HUDSON-DELAWARE CHAPTER OF THE SOCIETY OF ENVIRONMENTAL TOXICOLOGY & CHEMISTRY, INC.

Comprehensive Restoration of Aquatic Environments

Sponsored by:

Hudson-Delaware Chapter SETAC

Office of Maritime Resources NJ Department of Transportation

Fall Workshop

North Jersey Transportation Planning Authority

One Newark Center, Newark, New Jersey

September 21, 2001

Agenda

8:00 – 9:00 am

Registration & Continental Breakfast

9:00 am

Overview of Comprehensive Restoration Issues

Richard Gimello
Executive Director, Office of Maritime Resources
New Jersey Department of Transportation

Mr. Gimello will discuss a brief overview of the many aspects that must be considered when restoring aquatic environments- especially in an urban setting. The many complex issues that must be addressed to restore degraded ecosystems include habitat assessment, ecological and human health risk assessment, restoration techniques, remedial alternatives, costs, brownfield reclamation, source control/contaminant reduction, natural resource damage assessment and economic revitalization (to name a few). These issues, which sometimes conflict, require tremendous coordination and cooperation between the many agencies and interested parties to progress through the regulatory process - investigation, feasibility, design, construction, operation and maintenance.

9:20 am

Functional Habitat Assessment to Achieve Restoration Goals

Susan Metzger, Ph.D.
Principal & Manager, Environmental Sciences Group at
Lawler, Matusky & Skelly Engineers, LLP

Restoration of aquatic habitats is achieved when renewed areas function to sustain a diverse biological community of "natural" plants and animals. Identifying and measuring the functions to be provided in a restored habitat is an important component of setting and achieving restoration goals. This presentation discusses functional habitat assessment methodologies for littoral and wetland habitats in the New York/New Jersey Harbor and its tributaries. Case study examples are used to demonstrate how functional habitat assessment can be used to define goals for restoration plans and monitor success. The relationship between functional assessment goals and design goals is described. The importance of monitoring habitat function, as well as design criteria, to assure that restoration goals are achieved is emphasized.

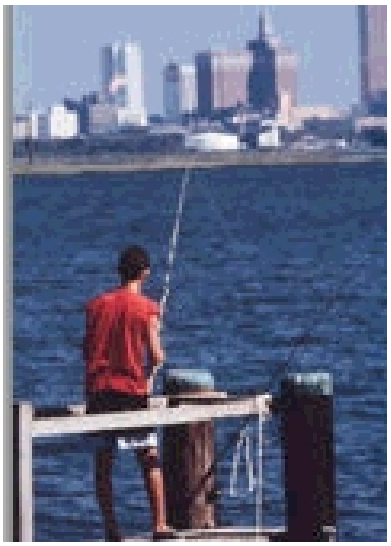
9:50 am

Ecological Risk-Based Remedial Goals and Natural Resource Restoration

Nancy Hamill
Research Scientist, Site Remediation
New Jersey Department of Environmental Protection

The remediation of aquatic media associated with contaminated sites is a risk-based process, regulated by the Technical Requirements for Site Remediation, N.J.A.C. 7:26E. Remedial goals protective of aquatic recep-

tors are determined in accordance with the tiered approach to ecological risk evaluation prescribed by the regulation. Two types of approaches are used by NJDEP's Site Remediation Program (SRP) to determine risk-based remedial goals: (1) comparison of contaminant levels to existing sediment quality criteria and Surface Water Quality Standards and (2) site-specific assessments of adverse ecological effects that enable the calculation of quantitative remedial goals. Challenges to remedial goal-setting and SRP initiatives are discussed.



Barbara Dietz
Natural Resource Injury Assessment Coordinator
Office of Natural Resource Restoration
New Jersey Department of Environmental Protection

The goal of the Office of Natural Resource Restoration (ONRR) is to make the public whole by restoring the public's natural resources that are injured due to the discharges of oil or hazardous substances. ONRR utilizes the information gathered during the Baseline Ecological Risk Assessment (BEE), Remedial Investigation (RI) and Ecological Risk Assessment (ERA) to make injury determinations. Once it is determined natural resources have been injured ONRR uses tools such as the HEA or NJDEP's Ground Water Methodology to arrive at the number of acres or appropriate projects needed for restoration as compensation for injuries to natural resources.

10:30 am Break

10:45 am

Remediation and Restoration of the New York/New Jersey Harbor

Leonard Houston
Chief, Environmental Analysis Branch
US Army Corps of Engineers

Beginning with the Water Resources Development Act of 1986, Congress has provided increasing authority and funds for the U.S. Army Corps of Engineers to take on elevating this mission to the Corps' highest level of budget priorities. Building off its engineering expertise in water resource projects, the Corps now has authority to study and implement aquatic habitat creation/restoration (including wetlands), water quality improvements, sediment remediation and related actions. Employing ecosystem and watershed planning approaches in developing and recommending solutions to habitat degradation, the NY District of the Corps has undertaken numerous studies to assess problems and identify solutions for a number of degraded systems, including the Lower Hudson River, Jamaica and Flushing Bays in NYC, the Bronx and Sawmill rives in Westchester county and, most recently, the Hudson-Raritan Estuary. This latter effort encompasses the full expanse of the Port of NY/NJ, with extensive consideration of sediment contamination problems in the Lower Passaic River and Gowanus Canal.

Three basin-wide studies are initiated in the same manner as the Corps' other, more traditional studies. Congress directs the Corps to investigate environmental problems established by determining the ecological value of potential improvements, and identifying a non-Federal sponsor willing to share the costs of the Feasibility Study (50% Federal and 50% non-Federal), and project construction (65% Federal/35% non-Federal).

For smaller, more site-specific problems, Congress has authorized several Continuing Authority Programs

(CAP) in which local/state entities (as well as non-profit groups) can seek Corps assistance directly, without the need for specific Congressional authority. The potential local sponsor requests assistance directly from the Corps, who then prepares (at Federal expense) a brief report that focuses in on the problem and potential solutions, estimating the cost to develop and implement a suitable solution. If the approach and cost are agreeable to the local sponsor, the Corps will design and implement the recommended solution at a cost sharing ratio that requires the non-federal sponsor to provide only 25-35% of the total cost. The NY District has already prepared nearly two-dozen of these smaller reports and has taken nearly half into the feasibility/ design phase, with many more requests coming in as word of these programs becomes more widespread.

This presentation describes a select number of the basin-wide and smaller CAP studies as examples of the variety of environmental programs. The presentation also summarizes the programs and how they can be accessed by interested parties.

11:15 am

Sediment Decontamination Technology and its Application in Restoration and Redevelopment

Eric A. Stern
Regional Contaminated Sediment Program Manager
US Environmental Protection Agency—Region 2

Effective operation of the multi-state Port of New York/New Jersey (Port), which contributes $20 billion to the regional economy and generates nearly 170,000 jobs, is dependent on yearly navigational dredging of several million m^3 of sediment for channel maintenance and deepening. Further dredging is required for remediation of environmentally sensitive areas. However, more stringent ocean placement testing regulations in the Port region have necessitated a search for other means of handling the most contaminated dredged materials.

Here, we describe a dredged material decontamination program for the Port aimed at the creation of sediment decontamination facilities that produce a beneficial use product to obviate the need for ocean placement. These facilities, to be a viable component of an overall dredged material management plan, must be environmentally balanced and economically feasible with the predictable ability to process large volumes of dredged materials with rapid turn-around. Our program recognizes that the responsible management of contaminated dredged materials is a complex problem that requires the effective application and coordination of a variety of cross-cutting skills to make decontamination facilities a reality. Participants do not come from a single agency, but are ad hoc teams of scientists, engineers, regulators, port authorities and operators, technology development firms, federal/state/local governments, business interests and community groups, among others, who are brought together by the need to solve the complex problem of managing dredged material in the Port region.

12:00 pm

Luncheon Speaker: Passaic River Restoration Initiative: A New Approach for Addressing Polluted Urban Rivers in the United States

Jonathon P. Deason, Ph.D., P.E.
Senior Advisor, Dawson & Associates, Inc.
Professor and Director of Environmental and Energy
Management Program at George Washington University

Many urban rivers in the United States contain severely contaminated sediments that affect aquatic life and limit recreational and economic use of the rivers. For example, EPA's 1997 National Sediment Quality Survey identified 96 watersheds containing 1.2 billion cubic yards of contaminated sediments. Unfortunately, existing regulatory programs have not been fully effective in restoring degraded urban rivers to current quality standards, despite the fact that urban river restoration is critically important to many programs, such as brownfields redevelopment efforts. In response to this situation, a new cooperative effort to restore urban rivers that are affected by contaminated sediments is being undertaken by the U.S. Army Corps of Engineers, working in conjunction with the U.S. Environmental Protection Agency and other appropriate federal, state and local agencies. The Passaic River in northern New Jersey, one of the most complex riverine restoration challenges in the Nation, is one of the focal points of this initiative.

The Passaic River Restoration Initiative is an urban industrial river restoration effort that is being implemented through the civil works project development process of the Corps. Under this urban river restoration concept, the Corps is conducting cooperative project planning and development processes to identify and apply the most feasible technical solutions to achieve environmental restoration and economic revitalization. The new initiative has strong synergy with several current major federal programs, including brownfields redevelopment, the Total Maximum Daily Loads (TMDL) program, the Natural Resource Damage Assessment process, and new ecosystem restoration and protection, and aquatic ecosystem restoration authorities provided to the Corps in recent Water Resources Development Acts.

1:15 pm

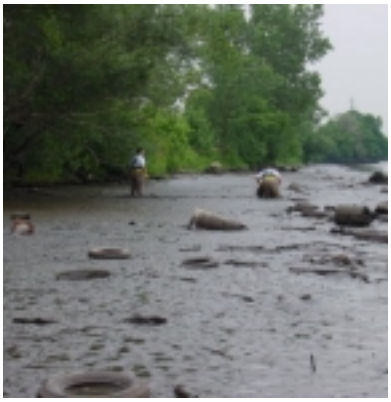
Managing Urban Ecosystems: On the Evolution of an Oil Spill Remediation Plan: Facts and Fiction of Restoration and Monitoring of an Urban Intertidal Salt Marsh and other Case Studies

Marc A. Matsil
Chief, Natural Resources Group
City of New York Parks and Recreation

NYC Parks Natural Resources Group (NRG) is presently managing more than $70 million in restoration programs supported by monies recovered from natural resources damages claims, state and federal grants and public works mitigations. Everyone is accountable and everyone pays! This presentation will address the science and programmatic goals that drive the nation's largest urban conservation program- wetlands, forests, and grassland projects.

"Everyone is accountable and everyone pays!"

Marc A. Matsil



New York City occupies a unique position on the eastern seaboard. Located at the juncture of northern and southern hardiness zones, the City is home to more than 40 rare and endangered species contained in a 28,000 acre parks system. NYC Parks NRG has inventoried and mapped on its GIS, northern sugar maple and beech forest communities, mingling with southern hackberry and sweetbay magnolia, at the edges of their ranges. NYC was the first municipality in the country to inventory its endangered species, in cooperation with the Natural Heritage Program, and propagate and re-introduce rare plants including serpentine bedrock influenced state rarities: Asclepius viridtflora, A. Pupurascens, and Cyperus ovularis. NRG's forest and wetland restoration projects are funded creatively through state, federal and private grants.

In 1990, one million gallons of oil spilled into the Arthur Kill, a narrow body of water separating NYC and New Jersey, severely damaging intertidal salt marsh and associated wildlife communities. After protracted negotiations, a settlement led to the funding of an experimental salt marsh restoration of heavily oiled substrate, lead by NRG. NRG's Salt Marsh Restoration Team, now in its ninth year, is supported by $1.75 million negotiated from the Exxon oil spill settlement. Bioremediation has resulted in reduced petroleum hydrocarbons and accelerated erosion rates, and initial recovery of the salt marsh ecosystem. The project has focused on establishing comprehensive monitoring protocols in restored and unrestored sites, elucidating a relationship between heterotrophic bacteria capable of degrading petroleum hydrocarbons found in the rhizosphere of the restored, Spartina alternaflora plants, and the reductions of the Total Petroleum Hydrocarbons (TPH). TPH ranged from 160 to 57,000 ppm. To date, more than 600,000 Spartina alternaflora plants have been restored, propagated from indigenous seed to areas heavily impacted by the oil with the assistance of 500 volunteers. Restored and unrestored control sites have been established, monitoring includes bacterial analysis, fertilizer studies, plant productivity, invertebrate population studies, fish, avian and mammal breeding studies in 120 m^2 quadrants. Unrestored quadrants in oil impacted reference sites have resulted in no voluntary seed or plant recruitment, and remains denuded and subject to increased erosion eleven years after the spill.

NRG presently serves as Chair of the NY/NJ Harbor Estuary Program's Habitat Workgroup (HWG). The HWG has standardized wetland and forest monitoring protocols for public works mitigation and damage claims, as well as prioritizing acquisition and restoration projects for NY/NJ harbor's critical watersheds.

1:45 pm

Local Community Restoration Initiatives and Partnerships

Ella Filippone
Executive Director, Passaic River Coalition

In 1971, the Passaic River in New Jersey was considered one of the most polluted river systems in the United States. With the Industrial Revolution finding key locations in the cities along the Passaic, i.e., Paterson, Passaic, and Newark, the river was used as the carrier of waste for almost a century. As such, it contained toxic materials of significance. While actions took place in the early part of the 20th century to remediate certain activities, the Passaic River continued to find itself in the middle of pollution problems from runoff from the factories along its banks. During this timeframe, the people abandoned the river. Infrastructure breached, and caused pollution incidents. At one such point, in 1980, the people began to reclaim the river. It continues to be a cause close to the hearts of the municipalities. Plans were made in the 1980's which have now been completed. A vision for the future is beginning to be developed. If the focus for a restoration/rehabilitation can move forward at this time, the Passaic River can again be the critical part of the community as it once was.

2:15 pm

Addressing Point and Non-Point Sources and Establishment of Total Maximum Daily Loads

Carol Ann Davis
TMDL Technical Lead
US Environmental Protection Agency—Region 3

Federal Regulations, in particular, the Clean Water Act, have been enacted to protect U.S. waters. Section 303(d) of this Act requires states to identify waters not meeting water quality standards, set priorities for total maximum daily load (TMDL) development, develop TMDLs for each listed water and listed pollutant, and submit the TMDLs to the U.S. Environmental Protection Agency (USEPA) for final approval. A TMDL must meet the following regulatory conditions pursuant to U.S. Federal Regulations:

1) *The TMDLs are designed to implement applicable water quality standards.*
2) *The TMDLs include a total allowable load as well as individual waste load allocations and load allocations.*
3) *The TMDLs consider the impacts of background pollutant contributions.*
4) *The TMDLs consider critical environmental conditions.*
5) *The TMDLs consider seasonal environmental variations.*
6) *The TMDLs include a margin of safety.*
7) *The TMDLs have been subject to public participation.*
8) *There is reasonable assurance that the TMDLs can be met.*

2:45 Break

3:00 – 4:00 pm

Panel Discussion

About the Speakers

Richard Gimello

Executive Director, Office of Maritime Resources

New Jersey Department of Transportation

On April 17, 2000 Commissioner James Weinstein announced the appointment of Richard J. Gimello as Executive Director of the Office of Maritime Resources within the New Jersey Department of Transportation. Mr. Gimello most recently served as Assistant Commissioner for Site Remediation in the New Jersey Department of Environmental Protection. Mr. Gimello also served as Vice-President of Development for Concord Resources Group, a hazardous and solid waste management company owned by Conrail and as the Director of the New Jersey Technical Assistance Program for Industrial Pollution Prevention at the New Jersey Institute of Technology. He also acted as the Executive Director of the New Jersey Hazardous Waste Facilities Siting Commission from 1982 to 1990. Mr. Gimello previously worked for NJDEP from 1980 to 1982 as Chief of the Office of Public Participation.

Mr. Gimello holds a Master's degree in Public Policy from Rutgers University and a Bachelor of Science degree from Trenton State College.

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Susan Metzger, Ph.D.

Principal & Manager, Environmental Sciences Group

Lawler, Matusky & Skelly Engineers, LLP

Dr. Metzger is a principal and manager of Lawler, Matusky & Skelly, LLP's Environmental Sciences Group. She has managed studies and prepared analyses that were included in many environmental impact statements (EISs) developed under the National Environmental Policy Act (NEPA). She has conducted numerous environmental assessments and documentation studies for public and private sector clients throughout the NY/NJ Harbor dealing with waterfront facilities and environmental aspects of major projects. NY/NJ Harbor studies under her direction include dredging and disposal permits, waterfront development; impact assessment under NEPA, SEQRA, CEQRA, and Coastal Zone Management (CZM) compliance; Uniform Land Use Review Procedure (ULURP); bioasay, bioaccumulation studies, and benthic collection and identification; and assessment of impacts due to shading, dredging, and pier and piling construction. Her clients have included the Port Authority of NY/NJ (PANY/NJ), New York Statement Department of Transportation (NYSDOT), US Army Corps of Engineers (USACE), and New York City Department of Sanitation and Department of Environmental Protection (NYCDOS, NYCDEP). As director of the Environmental Sciences Group, she coordinates duties and report and permit application activities of LMS scientists, engineers and biologists. Dr. Metzger holds a Ph.D. in Zoology (1978), a M.S. in Public Administration (1989) and an A.B. in Biology (1966).

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Nancy Hamill

Research Scientist, Site Remediation

New Jersey Department of Environmental Protection

Nancy Hamill is a Research Scientist in the NJDEP Site Remediation Program's Bureau of Environmental Evaluation and Risk Assessment (BEERA). She provides technical review and development of ecological risk assessments and oversees the development of technical guidance for ecological evaluations. She is a member of the USEPA Region II Biological Technical Assistance Group (BTAG) and serves as work leader for BEERA's Ecological Review Unit. Nancy holds a BS in Biology from Lehigh University and a MS in Environmental Sciences from Rutgers University.

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Barbara Dietz

Natural & Historic Resources

Office of Natural Resource Restoration

Barbara Dietz has been with the New Jersey Department of Environmental Protection's Office of Natural Resource Restoration (ONRR) since 1994. Her responsibilities include screening hazardous sites for natural resource injuries and preparing natural resource injury assessments. If natural resource injuries are identified at a site, Ms. Dietz coordinates with the Federal Natural Resource Trustees, the appropriate Remedial Project Manager, the Attorney General's Office and the Responsible Party to insure that restoration is implemented that compensates for the injuries to the natural resources.

Prior to her position with ONRR, Ms Dietz worked for 6 years in the NJDEP's Site Remediation Program. Her earliest experience includes work with both the Departments' Water Enforcement and Coastal Resource Programs. Ms. Dietz has a B.S. in Environmental Science and a Masters Degree in Public Administration.

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Leonard Houston

Chief, Environmental Analysis Branch

US Army Corps of Engineers

Mr. Houston is Chief of the Environmental Analysis Branch, within the Planning Division of the U. S. Army Corps of Engineers' NY District. As branch Chief Mr. Houston, who has a Masters Degree in Marine Science, supervises a staff of some two dozen biologists, oceanographers and archeologists, as well as a GIS lab. The branch's newest responsibility, which is the subject of his talk, is to evaluate ecosystem needs and develop projects to restore aquatic and wetland habitats within those

systems. The branch is also responsible for assessing impacts of Corps water resources projects, recommending least damaging alternatives and developing mitigation and monitoring plans for the alternatives selected for construction. The branch also oversees compliance with NEPA and other Federal environmental laws, as well as securing state and local permits.

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Eric A. Stern

Regional Contaminated Sediment Program Manager

Sediment Decontamination Program

U.S. Environmental Protection Agency- Region 2

Eric A. Stern is the U.S. EPA Region 2 - Regional Contaminated Sediment Program Manager. Under this capacity, he manages the Federal Water Resources Development Act NY/NJ Harbor Sediment Decontamination Program working in cooperation with the U.S. Army Corps of Engineers, Department of Energy - Brookhaven National Laboratory, N.J. Department of Transportation - Office of Maritime Resources, and the Port Authority of NY/NJ. Mr. Stern works in the area of contaminated sediment assessments/monitoring, dredged material management, beneficial uses of dredged materials, innovative decontamination technology development, with an emphasis on restoration and re-development. Previously, he was with the U.S. Army Corps of Engineers, Operations Division working in Dredged Material Management as an oceanographer.

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Jonathon P. Deason, Ph.D., P.E.

Senior Advisor, Dawson & Associates, Inc.

Professor and Director of Environmental and Energy Management Program at George Washington University

As Director of the Office of Environmental Policy and Compliance at the Department of the Interior (1989-1994), Dr. Deason oversaw the environmental compliance programs of the Fish and Wildlife Service, Bureau of Land Management, Minerals Management Service, Office of Surface Mining Reclamation and Enforcement, and six other bureaus. He also served in five other senior executive and management positions during a 28 year federal career. After leaving government in 1994, Dr. Deason served for two years as Vice President of a 4,000-company trade association where he worked extensively with federal agency and congressional personnel on environmental compliance issues. Since 1996, he has been Professor and Director of the Environmental and Energy Management Program at the George Washington University. He also has served as an active and reserve

Army Corps of Engineers officer for 28 years and currently holds the position of Chief of Staff (Reserve) at the Corps.

Dr. Deason holds a Ph.D. degree in environmental systems engineering from the University of Virginia, an MS degree in environmental engineering from the Johns Hopkins University, an MBA degree from Golden Gate University and a BS degree from the U.S. Military Academy. He is the recipient of the Founder's Medal of the National Society of Professional Engineers for being honored as the 1992 Federal Engineer of the Year. He also received the 1993 Engineering Achievement Award of the Virginia Engineering Foundation, the President's Meritorious Executive Award in 1993, and the 1984 Arthur S. Fleming Award. He has served on the national boards of directors of the American Water Resources Association and the Renewable Natural Resources Foundation, and is a past President of the American Society of Civil Engineers, National Capital Section. He is a licensed professional engineer and has authored more than 60 publications.

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Marc A. Matsil

Chief, Natural Resources Group

City of New York Parks & Recreation

Marc Matsil is Chief of New York Parks Natural Resources Group (NRG). Marc develops and implements conservation, restoration and management programs for the City's natural resources. NRG publishes ecological assessments and technical management plans that serve as guidance for the protection of 28,000 acres of parkland. Marc has designed grants, natural resources damages claims, and public works mitigations exceeding $100 million that support NRG's wetland and woodland acquisition and restoration programs. Marc currently serves as the Chair of the NY/NJ Harbor Estuary Program's Habitat Workgroup.

Before joining Parks in 1987, Marc was Natural Resources Specialist with the U.S. National Park Service, conducting wetlands and meadow restorations and wildlife and vegetation surveys for the Alaska National Parks, Mount Rainier and Mesa Verde. He has presented numerous papers at international meetings and conferences.

Marc is the recipient of several awards including the Society for Ecological Restoration International Sperry Award, the Natural Conservancy Oak Leaf Award, National Wetlands Award, and Chevron-Times Mirror North America Conservation Prize.

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Ella F. Filippone

Executive Director

Passaic River Coalition

Ella Filippone founded the Passaic River Coalition (PRC) in 1969. Serving as the Executive Administrator for many years, she is responsible for the overall development and implementation of all projects for that organization. A recognized expert in the areas of water quality and quantity, her main interest is in the Passaic River Basin. She actively participates in the watershed management process in New Jersey, and chairs the Public Advisory Committee for Watershed Management Area 6 in New Jersey. The experience and progress achieved by this body has resulted in her recent appointment to the Management Committee that oversees similar efforts in two more neighboring watersheds. These activities make her a key figure with regard to environmental impacts on water supply and quality for the citizens of northern New Jersey.

The governor and key legislative leaders have drawn on her expertise by appointing her as a member of the following bodies: NJ Drinking Water Quality Institute; NJ Water Supply Advisory Council; NJ Dredging Project Facilitation Task Force; NJ Underground Storage Tank Remediation Task Force; Governor's Water Quality Advisory Council. She has served on numerous other committees and task forces over recent years. The PRC has recently completed the creation of a recreation and open space master plan for Passaic County, and is currently involved in a similar effort in Essex County.

Water is a vital necessity for our lives. Her interest in public outreach and education on this topic, coupled with her knowledge and experience make Ella an interesting speaker for many groups.

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Carol Ann Gross-Davis

TMDL Technical Lead

US Environmental Protection Agency—Region 3

Ms. Davis is an environmental scientist at the U.S. Environmental Protection Agency, where she is the Region III Total Maximum Daily Load Technical Lead, in the Office of Watersheds. She has experience in a variety water quality programs, including Water Quality Standards, NonPoint Source program, watershed assessment and monitoring, regulatory compliance and TMDL litigation. One of Ms. Davis' main roles is to provide direction to States in Region III in dealing with the evaluation of unique water quality situations involving complex pollutants, physical conditions and multiple pollutant sources including water impaired due to dioxin and PCBs.

Some recent projects include:

* Technical and policy representative on State and interstate workgroups developing TMDLs, including Delaware River Basin Commission, and Ohio River Sanitary Commission. Both these Commissions are working on PCB TMDLs for large river systems. The Delaware River Watershed has many possible sources of PCBs and the Committee developing the model represents all the stakeholders from industry, municipal, government and the environmental coalition.

* A recent completed project, involved the development of dioxin TMDLs completed on the Kanawha River, Pocatalico River, and Armour Creek in West Virginia. The mathematical approach used for these three waters is simple in terms of its analytical framework and it was the most appropriate model based on the available information and data. Therefore, these dioxin TMDLs show the importance of evaluating the readily available data/information versus the problem to be solved and based on this evaluation, choosing the simplest model. As a result of the TMDL, EPA has initiated activity at over 19 sites throughout the watershed with the intent of collecting the data necessary to define the magnitude of dioxin loading from each site and/or identify necessary control actions.

Ms. Davis graduated from Cabrini College with a B.S. in Biology in 1991 and earned her M.S. from Drexel University, School of Engineering in 2001. Ms. Davis has been a member of Society of Women Environmental Professional, Philadelphia Chapter for two years and serves as the organization's Programs Co-Chair. She is also a member of Friends of the Manayunk Canal and works to address environmental issues in her local watershed.

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Sponsors

SETAC is an international professional society of 6,000 environmental chemists, toxicologists, and ecologists from academia, government, and private industry. The Hudson-Delaware Chapter of SETAC was founded in 1984 to help further the goals of SETAC in the greater New York-Philadelphia Metropolitan Area. SETAC promotes learned discourse and education on all aspects of environmental toxicology and chemistry.

Office of Maritime Resources (OMR) was created by Governor Christine Todd Whitman in August of 1995 to provide interagency support, programmatic planning and policy recommendations on maritime issues to the Governor and the Legislature. In 1999, OMR became part of the New Jersey Department of Transportation. OMR promotes coordination and cooperation with and among State, multi-State, Federal and non-governmental agencies. OMR promotes public education on all maritime issues and serves as the primary advisory body and lead agency for support of New Jersey's $50 billion maritime industry which includes ports and terminals, boat manufacturing, ferry operations, government services, and maritime environmental resources. OMR supports technology research and development, investigates innovative dredged material management technologies to ensure a balance between development and protection of marine ecosystems, and the growth of New Jersey's Marine Transportation System.

Workshop Proceeds

"On behalf of the HDC-SETAC Board of Directors, I am proud to announce that all the proceeds from this Workshop will be donated to the victims of the September 11th Tragedy. We dedicate this event to those that lost their lives and the families they have left behind. We hope this donation can help make a difference in our country's effort to help pick up the pieces of our nation and our region. Thank you all for your participation in this worthy cause."

Lisa Baron, HDC-SETAC President