Dear Friends:

As we approach our 50th Anniversary, it is appropriate for us to consider how our Commission has grown in importance and responsibility, to review how business here at the Commission is conducted, to reflect on our achievements, and to consider opportunities to enhance our services. Through this 1996 Annual Report, the staff and I have attempted to put a spotlight on the workings of the Commission, share with you the Commission's goals and objectives, and highlight the recent year's accomplishments.

We take great pride in our FY-96 accomplishments and see our work as an important complement to what will soon be more than five decades of activity. In the interest of continuing our work in a responsive and effective manner, we ask that you, over the course of the next year, share your suggestions with us on how we might enhance our operations.

During 1996, the Commission continued to work with the states, EPA, other interested agencies, and the public to address the issues which are important to us all. We are sincerely thankful for the support we have received over the past year from the Governors, State Legislators, Congress and EPA and its staff. We enter the next operational year with a resolute commitment to promote the principles of regional cooperation, flexibility for the states, and protection and improvement of the quality of our waters.

In closing, I want to personally thank all of you for the support you have shown me for the past two years. It has been an honor and privilege to serve as your Chairman.

Sincerely,

Robert W. Varney
The New England Interstate Water Pollution Control Commission (NEIWPCC) has a tradition of regional and national environmental leadership and responsiveness. From its pioneering work in water pollution abatement technology, to facilitating communication on environmental issues, to training the environmental workforce, to educating the people who need to know, NEI takes a "can do" approach.
What Is NEIWPCC?

In 1947, recognizing that industrial and population growth would lead to serious water quality degradation and that cooperation among states was the best way to approach and resolve water pollution issues, Congress passed legislation allowing for the formation of interstate water pollution control commissions. Connecticut, Rhode Island, and Massachusetts acted at once by establishing the New England Interstate Water Pollution Control Commission. During the next few years, Vermont, Maine, New Hampshire, and New York joined the Compact. The Commission, according to the Compact agreement, would receive its duties, powers, jurisdiction, and financial support from the states. The Commission's primary role was, and continues to be, to coordinate Compact-member State efforts to improve and maintain water quality.

The business of water quality management has proven to be far more complex than it appeared to be in 1947. While its initial emphasis centered on surface water protection, the Commission's role and responsibilities have expanded to encompass a broad spectrum of water quality issues which are presented and discussed briefly in this annual report.

How Does NEIWPCC Operate?

NEIWPCC is administered by thirty-five Commissioners—five from each Compact-member state. Commission officers are elected annually. In general, chairpersons serve for 2 years and on a rotating basis among the states. The Commissioners, either ex-officio or appointed by state governors, represent the state water pollution control and health agencies. They may also represent conservation groups, municipal and industrial interests, and the general public. Nonagency members bring an important perspective to the decision-making process.

The NEIWPCC Executive Committee consists of the Chairman, Vice Chairman, and the commissioners of the state environmental agencies or their appointees—usually state water program directors. The committee acts on all administrative matters of the Commission and is authorized to act on any issue that does not require the full vote of the Commission. The committee reviews and develops policy statements and testimony and holds roundtable discussions with EPA-Region 1 to identify and reach consensus on interstate program problems. During FY-96, for example, the Executive Committee held a special meeting to review proposed changes to the National Governors Association’s (NGA’s) Water Resources Management Policy. As a result, NEIWPCC sent the NGA a consensus letter that contained regional comments concerning the proposal.

In general, NEIWPCC program development and coordination is carried out by the Commission staff under the direction of the Commissioners and under the supervision of the Executive Director. The activities of the Commission are described in the annual NEIWPCC-EPA Agreement which serves as the work plan for the staff. The Executive Director maintains ongoing communication with the appropriate regional and national water-related state and federal agencies and professional environmental organizations in order to integrate Commission policies and procedures with overall water pollution control efforts.
M ost, if not all, of our environmental laws came about as the result of some crisis or other. The Clean Water Act of 1972, for example, was born of overwhelming national disgust over the degraded state of many of the nation’s once grand and glorious surface waters. Crises can inspire us to sit up and take notice, serving as an antidote to indifference. Crises often succeed where earnest entreaty has failed. But crises come, more often than not, at a high cost. Once the crisis had been ameliorated, and we’ve breathed a collective sigh of relief, we move on, carrying some small lesson in our collective psyche, but not necessarily the whole curriculum. The crisis may, indeed, be our most reliable catalyst for responsible behavior. But where the crisis has the punch, it is often lacking in resonance and technique.

There is, in fact, a more painless, effective, and less costly alternative to crisis-driven motivation: Proaction—acting in advance to deal with anticipated potential difficulty. This approach encourages actions that are the result of thoughtful and productive dialogue, training, and education rather than swift but short-lived rushes of adrenaline.

For nearly 50 years, the New England Interstate Water Pollution Control Commission (NEIWPCC) has operated with a proactive sway, pushing the interstate water quality improvement envelope in the direction of informed consensus. While the Commission Compact was originally designed around classifying interstate waters as a first step in controlling water pollution, the Commission soon became a forum for seeking solutions to those problems which were a deterrent to progress in pollution abatement.

Over the years, the Commission’s mission of coordinating, promoting, and facilitating interstate water quality improvement has remained a constant; however, its list of activities has grown significantly at both the regional and the national levels. From source water protection to environmental education to resource protection to regional onsite systems regulatory cooperation to New England-wide wastewater training and technology forums, the New England Interstate Water Pollution Control Commission and Environmental Training Center have gone the extra yard to promote a proactive, over a reactive, approach to water quality improvement.

The array of NEI activities described in this FY-96 Annual Report attests to the Commission’s commitment to proactive water quality advocacy. Take for example...


Water is a limited resource. And as reports of “unsafe” drinking water and waterborne illness linked to drinking water supplies become more frequent and far-reaching, water suppliers are having to defend their integrity and commitment to public health protection. Whether source water is pristine or whether it has already experienced some water quality impacts, there is no time like the present to ensure that it will be protected into the future. To do this, the water supplier needs to map out a water supply protection strategy, which entails the development and implementation of a source water protection management plan.

Many of the larger water utilities in New England have budgets that are sufficient to support in-house staff or pay for consultants to develop and help implement their source protection plans. Small systems, however, are usually operating on shoe-string budgets, struggling to stay in compliance with regulations. It is these small systems, which comprise the majority of the region’s drinking water systems, that need help to protect the health of the public they serve and meet regulatory standards.

In order to ensure that the region’s small water supply systems receive the guidance they need in developing source protection programs, NEIWPCC, with the assis-
tance of a seven-state steering committee (the New England states and New York) produced a Source Protection Guidance Manual for Small Surface Water Supplies in New England. The manual, which was produced with a grant from EPA-New England, was designed to help the region’s small public water supply systems prepare and implement their own source protection plans.

In most cases, this manual does not deal with groundwater source protection, but refers readers to their state wellhead protection programs. In this region, groundwater protection programs are already well developed, whereas the protection of surface water remains an area where large gaps in source protection have been identified. While directed at small systems, the concepts in the manual are fairly basic and can be applied to systems of all sizes.

The manual is structured to be used in several ways. Readers can approach source protection by reading the manual from cover to cover or by picking and choosing chapters of interest. Many of the chapters in the manual can serve as "stand-alone" information pieces that are designed to provide suppliers with topic-specific outreach material.

Preparing a Groundwater Resource Book For Grade K-6 Teachers

Here in New England, groundwater plays some part in everyone’s life—directly or indirectly. Our most direct groundwater connection, of course, is the drinking water well. But there’s a lot more to groundwater than meets the eye. Many of us aren’t aware of what groundwater is and how it fits into the bigger picture—how it fits into the earth’s water cycle; how all of the water available to us here on earth is part of one, big interconnected system; and how groundwater is a major contributor to New England’s lakes, ponds, rivers, streams, and wetlands.

Ninety-five percent of all fresh water on earth (not including icecaps) is groundwater. It is the drinking water source for 53 percent of the United States population, and while much of the New England’s groundwater is of good quality, problems associated with groundwater contamination have increased in recent years. Once groundwater is contaminated, it is very difficult and expensive to restore. As with all matters of the environment, we need to get our collective psyche up-to-speed on the impact of our actions on groundwater so that, ultimately, we instinctively do our part to prevent groundwater degradation.

Recognizing that today’s children are tomorrow’s decision-making adults—business and community leaders, homeowners, parents—NEIWPCC, in cooperation with EPA-New England produced and published That Magnificent Ground Water Connection: A Resource Book For Grades K-6. The activities in the book introduce the water cycle and groundwater with a New England focus.

As a starting point for the project NEI and EPA staff surveyed existing curricula, pulled together a selection of appropriate groundwater-related activities, and adapted them to fit New England. NEIWPCC contracted with Susan MacMaster of MacMaster Training Associates in South Carolina to help do the job. Selections were made partly with respect to their applicability to a wide range of subject matter, not just science. The goal was to produce a product that integrated the groundwater theme into stories, songs, math, social studies, art, and writing and that was both educational and fun.

The K-6 part of the project is now complete and has all of these features. The 7-12 version is scheduled to be completed in spring 1997. The K-6 book includes 24 stand-alone activities and their associated handouts (to be copied and distributed to students). Background information is provided as an introduction to each activity. The activities are organized according to section themes: Basic Water Facts, The Water Cycle, Ground Water Basics, Water Distribution and Treatment, and Water Stewardship. The Resource File at the end of the book includes a listing of Ground Water Education Resources and a Glossary of Terms. The activities can be carried out using inexpensive, readily available materials.

Coordinating Rhode Island’s Resource Protection Project

Human health and welfare are dependent on a healthy, functioning natural environment. It is far more prudent to take the proactive approach of protecting a healthy ecosystem from degradation rather than to wait until damage has occurred and the cost of restoring the impaired system becomes prohibitive. Recognizing that state and federal governments need to apply their limited resources in a manner that will achieve the greatest environmental benefits, NEI, in cooperation with EPA-New England and participating state environmental agencies, set in motion
a resource protection initiative to develop a process for targeting states' most important natural resources.

The initiative began with a pilot New Hampshire Resource Protection Project, facilitated by NEI Connecticut and Rhode Island, building from the successful process developed in New Hampshire, embarked on their own projects. While the Connecticut project is housed at the state Department of Environmental Protection, NEI has coordinated the work in Rhode Island and New Hampshire (see page 10).

To assist with the priority-setting process and future education efforts, the Rhode Island Resource Protection Project developed a set of maps, using Geographic Information System (GIS) technology, that depict statewide natural resources. The maps are composed of existing data from the Rhode Island Geographic Information System (RIGIS), information collected by the project, and computer analyses of the data. During FY-96, the Rhode Island work group, composed of representatives from private, local, state and federal agencies, identified nine resource protection areas that they agreed contain many of the state's most important resources.

The Rhode Island work group envisions that the critical resources in these areas can be protected effectively through existing programs and public/private partnerships, rather than by creating new regulatory programs. While protection strategies will differ from area to area, implementation will not be possible without the full involvement of all interested stakeholders—local governments, state environmental and resource agencies, federal agencies, private organizations and individuals.

Working With EPA-New England and the New England Governor’s Conference to Initiate an Interstate Regulatory Cooperation Project

Most environmental regulators are reluctant to jump right in and give a new technology the “green light.” In deciding whether or not to approve a new technology for use in a regulated setting, regulators essentially play the role of the devil's advocate, asking questions, in an effort to get a handle on what could go wrong with any given technology. Has the technology been adequately field tested? How much testing is enough? What type of documentation/data has the proponent provided? Has the technology been tested at a facility run by an independent or third party who does not benefit from the product's approval? Under what climate, soil, wastewater conditions was the testing conducted? Can it work here? Will it benefit the public?

Environmental regulators are legitimately concerned with these questions because, beyond consumer protection, their overlying responsibility is to protect the public health and the environment. A regulator wants to be sure that a technology is not only reliable, but that the manufacturer isn't going to disappear into thin air, leaving a water supplier, wastewater treatment plant operator, or a homeowner, in the case of on-site wastewater systems, with no technical support or parts for the product.

In the case of on-site wastewater systems (a.k.a., septic systems) another whole can of worms is the maintenance of the alternative technology, especially if it is a mechanical system. Unlike a treatment plant that is staffed by specially-trained personnel, homeowners traditionally do not have the expertise to maintain and operate their on-site systems.

Inasmuch as many of the region’s environmental regulators have repeatedly found themselves sloshing around together in the same, tentative new technology boat, the notion of some sort of regional cooperative has its appeal. The concept of a central training and testing facility has been long discussed in the field of on-site wastewater systems and is actually becoming a reality at the University of Rhode Island training and testing center and a soon-to-be constructed testing facility on Cape Cod.

During FY-96, the region’s environmental regulators hatched and began implementing plans for an “Interstate Regulatory Cooperation Project.” The plan was to set up a regional pilot project to facilitate the technical evaluation of innovative/alternative on-site wastewater technologies/products. The effort climaxd this September with the signing of a Memorandum of Agreement (MOA) between all of the New England states, NEIWPCC, EPA-New England, the New England Governors Conference, and the National Small Flows Clearinghouse at the Eastern States Exposition in Springfield, Massachusetts.

The agreement iterates the need for regional cooperation in evaluating environmental technologies and spells out how the pilot project will be carried out. The memorandum states that NEIWPCC's existing On-Site Systems Task Force, comprised of the New England and New York State on-site program regulators, will serve as the project’s review committee. The committee will develop technical
standards which will be used to verify and review new technologies and assess each technology on its merits and render an "Advisory Opinion." Because this is an independent review, the advisory opinion will contain a clause which clearly states that the committee has not assessed the technology for compliance with individual state regulations. This will be left to the proponent on a state-by-state basis.

Through the project, the states will ultimately share and acknowledge the results. A data sharing/clearinghouse will also be developed through the National Small Flows Clearinghouse so that all states, inside and outside of New England, can share the generated information and references. This information will also be useful and accessible to local officials, manufacturers, designers, and homeowners. Once the technology protocol is developed, regulators hope that it will be easily transferred to other environmental technologies.

**Promoting the Beneficial Use of Biosolids**

As a result of the nation’s water pollution control and prevention efforts, the quality of our surface waters has improved significantly. But, as so often happens, the answer to one problem tends to create another. In the case of wastewater treatment, as the population grows and wastewater cleanup technologies improve, more and more cleanup by-products—sludges—are generated. What to do with these sludges is the question. What many people don’t realize is that, depending on its quality, a community’s sludge has the potential to contribute to society and the environment in a positive way.

The federal government has banned ocean dumping, and landfills are becoming less and less a viable option. As a result, many communities are having to think a lot harder about how they are going to manage their sludge. There are a number of environmentally friendly alternatives to traditional landfill or ocean dumping disposal methods that communities might consider; some involve technologies that treat sludge so that it can be recycled back to nature, others beneficially use the material as fertilizer (e.g., land application), others are essentially disposal technologies. Sludges that meet EPA standards for land application are referred to as biosolids.

NEI’s Residuals Work Group, made up of state and federal residuals regulators, long ago recognized the need for educating communities about their sludge management options. Through NEI, the group has produced a video and other outreach material, including a t-shirt, to promote the beneficial reuse of biosolids. In FY-96, the group completed a series of four brochures that address composting, land application, incineration, and sludge/biosolids in general. NEI mailed the brochures to all wastewater treatment facilities in New England and New York, as well as to state agencies and private consultants. The brochures have been distributed in a variety of other ways: through the New Hampshire Conservation Districts, through a number of municipalities and private businesses and organizations who have purchased bulk quantities, and at food and agriculture events.

**Bringing State-of-the-Art Wastewater Treatment Technologies to Northern New England**

Municipal and industrial water pollution control facility operators, municipal officials, and state personnel in Northern Maine, New Hampshire, and Vermont often miss out on the "what’s new" in wastewater treatment technology; technology forums are typically held in southern New England, a long haul for small rural facilities with lean budgets. Recognizing that state-of-the-art information can help all operators and communities improve their compliance performance, NEI’s Environmental Training Center (NEIETC) received an EPA grant to develop, coordinate, and implement two technology forums in Northern New England, one in White River Junction, Vermont and the other in Houlton, Maine. NEI used a FastPlan brainstorming approach to determine just what types of technologies local water pollution control personnel desired, gathered together the experts, and presented the forums in April and May of 1996.

*These are just a few of NEI’s FY-96 accomplishments. As you read on, you will discover a host of other Interstate activities that were undertaken to improve and protect our water resources...in the absence of crisis. While we are proud of our accomplishments, we also know full well that there is much more that all of us can and must do. Environmental stewardship is an ongoing event.*
NEIWPCC.....FY-96
Getting Down To Business

FORUMS FOR INTERSTATE COMMUNICATION

One of NEIWPCC's most important jobs is to champion and facilitate communication and cooperation among its member states. This has proven most effective when environmental issues common to all or some of the states are identified and examined through the framework of Commission work groups and special topic meetings.

NEI's work groups enable the staff to work with Commission members and state and federal agencies on an ongoing basis to maintain and foster regional responsiveness to the growing list of environmental issues. The work groups are designed to provide a structured forum for the exchange of information, to encourage a cooperative approach for addressing issues of regional importance, and to develop recommendations for regional consensus. NEI staff coordinate these meetings and serve as both staff support and an information clearinghouse service.

Work Groups

Groundwater Management
Increasing incidents of contaminated groundwater source drinking water supplies alerted the nation's lawmakers that this irreplaceable resource had to be managed and protected. The protection of our groundwater supplies is arguably the most pressing challenge facing environmental managers today. Over the years, NEIWPCC has worked with the EPA and state groundwater staff to facilitate the exchange of technical information and discussion of various groundwater management strategies.

NEIWPCC's Groundwater Management Work Group met three times during FY-96 to discuss such topics as state and EPA program updates, Comprehensive State Ground Water Protection Program (CSGWPP) issues, source water protection, Superfund flexibility, wellhead protection biennial reporting, Safe Drinking Water Act reauthorization, stormwater infiltration, and training needs.

During FY-96, NEI also contracted for the development of a CSGWPP for Rhode Island and developed and distributed the K-6 groundwater curriculum (see page 4).

Nonpoint Source Pollution
Surface water pollution stemming from diffuse, nonpoint sources (NPSs) associated with urban, agricultural, silvicultural, and construction-related runoff is a major concern to water quality regulators, managers, and the general public. Contaminants that wash into our lakes, rivers, and oceans create havoc with the natural beauty and function of these aquatic systems. As point sources of pollution have become better controlled, the effects of nonpoint sources have become more apparent, though not as easily controlled as point sources. One way of addressing NPS pollution is through the implementation of land use-specific best management practices (BMPs). Public outreach and education are also important factors in controlling NPS pollution.

NEIWPCC's NPS Work Group, made up of state NPS program managers and EPA regional staff, is designed to coordinate and strengthen NPS protection efforts in New England, New York, and New Jersey. The work group acts as a clearinghouse for information on BMPs and develops issue-specific technology transfer programs. The group held regular meetings twice during FY-96 and met two other times to address special topics: once with the biocri-
teria work group to discuss biomonitoring in NPS projects and once with EPA staff to discuss establishing NPS environmental indicators and methods to ensure success.

In May, the work group, in cooperation with the New York State Department of Environmental Conservation, hosted a 3-day Seventh Annual Nonpoint Source Conference in Glens Falls, New York. Technical sessions covered such topics as national NPS guidance, numerous case examples on a variety of NPS topics, federal partnerships, and the watershed approach to environmental management. Afternoon field trips were arranged to transport attendees to sites that demonstrated successful agriculture and streambank erosion control and roadway/roadbank maintenance practices. The meeting also included a “Bio-Engineering/Sediment and Erosion Control Fair,” where vendors from around the northeast displayed and discussed their products and services.

**On-Site Wastewater Task Force**

Nearly one-third of the nation's population is served by septic systems. Each year these systems discharge about one-trillion gallons of water into the nation's soils and groundwater. Besides the important role they play in household sanitation, septic systems also influence community growth and economic development.

Improperly designed, installed, or maintained on-site sewage disposal systems, however, are often the root of serious environmental and public health concerns. Poorly treated or untreated effluent can contaminate groundwater and surface water—often important drinking water sources and/or recreational resources. Too often, this contaminated water has been responsible for water-related disease outbreaks.

It's not that septic systems don't work; it's that they have been widely misapplied, mismanaged, and misunderstood. This is why on-site systems must be carefully regulated, and why those involved with the design, installation, maintenance, and regulation of these systems must be properly trained.

The issue of whether or not to allow the use of alternative/innovative on-site wastewater treatment systems has come front and center in the past few years. Excessive nutrient loading in coastal area embayments has been traced back to failing or inadequate conventional on-site sewage disposal systems. Elevated nutrient levels impact coastal ecosystems adversely and often lead to such protective measures as shellfish bed closures. To counter these impacts, alternative/innovative on-site disposal options are being explored for their advanced treatment capabilities.

NEIWPCG's On-site Wastewater Task Force, comprised of state on-site wastewater disposal directors, was formed to identify and respond to the need for more effective on-site wastewater regulatory and management programs at the state level. During FY-96, the task force met six times, focusing, primarily, on the EPA/New England Governor's Conference Interstate Regulatory Cooperation Project (see page 5 for write-up). Discussions and activities related to this project centered on refinement of technical standards, the group's role as technical review committee, and meetings with potential vendors.

**Operation & Maintenance**

NEIWPCG's Operation and Maintenance (O & M) Work Group, made up of state O & M program managers and EPA regional staff, was created to coordinate issues and evaluate training needs for personnel responsible for the operation and maintenance of wastewater treatment plants in New England and New York. NEIWPCG works to enhance and promote understanding of state and federal wastewater treatment programs by serving as a forum for interstate discussion, developing tech transfer programs, and assisting the states in organizing an annual regional meeting. In FY-96, the regional meeting was held in April in Stowe, Vermont.

**Residuals**

Development and implementation of sludge and septage management programs are of utmost importance to NEIWPCG's Compact Member States. EPA is responsible for "503" program oversight until states choose to assume program delegation by either adopting and/or expanding the EPA regulations or by developing their own regulations which are equal to or more stringent than EPA's.

NEIWPCG's Residuals Work Group was created to enhance interstate communication on issues associated with residuals from wastewater treatment, on-site sewage disposal, and drinking water treatment. NEIWPCG has worked to promote compatibility among state and federal sludge and septage management programs by acting as a forum for interstate discussions. The group met four times in FY-96.

In March, the work group hosted a symposium, *Residuals Management: Where Are We Going?*, in Westford, Massachusetts. Approximately 150 people attended the event to hear presentations on septage management, sludge use and disposal, stabilization, odor control, emerging technologies, public acceptance, and drinking water residuals. The group also published and distributed a series of four sludge/hyosolds fact sheets.
dealing with incineration, composting, land application, and sludge/ biosolids in general (see page 6 for write-up).

In September, the group received notice that it had been selected to receive first place for EPA's National Beneficial Use of Biosolids Award. The awards were distributed at the Water Environment Federation's annual conference in October '96.

**Underground Storage Tanks (USTs)**

The 1984 Hazardous and Solid Waste Amendments to the federal Resource Conservation and Recovery Act (RCRA) directed EPA to initiate a program to regulate the underground storage of petroleum products and hazardous substances. For more than a year prior to this federal mandate, NEIWPCCC had begun coordinating meetings for its Compact-Member States to exchange information and experiences pertaining to underground storage tank issues. These UST/LUST Work Group meetings have continued, and, as a result of this UST communication network, Northeast states have developed strong UST/LUST programs and have blazed many trails nationally.

Over the years, UST-related issues have evolved from developing regulations to those of finding better ways to implement regulations and administer programs. In the face of burgeoning numbers of leaking underground storage tank (LUST) sites and dwindling funding for support staff, concepts of “streamlining” and risk-based corrective action have had appeal at both state and federal regulatory levels.

At NEIWPCCC's UST/LUST Work Group meetings (co-chaired with EPA-New England), state program directors have the opportunity to discuss and exchange information on a host of UST, LUST, and state cleanup fund issues. During FY-96, the group met two times to discuss such topics as: cathodic protection, regional contractor certification, compliance actions and procedures, tank integrity assessment, 1998 deadline, and state, regional, and national program updates.

As an outgrowth of the NEIWPCCC UST/LUST Work Group, NEI continues to facilitate regional UST contractor certification program efforts. As of January 1995, UST certification exams have been available to every state in the Northeast. (Maine has its own licensing program in place.) This regional voluntary certification effort makes it possible for tank owners and operators to obtain lists of contractors who have passed exams for such services as UST installation/retrofitting, decommissioning, tank tightness testing, and cathodic protection. By setting standards for industry competence UST regulators hope to ensure the protection of public health and safety, as well as the environment.

**Water Supply**

Water supply and water quality issues go hand-in-hand in terms of protecting the public health and well-being. NEIWPCCC coordinates and facilitates a Public Water Supply Administrators Work Group made up of the New England drinking water administrators and their EPA counterparts. Among other things, the group focuses on regional coordination of drinking water programs and implementation of Safe Drinking Water Act rules.

During FY-96, the work group met six times. Three of these meetings were in conjunction with NEI’s Groundwater Work Group to discuss mutual interstate source protection issues. Frequently in New England, a watershed or groundwater recharge area lies in a state other than the one where the point of withdrawal is located.

NEI’s Lead & Copper Work Group addresses issues associated with implementing the complicated Lead and Copper Rule of the Safe Drinking Water Act. During FY-96, the group met three times to discuss current water treatment technologies, work toward regional consensus on implementing the rule, and discuss specific issues pertaining to the rule with EPA.

A special Water Supply Work Group was organized to guide the development of NEI’s Source Protection: A Guidance Manual for Small Surface Water Supplies in New England, which was completed in March (see page 3 for write-up). NEI distributed 75 copies of the manual to each of its member-states. The manual was used as the basis for a source water protection seminar, “Consider the Source,” held in September in Westford, Massachusetts. Two NEI staff members made presentations.

**Wetlands Protection**

Viewed as worthless swamps in the past, we have come to understand and recognize that wetland ecosystems are extremely valuable natural resources. The nation’s wetlands provide a full spectrum of irreplaceable environmental values, including flood control, water quality maintenance, fish and wildlife habitats, and recreational uses. The loss of wetlands to development, agriculture, and other land uses continues at a rapid rate. In many northeastern states the protection of our remaining wetlands has become a major priority.

During FY-96, the Wetlands Work Group met two times to discuss such issues as wetland mitigation and restoration and the use hydrogeomorphic modeling (HGM) to classify wetlands and assess functions. NEIWPCCC helped organize a week-long workshop to evaluate an HGM model proposed by the Army Corps of Engineers for evaluating sloped wetlands in New England. Forty experts
in the disciplines of hydrology, biochemistry, botany, and wildlife were invited to participate.

**Biocriteria**

EPA-New England organized a work group, made up of state bio-monitoring coordinators, to set in motion a regional effort to incorporate biological criteria into state water quality standards. The heart of the group's work is developing a set of regional criteria. NEI staff participate in these work groups and serve as financial managers for the biocriteria project.

**Financial Management**

NEI's newest work group brings together state and federal environmental agency financial managers to talk over mutual grant-related problems. The work group provides financial managers with the opportunity to find out how other states do things and meet, as a group, with EPA representatives. The group, which met for the first time in September, quickly recognized that they had many issues in common and that continued work group meetings would be invaluable.

**Special Topic Meetings**

**Performance Partnerships**

On May 2, NEIWPC, the Northeast States for Coordinated Air Use Management (NESCAUM), and the Northeast Waste Management Officials Association (NEWMOA) hosted an 8-state, bi-region Performance Partnership meeting in Auburn, Massachusetts. The three interstate groups organized this joint meeting to facilitate discussion among EPA, environmental agency commissioners, and program directors on implementing state consolidated grants effectively. All of the New England state, New York, and New Jersey media staff were in attendance, as were many of the environmental commissioners.

**PROJECT COORDINATION & MANAGEMENT**

Over the past few years, NEIWPC has worked with EPA, and other federal, state, and local agencies in efforts to refocus existing water pollution control programs so that they can operate in a more comprehensive and coordinated manner. NEI fills a niche between EPA-New England and the states by coordinating and managing a number of special projects and larger watershed projects in the region. In this capacity, NEI's technical staff develop program workplans and budgets, negotiate contracts, oversee activities, track the delivery of work products, and, in many instances, serve as active participants in the process. NEI has the ability to bring various state and federal agencies and other interested parties together in to order address issues, identify needs, and pursue means for taking action. This process helps leverage limited regional environmental agency resources.

**Special Projects**

**Resource Protection**

There is growing recognition among many state and federal regulatory agencies that protection of ecological health has received far less attention than protection of public health. Given recent data on loss of biodiversity and acknowledging the overall importance of our ecosystems to human health and welfare, the New England environmental agencies and EPA have in recent years agreed to place more emphasis on natural resource protection. One of their stated long-term objectives is to “assure that adequate management measures are in place to protect the highest priority natural resources in New England.”

NEIWPC triggered a coordinated effort to define criteria and develop a method for identifying high priority natural resources areas in the New England states (see page 4 for write-up). New Hampshire was chosen to be the “pilot” state to develop and implement a resource protection strategy.

The methodology developed in New Hampshire is now being used in both Rhode Island and Connecticut; the Connecticut project is being coordinated by state DEP staff. NEI is facilitating the work in Rhode Island.

During FY-96, NEI continued to facilitate the New Hampshire and Rhode Island projects, wrote an article on the resource protection project for the Massachusetts/ Rhode Island American Planning Association's newslet-
ter, served as a panelist for GIS use at the New England Environmental Conference, exhibited a resource protection display at WEF's national "Watershed '96" conference in Baltimore, and explored the possibility of establishing a resource protection project in Vermont.

**TR-16 Revision**

One of NEI's most popular and widely respected documents is Technical Report #16 (TR-16), *Guide for the Design of Wastewater Treatment Works*, which is used throughout New England by consultants and regulators alike. NEIWPCC's TR-16 Work Group is presently revising and updating the document, which has not been updated since 1980.

NEIWPCC organized an Advisory Board of state experts, who evaluated the existing document and identified sections that needed to be changed, enhanced, or deleted. Six chapter writing and review groups were formed, comprised of volunteer consultants and regulators. Writing, review, and editing continued throughout FY-96.

**Mercury**

There has been growing interest in the fate and transport of mercury in the environment due to widespread reports of elevated mercury levels found in fish caught from lakes and ponds. Five of the New England states, and 46 states nationally, currently have some form of mercury-related fish consumption advisory. The advisories are aimed primarily at pregnant women, nursing mothers, women of reproductive age, and young children. Other members of the population are encouraged to limit their fish intake.

Because of these concerns, Congress, in the Clean Air Act Amendments of 1990, required EPA to study the issue of mercury emissions and deposition. A draft report to Congress, released in December 1995, indicates that the Northeast corridor is affected by mercury deposition more than any other area of the country. This report was due to be completed in 1996; instead, it has been withheld indefinitely pending a review by the National Science Advisory Board.

Because of the regional implications, NEIWPCC was asked to assist the Northeast States for Coordinated Air Use Management (NESCAUM) and the Northeast Waste Management Officials' Association (NEWMOA) in undertaking a regional study to "fine tune" EPA's data for the Northeast. Instead of rebutting the findings of the national study, the regional study will stand alone. NESCAUM is the lead organization for the regional study and is assisted by a work group comprised of air, water, waste, and pollution prevention program managers.

**Biological Nutrient Removal**

NEI contracted with the Connecticut Department of Environmental Protection to further research the viability of biological nutrient removal (BNR) with the City of Stamford's wastewater treatment facility. This follow-up to a previous BNR study involved adding methanol and using a pilot-scale upflow clarifier during the treatment process and performing a nonpoint nitrogen trading assessment on a local river in Stamford. The final report for the study, *Final Report: Biological Fluid Bed Denitrification Project*, was completed in early FY-96. According to the results, this process appears to be a viable option for nutrient removal in the Long Island Sound.

**Massachusetts Title 5**

Following years of study and research, in March 1995, the Massachusetts Department of Environmental Protection (DEP) issued revisions to the state's "Title 5" environmental code on subsurface disposal of wastewater. Many of the revisions were controversial and were received by the general public with mixed reaction. As a result, DEP requested that NEIWPCC undertake a study that would examine and provide insight into the department's experience in implementing these revisions. NEI was contracted to prepare and publish a final report based on this study. The department will then publish suggested regulatory revisions, as deemed appropriate per the report.

NEI's study will look at a number of specified items (e.g., higher pere rates, feasibility of replacing pere tests with soils analyses, impact on critical resource areas,
experiences with alternative disposal systems). NEIWPC will coordinate and oversee this work in conjunction with DEP personnel. During the summer of FY-96, NEI initiated this work by hiring a group of interns to carry out initial research work. These personnel were located at the five DEP regional offices and at NEIWPC.

**Contract Operations At POTWs**

NEI received a grant from EPA-New England to coordinate and facilitate a workshop for state regulatory officials, publicly-owned treatment works (POTWs) operators, and municipal officials to discuss POTW contract operations with respect to NPDES compliance and infrastructure protection. NEI held the workshop in October 1995 and produced a summary report that listed the “pros and cons” of contract operations and the issues that need to be resolved. As part of this grant, NEI conducted a survey to determine which POTWs in the region were operating under contract operation agreements. As a next step, NEI will prepare a contract operations guidance document for municipalities that are considering various POTW operations alternatives.

**Performance Analysis Systems For POTWs**

NEI received a grant from EPA headquarters to coordinate the development of a “Self-Diagnostic Evaluation Computer Program” for POTWs. Through this program, POTWs will be able to enhance their compliance performance by maintaining their own systems analysis and self-diagnostic capabilities. Where there are compliance problems, the program will provide suggested troubleshooting strategies. This work is being guided by a national advisory work group whose members represent state environmental agencies, EPA, training institutions, POTWs, and municipalities. When the program is completed, NEI will organize training for POTWs. During FY-96, NEI assembled the national advisory work group, held a 2-day brainstorming session to formulate the software package, and contracted with INDUS Corporation in Vienna, Virginia to develop the software.

**Waquoit Bay National On-site Demonstration Project**

EPA’s National On-site Demonstration Project (NODP) is a 3-year project designed to help communities in sensitive environmental areas find solutions to their wastewater treatment problems. Through the project, communities receive assistance in selecting, developing, installing, and monitoring new alternative methods of wastewater treatment. Once the systems are installed, they are monitored and evaluated, generating data that will provide valuable information on systems performance. NEI administers the contract for the Waquoit Bay NODP and participates on the project’s advisory committee. During FY-96, this committee approved and oversaw the installation and monitoring of four alternative on-site demonstration projects.

**Internet Training**

NEI received a grant from EPA-New England to provide internet training to state environmental agency personnel. Training was held in August at Middlesex Community College in Bedford, Massachusetts.

**Watershed/ Water Quality Projects**

**Merrimack River Initiative**

The Merrimack River Initiative (MRI) was created because no single community or government agency has the authority, money, or staff to protect and restore all the resources along the 118-mile Merrimack River and its associated 5,010-square mile watershed. Because of this, a collective effort is necessary. The role of the MRI is to coordinate and maximize the efforts of various agencies and to establish a framework for continued coordination and action at the federal, state, regional, and local levels. The Initiative is in a position to help integrate many of the existing federal, state, regional, and local management efforts already underway in the watershed, as well as to promote grassroots involvement and public education.

The overall goal of the Initiative is to develop and implement a Watershed Management Plan that will help restore and maintain the physical, chemical, and biological integrity of the Merrimack River and its watershed to meet existing and future multiple uses and to protect its natural resources.

NEIWPC has been involved with the Initiative since its inception in 1988, when an agreement to protect the watershed was signed by EPA, New Hampshire, Massachusetts, and the Interstate. With a grant from EPA, NEIWPC has served as coordinator for the MRI activities. The NEIWPC Executive Director serves as chairman for the MRI Management and Executive Committees, and NEIWPC staff participate on the subcommittees.

During FY-96, in addition to attending regularly scheduled MRI meetings, NEI:

- Continued preparation of additional MRI fact sheets;
- Produced *InfoStream*, a newsletter that provides information on watershed-related activities;
completed the slide show, Watershed Connections: The MRI Initiative, and transferred it to video for use as an MRI Outreach tool;
- Developed an agenda for the final MRI conference to introduce the draft management plan;
- Helped develop the MRI communications strategy;
- Prepared 21 one-page summary sheets, outlining, in bullet format, activities funded through the MRI.

To help cultivate local watershed action, the MRI, through NEI, awarded small local involvement grants to nine communities and organizations in the Merrimack River watershed. Funding for these grants was provided through a grant from EPA-Region 1. Funds were awarded for the following projects:
- Belknap County River and Shoreland Cleanup
- Kid’s Guide to Discovering the Merrimack Valley
- Riverland Conservation Area Improvements
- Hands Along the River
- Upper Merrimack Monitoring Project
- Appreciation of the SaAs-Co River Basin
- Merrimack Riverways Cleanup Initiative
- Conservation Camp on the Piscataquog River
- Souhegan Green Guide

Androscoggin

The Maine DEP has initiated an Androscoggin River Watershed Pollution Prevention program to begin implementing a holistic approach to water resources management. As part of this effort, regulatory programs, such as licensing, inspection, and enforcement, and nonregulatory approaches, such as technical assistance, education and outreach, and pollution prevention, for both point sources and nonpoint sources of pollution will be coordinated and integrated. Through an EPA 104(b)(3) grant, NEIWPCG is responsible for providing a staff person to the Maine DEP to coordinate this program.

Salmon Falls

The Salmon Falls River forms the boundary between Maine and New Hampshire for its entire 40-mile length. In the tidal estuary, the name of the river changes to the Piscataqua and forms the state boundary for another 10 miles. The river’s flow is highly regulated at its headwaters at Milton Pond. There are four dams in the first 5 riverine miles; two of these dams generate peaking power and thereby regulate river flow in a store and release mode.

In the mid-1980s, it had become evident that a dissolved oxygen problem existed in the estuary; random sampling results consistently indicated nonattainment for both Maine’s and New Hampshire’s water quality standards. A subsequent study indicated severe water quality problems along much of the river. Using an EPA water quality model, Maine DEP developed a “Waste Load Allocation Report” for the river. The report made a number of recommendations for additional work.

In FY-96, NEIWPCG continued to work to complete a series of tasks cited in the Maine DEP report. This “Salmon Falls and Piscataqua River Watershed TMDL Project” is directed primarily at completing the interstate total maximum daily load (TMDL) for the Salmon Falls and Piscataqua Rivers. This work includes conducting intensive, biweekly water quality surveys of the river during and following phosphorus removal at four wastewater treatment facilities along the river. The data generated from this effort will be used to refine the existing water quality model and to enhance our understanding of background sources of pollutants. The information generated from the project will enable the states to develop an approvable TMDL.

Connecticut River

Recognizing the importance of the Connecticut River to its four bordering states, EPA, New Hampshire, Massachusetts, Vermont, Connecticut, and NEIWPCG agreed to institute a Connecticut River Advisory Committee which would meet on an ongoing basis to discuss issues pertaining to the river and its watershed. NEIWPCG’s role is to facilitate and coordinate the committee’s activities. During FY-96, the committee met three times.

As part of this project, NEI prepared, published, and distributed Pathways to Understanding Water Quality in the Connecticut River Watershed, An Overview of 305(b) Reports, Water Quality Standards, and Classifications. In addition, NEI staff began writing a Connecticut River water quality report, Health of the Watershed.
NEIWPC provides efficient, cost-effective, and responsive financial management and administrative support services for a number of regional and national programs and projects. These services include payroll administration, invoice and travel voucher payments, and financial reporting. NEI continues to assist its member states by providing staff support for various projects.

Lake Champlain

In 1991, as mandated by Congress, EPA convened the Lake Champlain Management Conference (LCMC) for the purpose of developing a comprehensive pollution prevention, control, and restoration plan for the lake and its 8,234-square mile basin, which includes the states of New York and Vermont. NEIWPC assisted EPA in organizing the convening of the LCMC, and has since served as fiscal agent for the program. During FY-96, the LCMC held public hearings regarding the draft Lake Champlain Pollution Prevention, Control, and Restoration Plan.

The Casco Bay Estuary Project

Maine’s Casco Bay was designated an estuary of national significance in 1990, and was included in EPA’s National Estuary Program. In FY-91, NEIWPC entered into agreement with EPA and the State of Maine to provide financial management services to the Casco Bay Estuary Project. As part of its scope of work, the Casco Bay Estuary Project convened a management committee which characterized the estuary, defined and prioritized the estuary’s problems, and drafted a Comprehensive Conservation and Management Plan. The Commission continued to serve as fiscal agent for the project through FY-96.

Near Coastal Waters

The EPA Near Coastal Waters program is part of a long-range strategic planning effort by the agency to restore and protect the water quality and natural resources of the nation’s coastal areas. In New England, pollution of estuaries and other near coastal waters has been identified by both federal and state environmental agencies as a priority problem that is in need of immediate attention.

While point sources such as wastewater treatment plants, industry, and CSOs contribute to the problem, nonpoint sources are now recognized as a major cause of coastal water pollution.

During FY-96, NEI provided financial and project management and administrative support for a variety of Near Coastal Waters projects, including:

- Administering contracts for the implementation and lab analysis of a citizens monitoring program for the Buzzards Bay Project;
- Providing a Narragansett Bay Outreach Coordinator for the Narragansett Bay Project; and
- Contracting for a Connecticut Department of Environmental Protection boat pumpout education program.

Great Lakes

With a grant from EPA Region 2, NEIWPC has been working with the New York Department of Environmental Conservation to provide financial management and staff support for water pollution prevention projects associated with the state’s Lakeside Management Plan (LaMP) for Lake Ontario. NEIWPC provides support for a LaMP Coordinator and public participation staff for both the LaMP and the associated Remedial Action Plan.

Long Island Sound

The Long Island Sound Study (LISS) is one of the National Estuary Programs funded by EPA under Section 320 of the Clean Water Act. The study began in 1985. In 1994, The Long Island Sound Study Comprehensive Conservation and Management Plan was completed. NEIWPC continues to serve as fiscal agent for portions of the LISS. Over the years, the Interstate has contracted for a variety of services pertaining to the study. During FY-96, NEI agreed to expand its role with LISS by providing outreach support for the implementation phase. NEI will work with LISS to prepare a booklet on the proposed nitrogen reduction targeting strategy and a slide presentation package.
Through work group activities and close communication with state and federal environmental and health agencies, NEI staff can rapidly respond to state training needs. In 1969, NEIWPCC established the New England Interstate Environmental Training Center (NEIETC), located on the campus of Southern Maine Technical College (SMTC), to provide the region with wastewater-related training and educational opportunities. To be adaptive and responsive to state environmental programs, NEIETC has applied its experience in wastewater training by offering a variety of quality and affordable training programs for men and women who work in a range of other environmental, health, and safety fields. In FY-96, NEIETC provided training to 1,958 environmental professionals.

Short Courses
NEIETC offers annual short courses (2-5 days) and workshops on various aspects of wastewater, drinking water, and hazardous materials/waste technologies at its SMTC campus and at locations throughout New England and New York to provide accessible training. During FY-96, NEIETC offered 19 Short Courses on such topics as: Hands-On Confined Space Entry, Pathogens Exposure Control, Statistical Process Control, Bio-Toxicity & Toxics Reduction, Train-the-Trainer, Basic Wastewater Treatment, Industrial Pretreatment, Basic Blueprint Reading, and Advanced Electrical. A total of 328 people attended these courses.

Symposiums
NEI offers symposiums on an as-needed basis to create information exchange forums and introduce new or changing pollution prevention technologies, operations and maintenance practices, and laws and regulations to the environmental workforce. During FY-96, NEI held a Combined Sewer Overflow/Stormwater Regional Technology Transfer in Westford, Massachusetts. Over 130 water quality professionals from throughout New England and New York attended. NEIETC also organized two Northern New England Technology Forums, which were presented in Vermont and Maine in April and May (see write-up on page 6).

Mobile Training Facility
Since 1972, NEIETC has operated its Mobile Training Facility (MTF) to help communities meet their water pollution control goals by providing on-site training for personnel. Through the MTF, NEIETC staff travel to locations throughout New England and New York, presenting a variety of 1- to 3-day courses to water pollution control professionals who would otherwise be unable to enroll in off-site training programs. While MTF courses cover water pollution control topics, primarily, the programs are expanding into other environmental disciplines. Training schedules are published in the MTF Fall and Winter/Spring Calendar. During FY-96, MTF staff conducted 20 training courses for a total of 316 environmental professionals. Topics included: Wastewater Safety, Wastewater Collection Systems, Gas Chlorination, Hands-On BOD & TSS, Preventative Maintenance, Hands-on Califom Analysis, and Basic Laboratory Procedures.

Joint Environmental Training Coordinating Committee (JETCC)
The Joint Environmental Training Coordinating Committee (JETCC) was established in 1985 with a grant from the Maine Department of Environmental Protection (DEP) to coordinate the environmental training needs of Maine's environmental professionals. JETCC operates under the guidance of a board which is appointed by the Commissioner of the DEP. The board is made up of municipal and industrial wastewater treatment personnel and local government representatives.

JETCC performs its function by networking training needs with the best instructional and technical support available and by conducting annual training needs surveys. JETCC utilizes a network of volunteer local hosts to manage on-site organizational details. The volunteer trainers are drawn from JETCC's network of wastewater treatment experts. In FY-96, JETCC offered 20 programs to 485 wastewater professionals at locations throughout

Summary of NEIETC's FY-96 Environmental Training Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Total # of Attendees</th>
</tr>
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<tbody>
<tr>
<td>Short Courses</td>
<td>328</td>
</tr>
<tr>
<td>Mobile Training Facility</td>
<td>316</td>
</tr>
<tr>
<td>Customized Training &amp; Special Programs</td>
<td>767</td>
</tr>
<tr>
<td>NEPITE</td>
<td>62</td>
</tr>
<tr>
<td>JETCC</td>
<td>485</td>
</tr>
</tbody>
</table>

1,958 Total Trained
the state. Training topics included: Math Certification Review, Basic Chemistry for Operators, Confined Space Entry, Basic Blueprint Reading, Work Zone Traffic Control, and Bearings and Lubrication.

**Customized Training**
NEIETC offers customized training programs for water pollution control facilities, business/industry, communities, and government agencies to meet specific needs of the region's environmental workforce. These programs can include process-specific issues, certification preparation, industrial pretreatment, pollution prevention, compliance, and safety. NEIETC has worked closely with state environmental agencies and has successfully addressed the training needs of such industries as pulp and paper, metal finishing, and electronics.

In FY-96, NEIETC entered into special training contracts with:
- Massachusetts Water Resources Authority, Boston, MA (wastewater)
- Vermont Department of Environmental Conservation (drinking water and wastewater)

**Careers In The Environment**
NEIETC staff act as program advisors and assist as speakers for two Southern Maine Technical College programs that prepare individuals for entry into the environmental field:

- **Pollution Abatement Technology** - a 9-month entry-level certificate program designed to provide well-trained personnel for a variety of specialized positions in the water pollution control field. The program combines technical courses, hands-on training in laboratory and maintenance work, and academic courses.
- **Environmental Technology** - a 2-year course which leads to an Associate Degree in Applied Science designed to provide students with fundamental skills required for entry-level employment in a variety of careers in the environmental sciences (e.g., wastewater, water supply, hazardous waste, solid waste, air quality, and resource management).

**The Northeast Partnership for Environmental Technology Education (NEPETE)**
The Northeast Partnership for Environmental Technology Education (NEPETE) is a non-profit community/technical college advocacy group whose role is to augment, facilitate, and broker academic, industrial, and governmental partnerships to ensure a workforce that can meet the environmental opportunities and challenges of the 21st century. To

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**Kirk Laffin Receives NETA's National Environmental Education Recognition Award**

NEIETC Director, Kirk Laffin was awarded the "Environmental Education Award" by the National Environmental Training Association (NETA) at its Annual Conference this April in Cincinnati, Ohio. This prestigious award is NETA's highest award conferred to an individual who has significantly contributed to the enhancement of environmental training at the local, state, regional, and national levels. The award is voted on and approved by the NETA Board of Directors. Kirk is a charter member, Certified Environmental Trainer, and past-president and board member of NETA. NETA is a professional society of environmental trainers from colleges, universities, government, industry, and private consulting firms.

As director of NEIETC, Kirk oversees the center's many and varied training programs. He also serves as regional director for the Northeast Partnership for Environmental Technology Education (NEPETE) and as program advisor for the Southern Maine Technical College (SMTC).
accomplish this, NEPETE has worked to establish a community/technical college network, linking participating academic institutions with each other, and locating community/technical college training resources for business, industry, and government.

NEI is the coordinator and fiscal agent of NEPETE, which operates with funding from the Department of Energy (DOE), EPA, and the Advanced Technology Environmental Education Center (ATEEC) of the National Aeronautics and Space Agency (NASA). NEIETC played an active role in establishing NEPETE, one of six regions that comprise a national PETE program and has served as NEPETE’s Regional Director.

The PETE program has worked to link community/technical colleges with the technical resources of such federal agencies as DOE, EPA, and NASA. DOE and EPA have defined “needs driven” or specific interests which require increasing the numbers of qualified graduates in environmental science, engineering, and waste management. The PETE program is focused on addressing these needs, as well as improving public understanding of environmental issues, promoting environmental technology transfer, and enhancing U.S. economic development and international competitiveness. In the NEPETE region, about 130 colleges offer some form of environmental program.

During FY-96, NEPETE:
- Held its Third Annual NEPETE Instructor Conference in March in Philadelphia (40 attended);
- Worked with ATEEC to send six community college instructors and high school teachers to attend a Summer Environmental Curricula Fellowship in Iowa;
- Conducted and distributed a survey of member colleges to list environmental curricula offered, enrollment data, and placement;
- Participated in a national “Defining an Environmental Technician” workshop in March in St. Louis, MO;
- Worked with Baltimore Urban League and supporting colleges to develop an inner city youth environmental employment program;
- Held a “DACUM (developing a curriculum) Train-the-Trainer Workshop” in August at SMTG (22 attended); and
- Worked with National PETE to negotiate a joint ISO 14000 proposal with GETF/ANSI to allow community colleges to participate in an “ISO 14000 Train-the-Trainer Workshop” in Tampa, Florida.

**Special Projects**

**Confined Space Training/Audits**

The Rhode Island Department of Environmental Management (DEM) contracted with NEIETC to conduct voluntary confined space audits at a number of municipal water pollution control facilities throughout Rhode Island. The audits will be a baseline for developing state and municipal corrective action, training, and policies for dealing with safe confined space handling and entry procedures. The audits were carried out in December 1995 and a project report was submitted to DEM in January 1996.

**POTW Inspectors Training**

During FY-96, NEIETC continued to hold a series of POTW Inspector Training Workshops for environmental agency POTW inspectors in New England and New York. NEIETC developed the curriculum with assistance of inspectors from multi-media environmental disciplines. Using a curriculum development process called FASTPlan, the inspectors identified the skills and knowledge that would be applicable for environmental inspectors regardless of their technical field of expertise. The core curriculum has been structured so that it can be used as a training tool for inspectors in all environmental media. The training covers the three phases of the inspection process: planning, on-site inspection, and follow-up. Problem-solving skills and hands-on experience are emphasized. One of the crucial components of these workshops is a mock inspection.

**Rhode Island Odor Control Assessment**

NEIETC, in conjunction with Bowker & Associates of Portland, Maine, performed an assessment of odor problems at the West Warwick, Rhode Island water pollution control facility. The Rhode Island Department of Environmental Management requested this audit in response to persistent odor complaints from local residents. During FY-96, NEIETC and Bowker & Associates surveyed residents within a half-mile radius of the plant and conducted an inspection of the plant, itself, and identified a number of significant odor sources. A report followed.
Where human behavior is concerned, change seldom takes place spontaneously; it comes about because of something. In the absence of crisis, people are most apt to make “right-minded” behavioral changes when they have been educated accordingly. Education plays a key role in bringing about change, and the New England Interstate Water Pollution Control Commission has been reaching out to educate and inform people for a long time. NEIWPCC develops, produces, and distributes an array of environmental information for the regulated community, environmental professionals, educators, and the general public. This growing collection of printed and audio-visual environmental outreach products is distributed through NEI’s Environmental Information Center at the NEIETC office in South Portland, Maine. In addition, NEI staff are often called upon to give presentations at workshops, conferences, and meetings on a variety of water-related issues.

NEI Publications

Water Connection
The Water Connection newsletter is NEIWPCC’s primary vehicle for keeping subscribers abreast of a wide range of water quality issues. The publication, available free of charge, addresses emerging and on-going issues related to water and its interaction with air, land, and living organisms. In FY-96, NEI published and distributed three issues of Water Connection.

Topics covered in Water Connection over the course of the year include: UNLESS...learning to live within our ecological means, NEI’s Youth and the Environment program, vernal pools, the Resource Protection Initiative and GIS, sorting out fact from fiction regarding the Massachusetts Title 5 program, the “typical” environmental trainer, the search for a better enviro-tech mousetrap, the Safe Drinking Water Act Amendments, the Androscoggin River Source to Sea Canoe Trek, MRI Local Involvement Grants, a phosphorus agreement for Lake Champlain, and the Rhode Island Septic System Policy Forum.

Interstate News
To keep NEIWPCC Commissioners, satellite employees, and work group participants abreast of Commission activities and upcoming events, NEIWPCC produces the quarterly, 2-page, 8.5” X 14”, Interstate News. This publication includes updates on NEI projects, notices of meetings and training programs, and brief summaries of relevant information.

Annual Report
NEIWPCC’s Annual Reports are an important means for keeping state and federal agencies and the general public up-to-date on the Commission’s ever evolving roster of activities and on “who’s who” on the Commission and staff.

L.U.S.T.Line
NEIWPCC’s L.U.S.T.Line is a national bulletin on underground storage tanks (USTs) that is funded with a grant from the EPA Office of Underground Storage Tanks (OUST). The publication was developed in 1985 to help keep state and federal underground storage tank (UST) regulators, consultants, contractors, and tank owners informed about state and federal UST, LUST, and state cleanup fund issues and activities and spill remediation and prevention technologies. In FY-96, NEI published
two issues of the bulletin and distributed them to over 5,000 subscribers.

The bulletin is currently free to subscribers; however, due to federal budget cuts funding has been cut back. As a result, NEIWPCCE made the decision in FY-96 to begin offering *LUSTLine* on a paid subscription basis to non-government agency subscribers as of July 1997.

**The Water Source**  
In FY-96, NEIWPCCE, in cooperation with EPA-New England, produced the third issue of *The Water Source*, a newsletter that focuses on water resource-related topics. Because of funding limitations, this publication is not produced on a regular basis. This issue was published to get the word out about the new Safe Drinking Water Act Amendments and to let readers know about NEI's new groundwater curriculum and source protection publications. NEIWPCCE mailed the publication to over 5,300 in the water supply/resource field.

**The New England Interstate Environmental Information Catalog**  
NEI has organized its growing collection of publications, brochures, newsletters, technical reports, slide/tape shows, videos, and training materials into a comprehensive *New England Interstate Environmental Information Catalog*. Materials in the catalog were produced by NEI and other selected sources and span a wide range of water-related topics, such as groundwater, surface water, wetlands, underground storage tanks, and wastewater treatment. The sale and distribution of catalog products is handled by NEI's Environmental Information Center. The catalog is available at no charge upon request.

**Selected FY-96 Publications & Videos**

- **Source Protection Guidance Manual for Small Surface Water Supplies in New England** - Prepared to provide the region's small water supply systems with the guidance they need to develop source protection programs (see detailed write-up on page 3).

- **That Magnificent Ground Water Connection: A Resource Book For Grades K-6** - Prepared to provide New England-specific groundwater teaching material for K-6 teachers (see detailed write-up on page 4). A grade 7-12 groundwater resource book will be available in FY-97. NEI also produced a promotional brochure for the resource book.

- **Watershed Connection: The Merrimack River Initiative** (video) - Prepared in conjunction with the Merrimack River Initiative (MRI) to educate the general public about the Merrimack River watershed and the efforts of the MRI to brings the various interests together to ensure its viability.

**Education & Outreach Activities**

**Youth and the Environment**  
New England's *Youth and the Environment* program began at the Lowell Wastewater Treatment Plant in 1990 to introduce economically disadvantaged youth to career opportunities in the environmental field by combining summer employment with academic training and hands-on experience. In an effort to expose students to the many and varied environmental career possibilities, the program provides a blueprint for establishing youth awareness and training in such fields as water supply, wastewater treatment, recycling, energy, marine environments, hazardous waste, and natural resources protection.

Because *Youth and the Environment* was conceived to help meet workforce needs in the wastewater pollution control and water supply fields, many work sites are located at wastewater and water supply facilities. However, considerable flexibility is built into the program so that it can be structured to meet the environmental training needs of participating communities.

Because of federal funding cutbacks, in FY-96, the program was offered in only four New England communities: New Haven, Connecticut; Boston, Massachusetts; Lowell Massachusetts; and New Shoreham, Rhode Island. As federal resources for this program dwindle, EPA-New England and NEIWPCCE continue to look for other funding sources so that this successful program can continue.

**Speakers Bureau**  
NEIWPCCE and the New England Water Environment Association (NEWA), operate a regional *Speakers Bureau*, comprised of professionals in the water quality field who are available to provide voluntary presentations in schools or communities in their locality. Presentations typically take one to two hours and help educate young people and the general public on a variety of issues related to water quality, the environment, and career opportunities. NEIWPCCE and NEWA have an assortment of curriculum materials available for loan to assist speakers in developing their presentations.
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Susan Sullivan, Asst. Dir. for Water Quality Protection & Training (1989 - )
Sidney D. Kallman, Asst. Director for Management & Budget (1982 - )
Ellen Frye, Outreach Coordinator (1980 - )
Thomas Groves, Sr. Environmental Engineer (1990 - )
Carolyn Jenkins, Sr. Environmental Analyst (1992 - )
Scott Lussier, Environmental Analyst (1993 - )
Jacqueline Morris, Water Supply Specialist (1994 - )
Joel Zimmerman, Resource Protection Coordinator (1995 - )
Eleanor Bassett, Sr. Accountant (1992 - )
Linda Agostinelli, Sr. Accountant/Internal Auditor (1996 - )
Jeanette Bengtson, Office Manager (1992 - )
Kirsten Hickey, Secretary (1994 - )

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Kirk Laflin, Director of Training Operations (1975 - )
Thomas Morton, Instructor/JETCC Coordinator (1987 - )
Gregory Kidd, MTF Coordinator (1987 - )
Lecunn Hanson, Admin. Assistant/ JETCC Coordinator (1991 - )
Charlene Knue, Secretary (1995 - )