing a better understanding the role of squids in the mid-Atlantic food web, this examination of predator-prey interactions will shed new light on the management of fished stocks that may be mutually dependent.

ISSUE B. COASTAL ECOSYSTEM HEALTH AND PUBLIC SAFETY

Goal 3. Improve the Quality and Safety of New York State's Commercial and Sport Caught Seafood Products:

Objective a. Coordinate efforts by the seafood industry and federal, state and local regulatory authorities to enhance the safety of seafood products and to successfully complete the transition to a state-of-the-art food safety control system (e.g., Hazard Analysis Critical Control Point (HACCP).

New York Sea Grant worked closely with faculty at Cornell University and other universities to start a distance learning program that will permit people in the seafood industry throughout the United States to obtain the HACCP information they need without having to travel to attend workshops.

Objective c. Identify the risks of contaminant burdens, pathogens and chemicals for seafood safety, develop cost-effective analytical techniques, and determine strategies for minimizing, eliminating or remediating potential impacts.

New York Sea Grant with other partners, and $534,000 in funding from USDA's National Integrated Food Safety Initiative, is investigating *Listeria monocytogenes* contamination patterns and evaluating intervention strategies to help reduce the threat of

this health risk. Ten seafood-processing plants that produce smoked seafood products around the country are participating.

Research results supporting the existence and understanding of bacterial *Listeria* subtypes present in ready-to-eat seafood products, but not harmful to humans, prompted FDA to develop a diagnostic assay which can differentiate them from those that do cause illness. Combined with implementation of a zero-tolerance policy for only the dangerous subtypes, this assay could be used to save smoked fish and other industries from costly product recalls. DNA fingerprinting methods also revealed areas in the processing environment that could be targeted to prevent contamination.

***Researcher(s) – Boor/Wiedmann**

Title – *Rapid Detection of Pathogenic Vibrio parahaemolyticus*

New and novel tissue culture-based assays for screening and detection of *Vibrio parahaemolyticus* in oysters and seawater will detect and distinguish between pathogenic strains of this bacteria from the more common strains that do not cause illness. This expert team of researchers will develop this new tool for industry and government use to help protect human health and to provide a better means to evaluate target water sources.

Researcher(s) – Boyer

Title – *Interlaboratory Validation of the HPLC-ECOS Method for PSP Toxin Analysis*

Monitoring programs for Paralytic Shellfish Poisoning protect human health, but the available techniques for PSP analyses are costly, controversial, and difficult to use. Using numerous outside labs and three popular molluscan species, this project is taking a newly developed alternative technique through interlaboratory trials necessary for its approved and accepted implementation in research and monitoring settings.

Goal 4. Prepare for and Respond to Coastal Hazards and Processes:

Objective a. Use and demonstrate new information technologies (Geographic Information Systems (GIS), internet and web-based technologies, etc.) to help decision makers better quantify and evaluate the structural, social, and economic impact of short and long-term coastal hazards on communities and select effective potential mitigation measures.

New York Sea Grant working with other partners developed a GIS CD-ROM, *Coastal View*, that allows managers of Long Island's South Shore to view changes in the coastlines over the long term. This information will help the Corps of Engineers and State Agencies make better management decisions regarding erosion and sea level rise.

Objective d. Develop the capability to proactively assist coastal landowners, public decision-makers, and marine contractors to deal with coastal high or low water, flooding, and/or erosion events.

***Researcher(s) – Bowman/Flood/Hill/Wilson**

Title – ***Hydrologic Feasibility of Storm Surge Barriers to Protect the Metropolitan New York - New Jersey Region***

This project will develop a model to determine whether storm surge barriers would provide effective flood protection for low-lying areas in New York City and New Jersey during storm surge events.

Goal 5. Assess and Enhance Coastal Water Quality:

Objective b. Design and deliver best management practices for pollution prevention programs for nonpoint sources to property owners, municipalities, industries, and businesses.

Sea Grant continues to hold NEMO workshops for municipal officials to help them reduce nonpoint source pollution into coastal waters. More than a dozen workshops were held in 6 Long Island communities. Two grant proposals were submitted to obtain additional GIS support needed to expand the program into new watersheds, and a proposal was submitted to EPA to fund the program for another year.

Objective c. Determine the processes and rates of transport, fate and effects of point and non-point source anthropogenic contaminants and pathogens (e.g., MTBE, fertilizer, sewage) and develop appropriate models to assess their impacts on developed coastlines.

***Researcher(s) – Waliser/Wilson**

Title – ***A Ferry-Based Observing System for Long Island Sound: Application to Physical Influences on Hypoxia***

This project's novel use of public transportation ferries to collect real time physical data for input to water quality models will greatly enhance scientific understanding of Long Island Sound in order to predict future conditions of stratification and hypoxia relative to regional weather and other variables.

***Researcher(s) – McElroy/Schreibman**

Title – ***Endocrine Disruption in Jamaica Bay: Are Winter Flounder Being Affected?***

Resource managers will have a field demonstration of whether endocrine disrupting chemicals need to be examined carefully with respect to potential effects of effluents such as those from municipal sewage treatment facilities.

***Researcher(s) – Sikka/Kumar**

Title – ***Disposition and Metabolism of Polybrominated Diphenyl Ethers in Fish***

Filling a critical data gap, this research team will examine the uptake, tissue distribution, excretion and metabolism of PBDEs in a model fish species. This vital information will

advance the state of knowledge on PBDEs in fish, allowing the prediction of the effects of these chemicals and their metabolite body burdens under environmental exposure conditions.

Objective d. Design and deliver educational and outreach programs that meet the goals of the Lake Erie and Lake Ontario Lakewide Management Plans.

Leadership has been provided in the development of a public presentation and 4 educational brochures and publications as part of NYSG commitment to provide leadership to the Lake Erie Binational Forum Education and Outreach team. This is a portion of a SGE commitment to share information on the status and progress of the Lake Erie LaMP.

Objective e. Develop techniques to assess the effects of water quality on the alternative uses of coastal resources and provide information to coastal residents so they can evaluate policies intended to prevent or reduce impacts on water quality.

***Researcher(s) – Hasbrouck**

Title – ***Identification of E. coli Sources for Effective Mitigation of Nonpoint Source Pollution***

This project will develop a crucial Bacterial Source Tracking tool by modifying novel molecular methodologies to be able to identify fecal coliform pollution source to animal species or groups. DNA libraries will be established and validated to aid in best management practice development.

Objective g. Provide information to assist state and municipal drinking water treaters, public health officials, and local governments in protecting and better treating public and private drinking water for bad taste and odor and cyanobacterial toxins.

***Researcher(s) – Boyer/LaLonde**

Title – ***Preparation and Calibration of a Rapid Assay for the Cyanobacterial Toxin Anatoxin-A***

A new and novel tool will be developed that can be used to rapidly screen for the presence of anatoxin-a in water and plankton samples. This tool, along with the corresponding ELISA assay, provides two key components for a tier-based monitoring system for the detection of health-threatening blue-green algal toxins in our nation's water supply.

Goal 6. Protect or Enhance Coastal Habitats:

Objective a. Educate community groups, professionals, and agencies about the benefits of and techniques for improving the quality (structure or ecosystem function) of threatened, degraded, or compromised coastal habitats (e.g., Areas of Concern).

NYSG developed and implemented an education program focused on increasing the awareness and understanding of dune ecosystem management in the Lake Ontario eastern basin. Programs included the implementation of a system wide intern field-based program, tour to a like resource on the north shore, and several public programs focused on management issues that affect both public and private property management and use.

Objective c. Use small grants programs, endowments and public involvement to provide support for coastal habitat restoration.

New York Sea Grant received another $1,000 donation to its Allan Overton Endowment, bringing the total contribution received to date to slightly over $12,000.

Objective d. Develop or refine techniques to determine the ecological value of coastal habitats, to examine the effect of human activities on habitat quality and/or habitat fragmentation, to determine if or when habitats have been degraded, and to identify and evaluate the effectiveness of remediation techniques to restore those habitats.

***Researcher(s) – Cerrato**

Title – ***Development of a New Approach for Benthic Habitat Identification and Mapping***

This study will help develop a new technique for benthic habitat identification and mapping by incorporating faunal *and* geophysical data into an integrated approach to differentiate among various benthic habitats. This multi-stage tool, which will utilize side-scan sonar, multi-beam acoustic, sediment grain size, and other data, will benefit the design and power of scientific research and monitoring projects, and environmental impact studies, vitally important to resource managers.

Objective e. Develop tools to support manipulation for long term maintenance of wetland habitats threatened by sea level rise.

***Researcher(s) – Goodbred/Cochran**

Title – ***Response of Long Island's Coastal Wetlands to Environmental Change***

This team will develop a detailed understanding of marsh-system controls and behavior under different physical influences in order to predict the best management strategies for wetland protection and remediation given current environmental conditions.

Goal 7. Control the Spread and Mitigate the Impact of Non-Indigenous Species (NIS) and Aquatic Nuisance Species (ANS) in New York's Coastal Waters:

Objective a. Educate the public and other stakeholders throughout North America about ANS introduction, spread, control, and impact (industry, drinking water tastes and odors, ecosystem components) mitigation via traditional methods, as well as operation of the National Aquatic Nuisance Species Clearinghouse and World Wide Web searchable database.

The International Aquatic Nuisance Species Clearinghouse website has been modified and updated to provide online opportunity for full text searches of all materials available in the collection. The site is visited by students, faculty, resource managers, and others from around the world.

Objective b. Determine the causes of initiation and cessation of ANS such as harmful algal blooms (e.g., brown tide), in order to develop strategies for prevention or mitigation.

Researcher(s) – Padilla
Title – ***Aquatic Nuisance Species: Metapopulation Dynamics and Control of the Zebra Mussel in Freshwater and Estuarine Systems: The Effects of Hydrodynamics, Larval Supply, and Embayments***
Efforts have been underway to identify effective zebra mussel control measures, but without much success in nature's environment. This project is examining the role of Hudson River embayments relative to the bivalve's larval stage, with the idea that zebra mussels could be limited by disruption of this life phase. New information useful to understanding this and other invasive species' population dynamics will result, along with insights for an ecosystem-based control strategy.

Researcher(s) – Baker/MacNeill
Title – ***Aquatic Nuisance Species: Applied Research Project for the Development of a Cercopagis Interdiction/Prevention Protocol***
Resting eggs of the fish-hook waterflea, a rapidly-spreading and voraciously predatory zooplankter, will be exposed to physical stressors (temperature, agitation, desiccation) and chemical agents (oxidizing compounds, saline compounds) to determine how human transmission via fishing gear, bait buckets, etc. can be mitigated.

Objective d. Determine the impacts of introduced species and harmful micro-organisms and develop effective response, detection, and control mechanisms.

Genetic studies unexpectedly revealed that sea lamprey are likely native to Lake Ontario, that there are considerable differences between Atlantic and Great Lakes populations, and that there is no evidence to support the concept that these fish home back to their rivers of origin. These significant findings call into question the current management efforts being used or proposed to eradicate this parasitic, damaging species.

***Researcher(s) – Mills/Mayer/Fitzgerald**
Title – ***Benthification of Great Lakes Ecosystems: A Synergism Between Nutrient Reduction and Driessena?***
Fisheries managers will gain long-term planning tools in the form of GIS-based habitat models to interpret and predict the response of fish populations and other communities to

the environmental "benthification" changes in the Great Lakes caused by zebra mussels and nutrient abatement.

***Researcher(s) – Bowser/Getchell**
Title – ***Prevalence of Botulism in Fish in the Lower Great Lakes***
This team will investigate the role that fish play in mortalities of waterfowl on Lake Erie from the causative agent of botulism, *C. botulinum*, filling a critical research gap and providing government agencies with information essential for managing natural resources and protecting human health.

Researcher(s) – Schulz
Title – ***Aquatic Nuisance Species: Effects of Invasive Invertebrate Predators on the Food Webs of the Great Lakes***
It is likely that the invasions of *Bythotrephes* and *Cercopagis*, two exotic zooplankton species, have affected Great Lakes food webs since both have roles as prey and predator relative to other species near the bottom of the food chain. Several tools including stable isotope analyses will be used to get a better picture of trophic interactions and energy flow, identifying whether these species are beneficial or detrimental to juvenile fish.

Researcher(s) – Marsden/Beekey/McCabe
Title – ***Aquatic Nuisance Species: Effect of Zebra Mussel Colonization of Soft Sediments on Foraging Success and Habitat Choice by Benthic Fish***
While invasive zebra mussels normally attach to hard substrates, they can also colonize soft sediments by forming clusters and expanding mats around an embedded hard object like a snail shell. This project is examining how this affects the feeding success and behaviors of benthic fishes such as sturgeons, sculpins and suckers. The results' food web implications will be important scientifically and to fisheries managers.

ISSUE C. EDUCATION AND HUMAN RESOURCES ISSUES

Goal 8. Develop the Capacity of New Yorkers to Participate as Partners in Coastal Issues:

Objective a. Work with Marine and Great Lakes educators to integrate new technologies and Sea Grant resources into K-12 classrooms.

New York Sea Grant is co-sponsoring the Long Island Sound Educators Conference scheduled for April 12, 2002, along with Connecticut Sea Grant and other partners. Over 20 workshops are being offered. The last conference held two years ago attracted 200 educators.

Objective d. Develop and distribute educational materials to Congress, state legislators, and stakeholders on the principles and theory of resource

management and uncertainties in current methods for making predictions and management decisions.

Communications produced information packets and "one-pagers" to aid in educating state and national legislators about NYSG's goals and programs.

Objective e. Provide non-formal education on Sea Grant issues and techniques to groups such as scouts, 4-H clubs, etc.

Informal learning tools such as illustrated bookmarks denoting 30 of New York's aquatic nuisance species were designed. Thus far 2500 have been distributed by extension specialists to aquarium and marine educators, international ANS conferences, etc.

Objective f. Develop and use new communications techniques and strategies (including publications, the Internet, and the media) to aid outreach to stakeholders and to the general public in order to foster an educated citizenry.

Twenty new outreach titles were produced and distributed including *Coastlines*. 460 requests for publications were fulfilled. Thirteen new journal articles by investigators. 28,900 document downloads were made from NYSG's website. Twenty press releases were distributed resulting in 60 print and broadcast media hits. NYSG's website was redesigned and expanded to include more content and images. Extension staff can download logos, fact sheet templates and publications from one section of the site..

Goal 9. Develop New Partnerships:

Objective a. Initiate a Sea Grant urban extension outreach effort in New York City.

Sea Grant began a small grants program in New York City similar to the small grants program it operates for the Long Island Sound Study. This program's goal is to give educators and community organizations funds to become involved in efforts to restore and protect waters in New York Harbor. Funding for this program comes through EPA.

Objective b. Develop a comprehensive coastal and aquatic outreach effort with new York's Native Peoples, in concert with Cornell's American Indian Program, to aid them in managing and utilizing their aquatic resources.

Provided leadership and assistance to the Akwesasne Mohawks in the development of an intern program focused on assessing the value of their wetland resources. The reservation includes one of the largest freshwater marshes in the Northeast.

Objective c. Respond to emerging coastal needs.

This past summer and fall avian botulism was a major issue in eastern Lake Erie, along NY's, Pennsylvania and Ontario Canada coastal region. New York SGE has taken leadership in getting state and federal agencies along with researchers to develop a research and outreach agenda for this issue. A national summit drawing 100 participants was held this past February in Buffalo.

Research examining an intense brown tide provided the first coordinated documentation of the bottom-up and top-down factors controlling these phytoplankton blooms that, so far, had not been studied simultaneously. High levels of organic nutrients coupled with low levels of grazing by microzooplankton contributed to the most significant brown tide bloom seen in 15 years. This compelling evidence finally pulls together many individual results regarding brown tide initiation and demise.
A recent development for the Hard Clam Initiative, already underway with three research projects, is the expected addition of $245K, again via NOAA's National Marine Fisheries Service (NMFS). Decisions about how best to allocate the new federal dollars will be made this year in concert with NYSG's Hard Clam Initiative Advisory Committee.

With NMFS funds, NYSG initiated work on six research projects and one NYSGE outreach effort as part of the total effort (19 projects) coordinated with other members of the Long Island Sound Lobster Steering Committee to try to determine causes of the 1999-2000 lobster mortalities in Long Island Sound. Total funds managed by NYSG will be just over $1.4 million for a 2.5-year period. NYSG's lobster initiative research projects are:

Researcher(s) – McElroy/Brownawell
Title – ***Effects of Pesticides on Lobster Health: Trace Level Measurements and Toxicological Assessment at Environmentally Realistic Concentrations***

Researcher(s) – Chistoserdov/Smolowitz
Title – ***Bacterial Assemblages Involved in the Development and Progression of Shell Disease in the American Lobster, Homarus americanus***

Researcher(s) – Lopez/Cerrato
Title – ***Effects of Temperature and Body Size on Metabolic Stress in Long Island Sound Lobsters***

Researcher(s) – Wilson/Waliser/Swanson
Title – ***Relationship Between American Lobster Mortality in Long Island Sound and Prevailing Water Column Conditions***

Researcher(s) – Factor/Daly
Title – ***Development of an Assay for Phagocytic Activity in the Immune System of Lobsters***

Researcher(s) – Anderson
Title – ***Immunological Health of Lobsters: Assays and Applications***

ISSUE D. NYSG ORGANIZATIONAL GOALS

Goal 10. NYSG will examine how funding can be increased for NYSG activities.

Objective a. Increase funds from federal sources.

NYSG currently is taking advantage of Fisheries Extension Enhancement funds to provide resources for SGE staff salaries.

Objective c. Increase NYSG funds from private organizations.

Following discussions with Cornell and SBU foundation fundraisers and Don Berth (retired Worcester Poly Tech fundraiser) we decided to work with the SBU group. We have met twice with Linda Merions to 1) describe NYSG, provide information and discuss goals, and 2) discuss several potential sources of funds. We are iteratively evaluating possibilities to hone the focus of our search and try to select some attractive options for our first attempts.

A fortuitous opportunity arose when NYSG was contacted by the organizers of a Long Island fishing tournament in May 2002. They were interested in donating part of their proceeds to us, anticipating that the connection to NYSG as a worthy beneficiary would give the tournament higher exposure. Besides receiving several thousand dollars, NYSG will have the opportunity to increase its visibility directly with the participating anglers and marinas, as well as the general public through the event's media coverage.

Goal 11. NYSG will improve its reputation among decision-makers as a leader in generating objective, science-based information for application to coastal issues.

Objective a. Increase input of the best scientists toward defining the coastal resources research areas where efforts can have large impacts on scientific progress.

The guidelines for the Program Advisory Council were approved. A search is underway to add three or four research members to the PAC as well as to increase the breadth of PAC topical representation. Dr. Anthony Calabrese leader of the NMFS, Milford Laboratory and expert in molluscan physiological ecology, fish and shellfish diseases and stock enhancement has agreed to serve on the PAC. Several other research contacts have been initiated. Christopher Zeppi, Esq., of the NY/NJ Port Authority has agreed to participate on the PAC. He brings the urban and ports and harbors perspective to the PAC.

Objective b. Increase the value of NYSG research results by optimizing the protocols for implementing the Focus Topic areas.

The 2000-2001 Focus Topic project on Lake Ontario salmonids is still underway with a no-cost extension until the end of May 2002. We have been very satisfied with the science, outreach activities, and media coverage of the effort, to date. Once the project is completed we will assess its overall success in meeting our expectations for this special funding.

Unfortunately, our second round with the concept of a Focus Topic was not successful in identifying a compelling project. The topic, *Minimizing Non-point Source Pollution in Coastal Regions*, was very broad yet only two preproposals were submitted. One was invited as a full proposal but, while its science was fundable, its overall merits received only lukewarm support. The high level of funding reserved for a Focus Topic project was not justified and the project was not selected. The funds went back into the pool to support other omnibus research proposals. We noted that several of those submissions addressed limited aspects of the Focus Topic, with the investigators purposely choosing not to build a larger, more comprehensive project.

Having had the benefit of these two experiences, NYSG professional staff discussed the Focus Topic concept at a meeting in October 2001. We did not come to any conclusion at the time, except that we should make at least one more concerted effort to solicit and fund a Focus Topic project. One suggestion was to build on workshops sponsored by NYSG that identified linking research needs, as a natural "next step" for our involvement with a topic already deemed to be of special importance. Proceedings could be used as background material and NYSG staff should again hold targeted informational meetings in upstate and downstate locations, as appropriate.

Goal 12. NYSG will increase its role as a key collaborative liaison among NYS stakeholders in coastal issues.

Goal 13. NYSG will develop ways to demonstrate better the success of the program.

Objective b. Identify and implement additional techniques and processes to continuously document NY Sea Grant programmatic accomplishments.

The SGE narrative process has been modified and updated to be accessed on a NY congressional district basis. We expect to have this database accessible on the web by the end of 2002.

Objective c. More fully utilize its statewide PAC, district PAC's and individual extension specialist PAN's to evaluate program efforts.

A program advisory network was established for the NY NEMO (Nonpoint Education for Municipal Officials) Program, which held its first meeting in March 2002.