



# ESTUARY NEWS

NEWSLETTER OF THE PARTNERSHIP FOR THE DELAWARE ESTUARY: A NATIONAL ESTUARY PROGRAM

# Focused on the Future

By Jennifer Adkins, Executive Director, Partnership for the Delaware Estuary



Recent products like a five-year "Strategic Plan," and forthcoming studies like the "State of the Estuary" report, make "The Future" a logical theme for this issue of "Estuary News."

**P**redicting the future is risky, as we have seen from both the housing market and the stock market recently. A couple years ago, a widely distributed essay predicted "The Death of Environmentalism." And yet today, you can't pick up a mainstream publication without seeing news related to global warming and renewable energy, or advertisements featuring nature as the backdrop for products ranging from cars to candy bars.

The business community has not only adapted to "green" thinking, they seem to have embraced it as an economic opportunity (see article on page 14), challenging the notion that financial prosperity and a healthy environment are incompatible. Innovation and the environment are converging outside the business sector as well. Conservationists

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are using new technologies to reach new and younger audiences and municipalities are using GIS technology to improve stormwater management (see articles on pages 9 and 12 respectively).

While predicting is risky, planning for the future is a necessity. To address pressing issues like climate change, for example, we are forced to plan for impacts we cannot yet fully predict with a high degree of accuracy; in part because they are shaped by our actions today. This spring, the Partnership will take an important step toward addressing future climate change in the Delaware Estuary when it teams with the Philadelphia Academy of Natural Sciences to convene a climate change workshop and "Town Square" meeting on May 6 (see update on page three).

Like most organizations, the Partnership is challenged to balance planning for the future with taking action today. But after so many changes in the last year, like a new "Strategic Plan" and an upcoming "State of the Estuary" report, we cannot help but look to the future. That is why we are making "The Future" the theme for not only this edition of "Estuary News," but also the Delaware Estuary Science and Environmental Summit taking place next winter (see article on page seven). In this issue you will get a preview of events and programs to come and an introduction to some futuristic thinking in estuary science and management.

Everyone living or working in the Delaware Estuary today will help determine its future – let's work together to make it a bright one. ■

## Artwork Floods in for Contests



PHOTO CREDIT: DELAWARE DEPARTMENT OF TRANSPORTATION

Judges pore over entries for the Delaware Department of Transportation's drawing contest in March of 2006. A similar group will work together this year to select the best drawings submitted from among hundreds of hopeful finalists.

Final entries have trickled in for the "Clean Water Begins and Ends With You" Drawing Contests, and judges have begun the difficult task of choosing a handful of winners from more than 2,800 students across 13 grade levels throughout the City of Philadelphia and the State of Delaware.

Each of the first-place drawings will be featured in advertising campaigns celebrating the 38th anniversary of Earth Day. And all those who place will see their artwork published in a colorful calendar available for free to the public.

Other prizes to be awarded at ceremonies in April include

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## MEETINGS CONTACT LIST

Meetings of the Estuary's Implementation Teams and Advisory Committees occur on a regular basis and are open to the public. For meeting dates and times, please contact the individuals listed below:

### Estuary Implementation Committee

Jennifer Adkins, Executive Director (Chair)  
(800) 445-4935, ext. 102  
jadkins@delawareestuary.org

### Monitoring Advisory Committee

Edward Santoro, Monitoring Coordinator  
(609) 883-9500, ext. 268  
edward.santoro@drbc.state.nj.us

### Toxics Advisory Committee

Dr. Thomas Fikslin, Branch Head  
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### Fish Consumption Advisory Team

Dr. Thomas Fikslin, Branch Head  
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thomas.fikslin@drbc.state.nj.us

### Science and Technical Advisory Committee

Dr. Danielle Kreeger, Estuary Science Director  
(800) 445-4935, ext. 104  
dkreeger@delawareestuary.org

### Delaware Estuary Education Network

Lisa Wool, Program Director  
(800) 445-4935, ext. 105  
lwool@delawareestuary.org

### Polychlorinated Biphenyls Implementation Advisory Committee

Pamela Bush, Esq.  
(609) 883-9500, ext. 203  
pamela.bush@drbc.state.nj.us



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framed certificates, a variety of art supplies, and gift cards ranging from \$25 to \$100. Furthermore, the first two schools that submitted 100 qualified entries will be rewarded with \$500 gift cards that are redeemable for school supplies.

The "Clean Water Begins and Ends With You" Drawing Contests are coordinated by the Partnership for the Delaware Estuary on behalf of their regional sponsors, the Delaware Department of Transportation and the Philadelphia Water Department.

For more information or to receive future contest mailings, please call Dee Ross at (800) 445-4935, extension 106. Additional details are also available on the Partnership's website, located at [www.DelawareEstuary.org](http://www.DelawareEstuary.org).

## Partnership to Coordinate Cleanup Site



Volunteers at last year's Christina River Watershed Cleanup are greeted by staff from the Partnership for the Delaware Estuary outside the Wilmington Rowing Center.

Staff from the Partnership for the Delaware Estuary will coordinate dozens of volunteers as part of this year's Christina River Watershed Cleanup on April 19, from 9 a.m. to 1 p.m. Working as a team, our goal will be to remove as much debris as possible from the Christina River in downtown Wilmington, just one of more than a dozen cleanup sites overall.

To aid in this effort, the Wilmington Rowing Center will provide its boathouse and dock, both of which are located at the southern end of the city's Riverwalk in a retail complex known as the Shipyard Shops. Meanwhile, employees of the Delaware Division of Fish and Wildlife will use motor boats to shuttle volunteers and pick up trash bags full of litter.

To help the Partnership in this endeavor or to volunteer at other

sites in New Castle County, please register online at [www.ChristinaRiverCleanup.org](http://www.ChristinaRiverCleanup.org). Participants are advised to wear: brightly colored clothing, long-sleeved shirts, pants, boots or water-resistant shoes, hats, and heavy-duty gloves. Insect repellent and sunscreen are also suggested, as are waders or hip boots if available.

Each volunteer who participates in this Earth Day activity will receive a free event t-shirt. For further details regarding the Christina River Watershed Cleanup, please call Shirley Posey at (302) 838-1897.

## Save the Date for Science

The Partnership for the Delaware Estuary and the Philadelphia Academy of Natural Sciences will host a public forum on May 6, from 6:30 to 8:30 p.m., on the effects of climate change in the Delaware Estuary. This town hall-style meeting is part of the Academy's "Town Square: Science for Citizens" series.

Prior to the evening's discussion, scientists will be joined by policy makers and resource managers, among others, for a day-long technical workshop. The goal of this earlier gathering is to compare data on climate change in a way that allows professionals to move forward in a concerted, regional approach to natural resource restoration and protection. The results of the workshop will be presented during that evening's Town Hall meeting in an effort to gather public input.

"Town Square: Science for Citizens" is made possible thanks to the financial assistance of the Claneil Foundation, the Richard Lounsbury Foundation, and the Environmental Associates of The Academy of Natural Sciences. Please visit [www.ANSP.org/townsquare](http://www.ANSP.org/townsquare) for more information as it becomes available.

## Jones Steps Down, Stays in NEP Family

Jennifer Jones has stepped down as environmental stewardship coordinator at the Partnership for the Delaware Estuary to take a position with our neighboring National Estuary Program (NEP) to the south. Beginning in March, Jones will take on new challenges as development coordinator at the Center for Inland Bays, located in Rehoboth Beach, Delaware. The Partnership for the Delaware Estuary and the Center for the Inland Bays are among 28 National Estuary Programs recognized by Congress for their importance to the nation.

Jones was hired by the Partnership in 2000 and, since then, has played an integral role in the organization's rapid growth. Under her guidance, the Partnership's Corporate Environmental

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Stewardship Program has grown to include a total of 28 participating companies. She has also been instrumental in the development of the Native Plant Demonstration Garden located at the University of Delaware's Hugh R. Sharp campus in Lewes. Jones has also managed the Partnership's Sense of Place Program and has played a critical role in coordinating the Philadelphia Water Department's annual exhibit at the Philadelphia Flower Show.

Jenn will be greatly missed by her coworkers at the Partnership. We extend our sincere gratitude for her many years of loyal service.



**The Partnership thanks Jennifer Jones for over seven years of great work in the Delaware Estuary.**

## New Faces at the Partnership

**D**on't be surprised to see some new faces at the Partnership for the Delaware Estuary this spring. Beth Haas has returned as office manager and the hiring process is under way for four new staff members to work on science, restoration, and education-and-outreach programs.

For information about future employment opportunities at the Partnership for the Delaware Estuary, please stay tuned to [www.DelawareEstuary.org](http://www.DelawareEstuary.org).

## Deadline Nears for SAN School Awards



**Maria LaRosa, a meteorologist with CBS 3 Eyewitness News This Morning, will congratulate the SAN Source Water Protection Awardees for a second consecutive year on May 7, during National Drinking Water Week.**

**T**he Schuylkill Action Network (SAN) will reward select schools in the Schuylkill River Watershed with Source Water Protection Awards during National Drinking Water Week in May. Schools have until March 10 to submit a brief application explaining how their environmental project has helped to protect sources of drinking water.

Winning schools will receive a SAN Source Water Protection Award and prizes valued at \$200 during a ceremony on May 7, from 10 a.m. to noon, at the Fairmount Water Works Interpretive Center in Philadelphia. Special guest Meteorologist Maria LaRosa of CBS 3's Eyewitness News This Morning will address awardees.

The Partnership for the Delaware Estuary has been an integral member of SAN since 2004, when it was awarded a \$1.15 million grant by the U.S. Environmental Protection Agency for a series of demonstration projects in the Schuylkill River Watershed.

For details about the Source Water Protection Awards, or to get involved in SAN, please call Dee Ross at (800) 445-4935, extension 106, or visit [www.SchuylkillActionNetwork.org](http://www.SchuylkillActionNetwork.org). ■

## Ecosystem-based Management for Tomorrow's Estuary

By Danielle Kreeger, Ph.D., Science Director, Partnership for the Delaware Estuary



Daniel Soeder (right), a hydrologist from the U.S. Geological Survey, and Dr. Danielle Kreeger (left), of the Partnership for the Delaware Estuary, are among those working toward ecosystem-based management of the Estuary through their operation of the Science and Technical Advisory Committee, of which Soeder is the chairman.

**E**cosystem-based management has been a hot topic lately among scientists and resource managers in the Delaware Estuary. Many are concerned that the traditional issue-by-issue, resource-by-resource approach to environmental management makes it difficult to deal with complex interactions, like those resulting from changes in climate, land use, and many other challenges that arise as populations grow. Increasingly, people are beginning to recognize the need for holistic management of the Estuary's natural environment.

In a 2006 report, entitled "Ecosystem-based Management: Markers for Assessing Programs," the United Nations Environment Programme recognized that "On a planet dominated by human

activities, it is increasingly necessary to design and implement management programmes that address complex linkages between [systems]."

Ecology is the study of interactions. Interactions occur among plants, animals and environmental conditions in a myriad of ways. Even slight population changes among certain species, or key chemical and physical conditions, can lead to unanticipated outcomes due to a complex web of direct and indirect (hidden) relationships. In fact, there is a common joke among ecologists that predicting ecological responses is not rocket science – it's more difficult.

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## Ecosystem-based Management for Tomorrow's Estuary

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Ecosystem-based management means different things to different people, but generally it is a management strategy that considers the sum of all parts rather than just the parts alone. Metaphorically speaking, it is like managing the health of a living organism; a person even. Would you evaluate your heart or circulatory system without considering your diet or exercise regimen? Probably not, but that hasn't always been the case.

So, why aren't we taking an ecosystem-based approach right now? In a number of cases we are, but we still have a long way to go. One reason for this is, as a society, we tend to be more reactive than proactive. Limited funding and public support frequently force us to focus on today's crises rather than managing for tomorrow's health. This is similar to the choice people and insurance companies face when deciding how much to invest in preventative health care versus immediate care. When resources are tight, immediate needs (especially emergencies) come first, even though preventative measures save resources in the long run.

Another barrier to ecosystem-based management is the system of jurisdictional boundaries that exists in our region. The Delaware Estuary extends into five states, two regions of the U.S. Environmental Protection Agency, and hundreds of local jurisdictions, like counties, cities, towns, and townships. Each of these entities makes its own decisions that impact the Estuary's natural resources, and they don't always agree. Take, for example, the recent dispute between Pennsylvania and New Jersey over a proposed channel deepening, or the Supreme Court battle between Delaware and New Jersey over a planned liquid natural gas terminal. Disagreement between jurisdictions can make holistic management of the Estuary a challenge.

To complicate matters, there are also individual departments within each jurisdiction, each with its own focus or mandate.

These can also create barriers among scientists and managers that prevent them from taking a "big-picture" perspective. Fortunately, ecosystem-based management has recently begun to be taught and promoted within our universities and academic institutions, but it will take time for this to have an impact.

Lastly, adoption of ecosystem-based management is also made challenging by some fundamental gaps in our knowledge about

how ecosystems work in the Delaware Estuary. Getting a secure grasp of "system ecology" in the Estuary will require significant resources and the time necessary to examine patterns over multiple years, spanning different conditions.

Together, these challenges make an already complex ecosystem even more complex to manage holistically. As the National Estuary Program responsible for the Delaware Estuary, the Partnership has spearheaded efforts to advance ecosystem-based management in our region. By hosting biennial science and environmental conferences and additional thematic workshops, we bring different sectors together to discuss region-wide challenges and solutions. The Partnership has also reformed, and continues to operate, a multidisciplinary Science and Technical Advisory Committee to help the organization tackle important contemporary science issues among diverse sectors in the Estuary. This committee alone has spawned four new technical workgroups to help fill vital niches in the Estuary.

In the future, the Partnership hopes to increase relations among specialists working throughout the region, including those focused on monitoring the environment or managing specific resources. The Partnership will also continue to increase its support for a holistic, ecosystem-based view among leadership throughout the region. Our goal is to cross-link all monitoring, conservation and restoration together with regulatory affairs in a way that best manages tomorrow's Delaware Estuary ecosystem. ■

**"...there is a common joke among ecologists that predicting ecological responses is not rocket science — it's more difficult."**

## Conference to Reconvene With Focus on the Future

By Jennifer Adkins, Executive Director, Partnership for the Delaware Estuary

In an area as large and diverse as the Delaware Estuary, there are hundreds of scientists, managers, and organizations working to better understand, manage, and protect some aspect or component of the watershed. For example:

- Scientists at Rutgers University's Haskins Shellfish Research Laboratory are working to better understand the viruses and habitat conditions affecting the recovery of Delaware Bay oysters.
- Conservationists at the Brandywine Conservancy are modifying dams in the Brandywine Creek in an effort to restore shad, a culturally important species of fish.
- Scientists at the U.S. Geological Survey are studying data collected at gauging stations to better understand the impact abandoned mine drainage has on the Schuylkill River's water quantity and quality.
- Researchers at the University of Delaware's College of Marine and Earth Studies are analyzing the



The Delaware Estuary Science and Environmental Summit, seen here in January 2007, will reconvene in Cape May, New Jersey, in January 2009.

impacts dredging has on sediments and erosion in the Delaware River.

- Resource managers at the Philadelphia Water Department and Delaware River Basin Commission are assessing the impacts of freshwater flows on salinity in the Delaware River.

These are just a few of the stakeholders currently working to

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## Conference to Reconvene With Focus on the Future

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advance our understanding of the Delaware Estuary and how best to manage its resources.

A critical role of the Partnership for the Delaware Estuary is to bring people like these together to share information that may help us collectively improve our understanding of issues in the Delaware Estuary. One way the Partnership fulfills this role is through its biennial Delaware Estuary Science and Environmental Summit. Since early 2005, the Partnership has hosted a large summit every two years in an effort to bring scientists and managers together that otherwise might not have the opportunity to share their work with each other. This meeting is held during mid-winter in a retreat-like atmosphere to encourage cross-sector communication and the fertile exchange of ideas.

In 2007, this event was expanded to include practitioners and teachers from the nonprofit and education sectors. This event hosted almost 300 scientists, resource managers and environmentalists from 10 different states throughout region. These participants engaged in more than 100 presentations, round-table discussions, and regular- and special-topic sessions to "Link Science, Management, and Policy to Set Achievable Environmental Goals in the Delaware Estuary." Sessions were organized in two tracks: one focusing on science and another focusing on environmental projects and programs.

The scientific program was kicked off with a keynote address given by one of the preeminent leaders in the field of estuarine ecology: Dr. Scott Nixon of the University of Rhode Island. During his speech, Dr. Nixon zeroed in on "The National Importance of the Delaware Estuary." This was followed by brief lectures designed to ensure that any presentation would find a home at the meeting, thus providing a regular outlet for students and scientists to report on their research to a regional, watershed-based audience. In 2007, these sessions included: hydrology, hydrodynamics, sedimentation, living resources and ecological processes, wetlands, and various types of environmental monitoring and assessment.

Highlights from the environmental summit included two sessions led by Christine Heenan, founder and president of the Clarendon Group. Heenan spoke at length about strategies environmentalists can use to communicate messages to critical audiences, including members of the media.

Each summit also contained special sessions that focused on issues of contemporary importance, such as bivalve shellfish ecology, management and restoration. Meanwhile, a special panel focused on links between science and policy, and a "hot-topics" session featured wide-ranging talks on wind farms, emerging contaminants and climate change.

Conference and summit participants were encouraged to attend sessions from either track, and audiences were combined for both the opening keynote address and closing hot-topic sessions. This helped to foster interaction between scientists, managers and practitioners.

Materials from the 2007 Delaware Estuary Science Conference and Environmental Summit are currently available on the Partnership's website. These include:

- The event's program
- Session abstracts
- Contact information for presenters
- Presentations for most of the sessions
- A "conference proceedings" document
- A "Who's Who" resource directory

Planning for the 2009 Delaware Estuary Science and Environmental Summit is already underway. We invite you to join us January 11 to 14 at the Grand Hotel in Cape May, New Jersey, for an exciting new program focused on "Working Toward a Healthy, Sustainable Environment in Tomorrow's Delaware Estuary."

For more details, please visit [www.DelawareEstuary.org](http://www.DelawareEstuary.org), or watch your e-mail for information as it becomes available. ■

*Since early 2005, the Partnership has hosted a large summit every two years in an effort to bring scientists and managers together that might otherwise rarely share their work with each other.*

*The 2009 Delaware Estuary Science and Environmental Summit will be held January 11-14 at the Grand Hotel in Cape May, New Jersey.*

## JOIN US IN SAYING *'Thank You Delaware Bay'*



*By Kimberly Cole, Environmental Scientist III,  
Delaware Coastal Programs*



**A crew from Mobius New Media films bird watchers at Prime Hook National Wildlife Refuge outside Milton, Delaware, on December 19. This brief commercial segment will encourage viewers to tell Delaware Bay, "Thank you for the beauty."**

In recognition of all that Delaware Bay provides, Delaware Coastal Programs has partnered with The Nature Conservancy and the Partnership for the Delaware Estuary to create [www.tydb.org](http://www.tydb.org), a new baywide awareness campaign called Thank You Delaware Bay. This program was officially launched before an audience of partners and journalists during a press conference in Lewes, Delaware, on February 12.

Thank You Delaware Bay was inspired by the Thank You Ocean campaign in California. The goal of its creators is to instill in both residents and visitors a feeling of personal connection to the bay

and a sense of responsibility for its environmental health.

The slogan for the Thank You Delaware Bay campaign is "Delaware Bay takes care of us. Let's return the favor." This message will be seen by millions of people in a variety of television commercials and printed advertisements, all of which focus on the tangible resources provided by the bay, such as jobs, food and recreation, just to name a few. Public service announcements are designed to help viewers understand these relationships and compel them to get involved in activities that protect the bay.

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## 'Thank You Delaware Bay' continued from page 9

Each advertisement refers viewers to the campaign's website, [www.tydb.org](http://www.tydb.org). This site serves as a portal for information about Delaware Bay. Everyone who logs on will have an opportunity to say "Thank You Delaware Bay" by:

- learning about the bay's resources
- discovering where they can experience the bay
- evaluating the impacts of their daily decisions
- reviewing baywide conservation issues
- volunteering to help the bay

Delaware Bay is a critical component of our region's well being thanks to its economic, recreational and cultural resources. Please return the favor by logging on to [www.tydb.org](http://www.tydb.org) to experience the beauty and amenities our bay has to offer, celebrate its diverse resources, and embrace the delicate balance between humans and this exceptional estuary.

For more information and to request an online hyperlink, please call Kimberly Cole at (302) 739-WAVE. And for more insight into the creative makeup of Thank You Delaware Bay, please call Mobius New Media at (302) 475-9880. ■



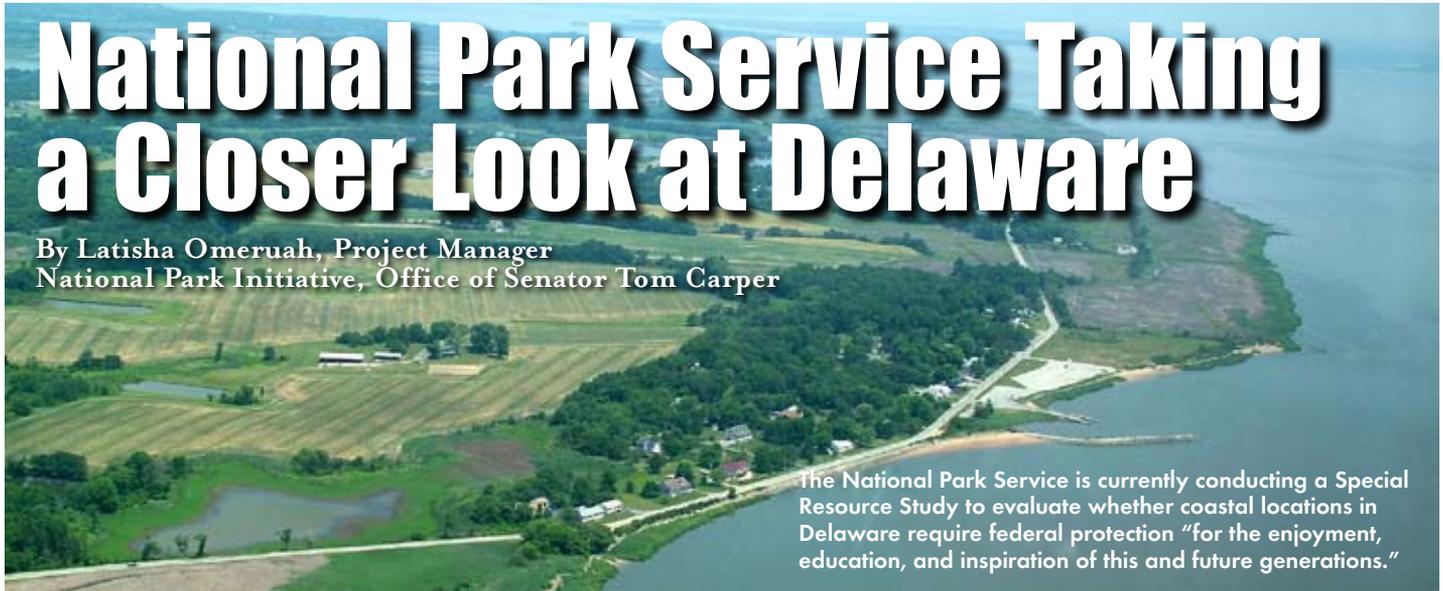
▲ Thank You Delaware Bay will serve as a year-round resource, whereas the region's three bay-themed festivals all take place between June and October. These include Delaware Bay Days in Port Norris, New Jersey; Delaware Coast Day in Lewes (above); and Southeastern Pennsylvania Coast Day in Philadelphia.

◀ Jennifer Adkins, executive director of the Partnership for the Delaware Estuary, speaks about the Thank You Delaware Bay campaign before a packed room at a press conference convened on February 12 in Lewes, Delaware.

## National Park Service Taking a Closer Look at Delaware

By Latisha Omeruah, Project Manager  
National Park Initiative, Office of Senator Tom Carper

PHOTO CREDIT: NATIONAL PARK SERVICE



The National Park Service is currently conducting a Special Resource Study to evaluate whether coastal locations in Delaware require federal protection "for the enjoyment, education, and inspiration of this and future generations."

**T**he National Park Service (NPS) is conducting a Special Resource Study in the coastal region of Delaware. The purpose of this study is to analyze select sites in the First State and evaluate them for potential inclusion in the National Park System.

It is not easy for a site to become a national park area. All units must meet stringent criteria for: national significance, suitability for inclusion, feasibility and the need for NPS management. This study will also develop alternative management and protection approaches that do not require Congressional designation, or inclusion in the National Park System.

"Delaware is the only state in the union without a national park unit, and the NPS wants to ensure that important places in the state are considered for inclusion in the National Park System," said NPS Northeast Regional Director, Dennis Reidenbach.

The Delaware study focuses on the coastal regions of the state, but other sites may be considered. The NPS also welcomes suggestions from the public on sites that merit scrutiny.

"It is important for people to participate in this study, to determine if the First State will get its first national park unit," said Reidenbach.

Public meetings were held in Milford and New Castle in October of 2007, and more will be announced over the next two years. People may also learn more about the project and post comments at: <http://parkplanning.nps.gov/parkHome.cfm?parkId=261>.

In 2002, Senator Tom Carper sponsored a public process to solicit ideas and gauge public support for the creation of a national park unit in Delaware. The Senator, his staff, and a committee consisting of prominent Delawareans undertook a three-year process. The result of this research was a recommendation for a national coastal heritage park.

One of many possible alternatives that will be evaluated during the Special Resource Study is the proposal by Senator Carper. If implemented, this would establish a network of interpretive centers that are linked together with important natural and historic resources throughout the state.

The NPS study was directed by the U.S. Congress and is a project of the National



PHOTO CREDIT: NATIONAL PARK SERVICE

**Senator Tom Carper briefs his constituents regarding the status of Delaware's proposed national park during one of two public forums in October of 2007.**

Park Service's Northeast Region Park Planning and Special Studies Division, which is located in Philadelphia. This type of study typically takes about two years to complete. Once finished, its findings and recommendations will be submitted to Congress as a report from the Secretary of the Interior.

For more information about the Delaware National Coastal Special Resource Study, please visit the aforementioned website. There you will find notices for meetings whenever they are scheduled in the future. And for additional insight, please contact Planner/Project Leader, Peter Samuel at (215) 597-1848 or [peter\\_samuel@nps.gov](mailto:peter_samuel@nps.gov). ■

## Philly to Phase in Stormwater Utility Fees

By Casey Thomas, GIS Analyst, Philadelphia Water Department

**T**he Philadelphia Water Department (PWD) has been financing its stormwater management through a sewer-service charge since 1968, but it will soon change the way it charges its customers by creating a separate stormwater utility fee. This proposed fee will be phased in over three years, beginning sometime in 2009.

Storms of increasing intensity, combined with stringent state and federal regulations, are resulting in escalating costs related to the management of stormwater runoff. As a result, cities and municipalities around the country have begun instituting stormwater utility fees. This revenue is necessary to ensure there is a direct source of funds for the provision of stormwater services.

Currently, customers are charged based on the size of their water meter. While this method is appropriate in some cases, it is often not representative of true stormwater costs, and this presents an equity problem.

The PWD will now relate a property's stormwater utility fee directly to its burden on the sewer system by using property characteristics as its basis. It will do this by using Geographic Information Systems technology, or high-tech mapping software, to measure a property's gross area and impervious area. Impervious area is classified as any surface that prevents water from soaking into the ground.

In addition to making customers more aware of their impacts and the importance of stormwater management, there are several advantages to this new billing method:

- *It is more equitable. Customers who are responsible for generating runoff will be charged accordingly.*
- *Properties that are currently not customers (i.e., parking lots and others without water or sewer service) will now be charged a stormwater fee since they contribute runoff. This expands the customer base and spreads the cost of service among more people, thus lowering rates.*
- *It encourages "green" development. Non-residential property owners who are adversely affected by*



*"Stormwater runoff is the portion of rainfall that moves over the ground toward a lower elevation and does not infiltrate into the soil."*

— Source: *Stormwater, The Journal for Surface Water Quality Professionals*

*this change can receive credits toward the stormwater portion of their bills if they find ways to reduce stormwater runoff on their properties. Some exemplary ways of doing so include green roofs, porous pavement and infiltration systems, just to name a few.*

The PWD is planning its credit system to reward green practices more so than "concentrated" systems, such as underground storage tanks that don't provide as much infiltration. Once environmentally friendly practices are in place, less stormwater will enter the city's sewer system. In the long run, this will mean lower costs (or at least slower increases in costs) for stormwater service and lower bills for customers.

Preventing runoff also means good news for the Delaware Estuary. As water makes its way into storm drains, it picks up pollutants like motor oil and bacteria off the streets. During large storm events, much of this gets discharged into rivers before it can be treated. The green practices encouraged by the PWD would not only reduce this runoff, but also they would improve its quality by absorbing and treating these pollutants via vegetative systems. In other words, this program should result in less pollution being discharged and, therefore, a healthier Estuary.

In summary, a revised stormwater fee will result in a fair charge that provides incentives for non-residential and stormwater-only customers willing to pursue green building practices. In addition, all customers will be more aware of the impact they have on the environment and the importance of urban stormwater management. ■

## Ecotourism Website Nears Completion

By Shaun Bailey, Marketing and Communications Specialist,  
Partnership for the Delaware Estuary

**T**his spring, the Partnership for the Delaware Estuary will unveil EcoDelaware.com, a new website promoting ecotourism events and destinations in Delaware, particularly in the Delaware Estuary.

EcoDelaware.com is being created to provide an online resource full of ecotourism opportunities in the state. A similar website is currently under development in Southern New Jersey, and related sites promoting ecotourism in Southeastern Pennsylvania are already available to the public. Therefore, EcoDelaware.com will fill a critical niche for the region while providing a new tool that connects residents and travelers with places of ecological interest in the First State.

This new website will allow users to search a database of ecotourism events and destinations, and it will feature several ecotours developed by the Partnership to highlight key areas and activities in the Delaware Estuary. The site will also allow



partners from throughout the state to submit their own events, destinations and ecotours. Through EcoDelaware.com, the Partnership seeks

to increase awareness, appreciation and, ultimately, environmental stewardship among new audiences.

EcoDelaware.com has been made possible thanks to a \$10,000 grant provided by the Delaware Office of Tourism in June of 2007. Since that time, the Partnership has worked with Talisman Interactive of Philadelphia to make this online resource a reality. Talisman Interactive has developed websites for the DuPont Nature Center and Fairmount Water Works Interpretive Center in recent years, both of which are ecotourism destinations in the Delaware Estuary.

For more information and to ensure your destination is listed, please e-mail Shaun Bailey at [SBailey@DelawareEstuary.org](mailto:SBailey@DelawareEstuary.org). ■

**EcoDelaware.com will be a venue from which community-based groups can promote their environmental events. One example is the Wilmington Earth Day Celebration, seen here in 2007.**



**Once operational, EcoDelaware.com will help visitors plan their trips to see events and outdoor attractions in the First State, one of which is the Kalmar Nyckel, the official tall ship of Delaware.**

## Green Goes Mainstream

By Shaun Bailey, Marketing and Communications Specialist, Partnership for the Delaware Estuary

In early January, 80 members of the American Dialect Society spent two days debating whether to proclaim "green" the Word of the Year for 2007. In the end, members immortalized "subprime" for obvious reasons, but if not for a poor housing economy, "green" could have easily been voted the most important word of the year, and rightly so. The term is used with such freedom today, it can easily be considered mainstream.

Many media outlets have begun to use "Green" as yet another news segment alongside "Business" and "Life." Take, for example, the "Going Green" link on the website of NBC 10, a local news program that occasionally airs a segment called "In the Garden." Similarly, *The News Journal* of Wilmington has a Web page entitled "Our Environment." And Channel 3 CBS continues to maintain its Clean Water Project, a watershed education resource located at <http://kyw.iewatershed.com>.

On the home front, merchandisers are electing to stock green products rather than those deemed harmful to the environment. These range from small businesses like Philadelphia's White Dog Café to retail giants like the Home Depot, the latter of which launched its Eco Options line of 2,500 products on Earth Day last year. And let's not forget the many regional businesses in between, such as those enrolled in the Partnership for the Delaware Estuary's Corporate Environmental Stewardship Program (now under the direction of Karen Johnson).

Countless corporations have begun to implement green marketing plans that play an integral role in their overall business plans. DuPont, for instance, has created Clear into the Future, a community initiative that shares the same mission as the Partnership. Meanwhile, "Green" could have easily been the theme at last January's North American International Auto Show. Even the Philadelphia Eagles – a billion-dollar franchise – has improved upon its reputation thanks to its budding "Go Green!" program.

Cities big and small have begun to have town hall-style meetings centered on green subjects. Take, for example, the Philadelphia Academy of Natural Sciences and its "Town Square: Science for Citizens" series. Every few weeks the Academy – a world leader in biodiversity and environmental research – provides a venue for some of the most forward-thinking environmentalists in the nation. Most recently, this included Van Jones, president of the Ella Baker Center for Human Rights in Oakland, California. Jones is working to combat both pollution and poverty in a way that has never been done before: by training inner-city youth to take up ranks in



**An interactive robot known as Professor Green greets festival goers at Coast Day on September 15 in Philadelphia. Professor Green represents one of many outreach efforts currently being used by Clear into the Future, a program founded by DuPont.**

a youth corps training program that is part of a Green-Collar Jobs campaign. Using \$125 million provided by the Green Jobs Act of 2007, Jones plans to create green job-training programs across the United States.

Now that "green" has become a buzz word in the American vocabulary, perhaps consumers will begin to distinguish between shades of greenness, or degrees of authenticity. Or better yet, perhaps this will serve as a stepping stone for other ecological terms, each one of which is worthy of increased attention. Just imagine if every American knew the meaning of "estuary," "watershed" or "stormwater," for example. After all, if "subprime" can make it into the American vernacular, why not "estuary?" ■

**See how you can get the most green, for your green, at the websites below:**

**Automobiles:** ..... GreenerCars.org

**Commercial Purchasing:** ..... ResponsiblePurchasing.org

**Computers:** ..... EPEAT.net

**Retail Products:** ..... GreenerChoices.org

**Green Investing:** ..... SierraClubFunds.com

# ESTUARY EVENTS

## *Native Waters Exhibit*

**January 22 until  
April 12**

**Dover, DE**

The Delaware National Estuarine Research Reserve in Dover is hosting a traveling exhibit entitled "Native Waters: Sharing the Source" until April 12. This exhibition blends contemporary science with traditional Native American culture to tell the story of water in our lives. Visitors are welcome Monday through Friday, from 8 a.m. to 4 p.m., and every other Saturday from 9 a.m. to noon. Please call (302) 739-3436 to learn more about this free opportunity for the whole family.



## *Christina River Cleanup*

**April 19, from  
9 a.m. to 1 p.m.**

**Throughout  
New Castle  
County, DE**

Celebrate Earth Day a little early by participating in the 17th Annual Christina River Watershed Cleanup. This half-day volunteer activity is an excellent way for area businesses, civic groups, and individuals from all walks of life to show their gratitude for the watershed in which they reside. Join the Partnership at the Shipyard Shops in Wilmington, or choose from a number of other sites throughout the watershed. For more information on specific sites or to register, please call Shirley Posey at (302) 838-1897, or visit [www.ChristinaRiverCleanup.org](http://www.ChristinaRiverCleanup.org).



## *Philadelphia Flower Show*

**March 2-9 (times vary)**

**Philadelphia, PA**

The Philadelphia Water Department and the Partnership for the Delaware Estuary are sponsoring an exhibit at the Philadelphia Flower Show, where "Jazz It Up" is this year's theme. The display, entitled "Jazz Up Your Roof," will feature a green roof filled with plants, all of which are designed to capture and filter stormwater runoff while maintaining a controlled climate in the rooms below. For further details and to purchase tickets, please visit [www.TheFlowerShow.com](http://www.TheFlowerShow.com). All proceeds will benefit the Pennsylvania Horticultural Society.

community event. For further details, please call the Great PA Cleanup Hotline at (888) 548-8372.

## *Wilmington Earth Day Celebration*

**April 18, from 11 a.m.  
to 2 p.m.**

**Wilmington, DE**

Give the Earth a break while on your lunch break during Wilmington's Earth Day Celebration in Rodney Square. Visitors will enjoy music, a free plant giveaway and a variety of "green" vendors at this festive outdoor gathering hosted by the Partnership for the Delaware Estuary on behalf of the City of Wilmington. Please join us for this mid-day breath of fresh air. For additional information, please call Lisa Wool toll free at (800) 445-4935, extension 105.

## *Youth Eco-Leadership Summit*

**April 20-22**

**Valley Forge, PA, among  
other locations in the field**

Teachers and students throughout Pennsylvania are invited to share their research and stewardship projects at the 15th annual Delaware River Watershed Youth Eco-Leadership Summit. For more insight into this event and those of recent years, please visit [www.State.NJ.US/drbc](http://www.State.NJ.US/drbc). And to register no later than April 7, please call Bonnie Tobin at (610) 982-0161.

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# ESTUARY EVENTS

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## *WheatonArts Eco-Fair*

**May 3, from 10 a.m. to 5 p.m.**

**Millville, NJ**

Plan now for an early Mother's Day outing at WheatonArts Cultural Center's annual Eco-Fair. This free event will offer exhibits and demonstrations designed to help people live better, healthier lives with less environmental impact. The one-day festival will feature live musical entertainment, food and hands-on children's programs, all in a friendly open-house atmosphere. For directions and exhibitor information, please call Doris Abeling at (856) 825-6800, extension 104, or visit [www.WheatonArts.org](http://www.WheatonArts.org).



## *Storm Drain Marking*

**May 10, from 9:30 a.m. to 1:30 p.m.**

**Philadelphia, PA**

Good food and a good cause, you can't beat that. Join staff and patrons from the White Dog Café as they protect the Schuylkill River's tidal watershed by marking storm drains with medallions that read, "Yo! No Dumping! Drains to River." To reserve your spot, complete with a complementary lunch, please call (215) 386-9224. And to learn more about the Partnership's Philadelphia Storm Drain Marking Program, log on to [www.DelawareEstuary.org](http://www.DelawareEstuary.org) or call Dee Ross at (800) 445-4935, extension 106.

## *Pine Barrens Ecotour*

**May 10, from 9 a.m. to 4 p.m.**

**Philadelphia, PA**

Travel from Philadelphia to New Jersey's Pine Barrens and discover the native plant life John Bartram – the father of American botany – would have collected in the mid-1700s. Curator, Joel Fry of Bartram's Garden and Bill Cahill, an expert on the Pine Barrens, will both be on hand as your expert guides. Please call (215) 729-1047 to reserve your spot on this \$40 ecotour no later than April 25.



## *Delaware Bay Days*

**June 14-15**

**Bivalve, Port Norris and Shellpile, New Jersey**

Delaware Bay Days is a free maritime festival celebrating the natural resources and vibrant culture of the Delaware Bayshore region. This action-packed weekend promises to have a street parade, river tours, blue crab races and much more. Throughout the day, you can also satisfy your hunger with fresh seafood, soul food and homemade fare. And don't miss the live music and storytellers that are scheduled to perform. Please call the Bayshore Discovery Project at (856) 785-2060 for more insight, or visit [www.AJMeerwald.org](http://www.AJMeerwald.org).

## *Delaware River Sojourn*

**June 22-28**

**Throughout the Delaware River Watershed**

Discover why the Delaware River is included in the National Wild and Scenic Rivers System while paddling this year's Delaware River Sojourn. Participants can canoe or kayak all seven days, from New York to Southern New Jersey, or they can register for a single-day trip consisting of roughly eight to 14 miles. Each day offers its own unique program steeped in local culture and history. For more information as it becomes available, please stay tuned to [www.State.NJ.US/drbc/Sojourn.htm](http://www.State.NJ.US/drbc/Sojourn.htm). ■

# ESTUARY EVENTS

## Save the Date

### **Southeastern Pennsylvania Coast Day**

September 20 ■ Philadelphia, PA

### **Experience the Estuary Celebration**

October 2 ■ Chester, PA

### **Delaware Estuary Science & Environmental Summit**

January 11-14, 2009 ■ Cape May, NJ

Partnership for the Delaware Estuary, One Riverwalk Plaza, 110 South Poplar Street, Suite 202, Wilmington, DE 19801

#### Partnership for the Delaware Estuary: a National Estuary Program

The Partnership for the Delaware Estuary, Inc., is a private, non-profit organization established in 1996. The Partnership leads collaborative and creative efforts to protect and enhance the Delaware Estuary and its tributaries for current and future generations. The Partnership is one of 28 National Estuary Programs. To find out how you can become one of our partners, call the Partnership at 1-800-445-4935 or visit our website at [www.DelawareEstuary.org](http://www.DelawareEstuary.org).

*Estuary News* encourages reprinting of its articles in other publications. *Estuary News* is produced tri-annually by the Partnership for the Delaware Estuary, Inc., under an assistance agreement (CE-993985-090) with the U.S. Environmental Protection Agency (EPA). The purpose of this newsletter is to provide an open, informative dialogue on issues related to the Partnership for the Delaware Estuary. The viewpoints expressed here do not necessarily represent the views of the Partnership or EPA, nor does mention of names, commercial products or causes constitute endorsement or recommendation for use. For information about the Partnership for the Delaware Estuary, call 1-800-445-4935.

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