

# Coastal Delaware



Grant recipient - Pilottown Village

## DNREC Awards Grants to Protect Coastal Resources

The Delaware Coastal Programs office of DNREC's Division of Soil and Water Conservation is pleased to announce grant awards through two grant programs: (1) Natural Resource Management, and (2) Community and Local Government Grant Program. This funding was made available to the Delaware Coastal Programs by the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration.

**Bayshore Property Owners Association:** Grant funding was awarded to the Bayshore Property Owners Association to implement a wetland restoration and enhancement project. This project seeks to improve pre-discharge water quality, provide vegetation enhancements, increase biodiversity and introduce rare and threatened species (i.e., Atlantic White Cedar), and restore wildlife habitat.

**Church Creek Homeowners Association:** Grant funding was awarded to the Church Creek homeowners association to establish 2 acres of early successional dry meadow habitat. The establishment of meadows will provide increased water infiltration into groundwater, decreased run-off into Church Creek, and require less maintenance than traditional turf grass.

**City of Dover:** Grant funding was awarded to the City of Dover to design a vegetated buffer in Silver Lake Park which will reduce storm water run-off, pollution, nutrients, sediment and erosion.

**DNREC Division of Water Resources, Watershed Assessment Section:** Grant funding was awarded to DNREC Watershed Assessment Section to provide baseline information on shoreline condition and the location of stressors that are threatening coastal areas in the Delaware Estuary.

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## Delaware Coastal Program's Mission

Preserve, protect, develop and where possible restore and enhance the resources of Delaware's coastal zone by effective administration of the Coastal Management Program and the National Estuarine Research Reserve.

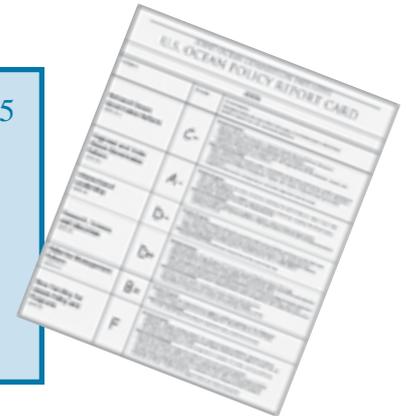


# Message from the DCP Administrator

At his time last year, the Joint Ocean Commission Initiative (JOCI) issued its first report card evaluating the progress the United States had made toward addressing the challenges identified by the U.S. Commission on Ocean Policy and the Pew Oceans Commission. So, how have we fared for this year? Overall, progress on United States ocean policy received an average grade of “C-” in six subjects, up a bit from “D+” in 2005.

Grades were given out in six categories. All of the grades improved except for the subject “New Funding for Ocean Policy and Programs” which kept the meager grade of “F” for the second year in a row. Coastal states had the highest ranking grade (A-) in the category of “Regional and State Ocean Governance reform”.

	2006	2005
Research, Science, and Education	D+	D
International Leadership	D-	F
National Ocean Governance Reform	C-	D+
Fisheries Management	B+	C+
Regional and State Governance Reform	A-	B-
New Funding for Ocean Policy and Programs	F	F



JOCI is planning to continue to work on the governance reform, and science and funding initiatives identified in its June 2006 report to Congress, *From Sea to Shining Sea*. The report identified the top ten actions that need to be taken by Congress, as well as \$750 million in funding priorities. The top ten actions are:

1. Adopt a statement of national ocean policy.
2. Establish the National Oceanic and Atmospheric Administration (NOAA) in law and work with the Administration to identify and act upon opportunities to improve federal agency coordination on ocean and coastal issues.
3. Foster ecosystem-based regional governance.
4. Reauthorize an improved Magnuson-Stevens Fishery Conservation and Management Act.
5. Enact legislation to support innovation and competition in ocean-related research and education consistent with key initiatives in the Bush Administration’s Ocean Research Priorities Plan and Implementation Strategy.
6. Enact legislation to authorize and fund the Integrated Ocean Observing System (IOOS).
7. Accede to the United Nations Convention on the Law of the Sea.
8. Establish an Ocean Trust Fund in the U.S. Treasury as a dedicated source of funds for improved management and understand of ocean and coastal resources by federal and state governments.
9. Increase base funding for core ocean and coastal programs and direct development of an integrated ocean budget.
10. Enact ocean and coastal legislation that has already progressed significantly in the 109<sup>th</sup> Congress.

All of these action items are meaningful and important steps that must be taken to ensure the health of our coastal and ocean ecosystems and the economies that depend on them. I expect that you join me in hoping next year’s grades are better.

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## OUR COASTAL TOWNS: LITTLE CREEK, DELAWARE

Like many small towns on Route 9 along the coast, Little Creek, Delaware could easily be missed by the blink of an eye. About 195 people call this little Kent County town, established in 1837, just east of Dover, home. There is a fire station, post office, produce stand, and deli but very little else. It does, however, boast a front row seat to an amazing natural phenomenon each spring. Heading east off Route 9 towards Port Mahon will take you past State managed wildlife areas to the coast to witness the annual spring shorebird migration on Delaware Bay.

Delaware Bay is an estuary of extraordinary biological value. Between May and June, hundreds of thousands of shorebirds time their arrival in the bay to coincide with the highly predictable, and massive, spawning of horseshoe crabs along the bay shore. These tiny birds, weighing only a few ounces, fly between the South American wetlands and the Arctic Tundra, about 9,000 miles, each spring and fall. They depend on places like Delaware Bay to rest and feed in preparation for their long journeys lasting up to 70 hours nonstop and covering over 2,000 miles at a time! For species such as the Red Knot, Ruddy Turnstone, Sanderling, and Semipalmated Sandpiper, the amazing superabundance of horseshoe crab eggs provides a vital food resource that enables the birds to complete their next flight to the frozen, wind blown arctic tundra with enough fat reserves to keep warm and nest. Upon their arrival at Delaware Bay, these shorebirds must refuel after flying thousands of miles, doubling their weight in about 10 days. It's a spectacle unlike any other and can be easily enjoyed in Little Creek or many other Delaware bay front locales.



Upon arrival, the birds are in a frenzy to eat the horseshoe crab eggs and any disturbance will not only detract from time to feed but also cause the birds to expend needless energy taking flight. For this reason, it is imperative that folks enjoy the birds from afar and keep noise to a minimum. Binoculars and scopes offer a superb view without having to disturb the hungry birds. Keeping pets off the beach is also a good idea. Spring migration occurs for such a short time. There will be plenty of time for Fido to play in the surf later in the season.

So if a sunny spring day has you itching to get outside, check the tides (avoid high tide as the birds are rarely feeding then and the road may be impassable), grab your binoculars and field guide and make the trip to Little Creek to enjoy the marvels of the Delaware Bay.



### NEWS FROM THE DELAWARE NATIONAL ESTUARINE RESEARCH RESERVE

Over the past three years, the Delaware National Estuarine Research Reserve (DNERR) has expanded its northern component, Blackbird Creek Reserve, located east of Townsend. Two hundred and five acres have been added to the original 212 acres designated in 1993. These new lands mean new challenges and opportunities.

There are already several efforts underway to guide the DNERR's programming on these new sites. Small scale restoration, invasive species control, and site stabilization have been underway for nearly two years. Recently, the DNERR embarked on a major restoration planning effort which will guide not only the implementation of restoration projects on the reserve lands but will also set forth a monitoring plan which will allow staff to measure the effectiveness of these efforts. The DNERR and DCMP are working together to draft a Water Access and Use Plan for the Appoquinimink and Blackbird

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## DELAWARE CLEAN MARINA PROGRAM



**Two New Marinas Certified! Indian Riverview Marina** in Dagsboro became a Clean Marina in October 2006. Indian Riverview Marina also utilized cost-share funds through the Delaware Clean Marina Program to aid in certification. Indian Riverview was awarded a Pollution Prevention (P2) mini-grant in the amount of \$960. This grant was used to purchase containment booms and help implement a boater education program at the marina. The boater education program includes distributing bilge oil-absorbent sheets and informative brochures to slip holders. The marina's Operation and Maintenance plan was also updated and also began providing recycling opportunities at the marina.

**Certified Clean Marinas**  
Indian River Marina  
Sandy Beach Marina  
Steamboat Landing Marina  
Indian Riverview Marina  
Pilottown Marina



*Alex Hense of DNREC's Pollution Prevention Program holds the Clean Marina flag as Faye McDaniel, manager, and Theodore Becker, owner, receive the Clean Marina Certificate from Robert Baldwin, Director of DNREC's Division of Soil and Water Conservation.*

On November 17, 2006, **Pilottown Marina** in Lewes became a Delaware Clean Marina. The Lewes-Rehoboth Canal, where Pilottown Marina is located, has served as an important waterway to the Delaware Bay for generations of commercial fisherman and recreational boaters. With Pilottown Marina's new pollution control practices, water quality in the canal will certainly improve. Pilottown Marina received \$18,750 in cost-share funds through the Clean Marina Program to purchase a new sewage pump out system. The marina's Operation and Maintenance Plan was also updated to require boater patrons to follow strict marina guidelines regarding the maintenance of vessels in the marina basin. The marina also maintains oil and gas clean-up material on-site in case a spill occurs.

### **Clean Marina Workshop -**

On March 27, 2007, the Clean Marina program held a workshop for marina operators interested in the program and pursuing certification. The workshop provided an

introduction to the structure and goals of the program, an explanation of the steps to become a certified Clean Marina, a Clean Marina Guidebook and materials (no cost), templates for commonly needed plans at marinas, staff training tools, and reviewed the regulations that were applicable to marina operations. Workshops are designed for managers of all size and types of marinas. Participants walk away with many useful tools for improving management of their facilities and a better understanding of the incentives to becoming certified.

## **NEW E-NEWSLETTER AVAILABLE – COASTAL CONNECTION**

The E-Newsletter will contain information on issues regarding DNREC's Shoreline and Waterway Management Section and will cover topics such as, storm damage, beach nourishment, macro algae harvesting, dredging, beach issues, waterway issues, flood issues, etc. It is geared towards members of the coastal communities, contractors, engineers, surveyors, town and/or municipal officials, homeowners associations, etc.

To register for the e-mailing list contact Jennifer Wheatley at [Jennifer.Wheatley@state.de.us](mailto:Jennifer.Wheatley@state.de.us) or (302) 739-9921.



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## STORMWATER POND AND OPEN SPACE MANAGEMENT WORKSHOPS OFFERED TO PROPERTY OWNERS, HOMEOWNERS ASSOCIATIONS

Downstate property owners who want to learn more about stormwater ponds and community open space maintenance are invited to attend a free, two-hour workshop on May 9 and 23 through the Department of Natural Resources and Environmental Control, Division of Soil and Water Conservation, Sediment and Stormwater Program, Delaware Coastal Programs, and the Sussex Conservation District.



*Pilottown Village stormwater pond*

Stormwater ponds, both wet and dry, act as temporary holding basins to prevent flooding, remove pollutants and settle suspended sediments transported by stormwater. These ponds can add to the aesthetics of a community, and homeowners often pay a premium to be close to these man-made waterfront sites. However, stormwater ponds are not self-sustaining. They are very effective at controlling flooding and removing pollutants, but need to be maintained. Similarly, many communities manage large tracts of open space as turf grass. Turf grass provides little benefit and property owners are encouraged to seek alternatives to open space management in the form of natural habitat.

The task of maintaining many stormwater ponds and community open space falls on the property owner. In many cases, the owner is a homeowners' association or maintenance corporation, whose responsibilities include open space management. Some associations seek professional support, while others choose to manage them on their own. Still, other property owners may not even be aware that these areas require ongoing and sometimes extensive periodic maintenance.

To aid property owners with these tasks, free two-hour workshops will be offered to communities and landowners to learn about stormwater facility maintenance and alternative community open space management.

Wednesday, May 9<sup>th</sup>  
6:30 – 8:30 p.m.

University of Delaware, College of Marine Studies  
Cannon Lab, Room 104  
Pilottown Road, Lewes, DE

Wednesday, May 23<sup>rd</sup>  
6:30 – 8:30 p.m.

Delaware Rural Water Association  
Conference Room  
210 Vickers Drive, Milford, DE

To register for this free workshop, please contact Laura Boyer with DNREC Watershed Assessment at (302) 739-9939 or [Laura.Boyer@state.de.us](mailto:Laura.Boyer@state.de.us).

If you would like more information on the workshop, please contact Jessica Watson with the Sussex Conservation District at 302-856-7219 ([Jessica.Watson@state.de.us](mailto:Jessica.Watson@state.de.us)), Beth Krumrine with the DNREC Sediment and Stormwater Program at (302) 739-9921 ([Beth.Krumrine@state.de.us](mailto:Beth.Krumrine@state.de.us)) or Marcia Fox with Delaware Coastal Programs at (302) 739-9283 ([Marcia.Fox@state.de.us](mailto:Marcia.Fox@state.de.us)).



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# ★ Staff Profile



**Name:** Bonnie Arvay

**Title:** Environmental Scientist II, Delaware Coastal Management Program

**Hometown:** currently Dover, Delaware

**Education:** M.S. in Marine Science from the University of South Carolina with focus on phytoplankton ecology, including harmful algal blooms B.S. in Marine Science from Coastal Carolina University

**Most fulfilling aspect of your job:** Helping to update and maintain the Program's legally enforceable policies. I think I may be the only one I know who finds enjoyment in reading State Code.

**Most challenging aspect of your job:** Helping those outside the environmental circles understand the need for balance between development and environmental protection.

**One work-related accomplishment you're proud of:** Successfully competing for the NOAA Coastal Service Center's Coastal Management Fellowship. After what seemed like years locked away in a microscope room I was finally preparing to defend my Master's thesis and was ready for the change that this opportunity allowed.

**One personal accomplishment you're proud of:** With the recent purchase of our first home, I am very proud that I was able to navigate the twisted world of realty and mortgage companies and keep my sanity.

**Things you do in your spare time:** camping, listening to live music, reading and watching movies

**Family:** Buddy (husband)

**Favorite book or movie:** As it turns out, my all time favorite book and movie are one and the same - To Kill a Mocking Bird. My current favorites change on a regular basis but at this time they are as follows: Shawn of the Dead and Slither tie for comedy/horror, Tenacious D for music/comedy, Love Actually for romance, and Devil's Rejects for favorite horror film. And my current favorite book is Barack Obama's "Audacity of Hope" and I am eagerly awaiting the last installment of the Harry Potter series.

**In your CD player now:** Well, since I got my iPod I don't listen to many CDs but my favorite albums at the moment are Gillian Welch's "Hell Among the Yearlings" and Tenacious D (self titled) although I'm sure that will change since the range of music I listen to varies as much as the movies I watch.

**How did you come to your position:** I first came to Delaware after successfully competing for a NOAA Coastal Service Center Coastal Management Fellowship. This is a program that matches post-graduates with state coastal management programs to assist with projects aimed at addressing state-level coastal issues. After completing the two-year program, I decided to stay in Delaware and continue working with the Coastal Programs.



## PLANNING FOR POPULATION GROWTH ALONG THE COAST

The second smallest State in the nation is the seventh most densely populated, and still growing. In the last six years alone, Delaware has added over 68,000 people to its population. How do State and local officials plan for this type of population growth and the many issues and opportunities it brings?



*Development pressures*

Legislation passed in 2001 requires that all counties and municipalities in the State of Delaware plan for growth by adopting "Comprehensive Plans." These plans compel local governments to visualize their future and specify their path forward through planned annexations, zoning changes and



*Recreational opportunities*

new legislation. Plans must be updated every five years to reflect changing demographics and development pressures. Development planning in coastal areas requires data, difficult questions and thoughtful solutions. Are health services adequate for retirees moving to your town? How do you

### Coastal Issues addressed by Comprehensive Plans:

- Public access to the waterfront
- Shoreline and beach protection
- Recreational opportunities
- Evacuation planning
- Wetland and floodplain protection
- Natural resource conservation
- Affordable Housing
- Employment Opportunities
- Public Safety

protect wetlands and flood prone areas? Can residents safely evacuate in the event of coastal flooding? How can homeownership remain affordable to workers in resort areas? How do you preserve open spaces and scenic vistas?

All three counties in Delaware are currently preparing updates to their Comprehensive Plans and asking themselves and their residents these questions, and many more. New Castle County's updated plan will be finalized in March, 2007. Sussex County and Kent County are currently drafting their plans and will be holding public workshops and meetings in April and May 2007 to gather the concerns and opinions of residents. If you are concerned about coastal land use, resource protection, traffic, public safety or other issues, consider attending a meeting and commenting on your local plan.

More information about County Comprehensive Plans is available online:

New Castle: <http://www.co.new-castle.de.us/landuse/home/webpage31.asp>

Kent: <http://www.co.kent.de.us/Departments/Planning/Zoning/compplanupdate.htm>

Sussex: <http://www.sussexcountyde.gov/compplan/index.cfm>

Information about Municipal Plans: <http://www.state.de.us/planning/information/municipalities.shtml>



*Blackbird Creek Reserve*

The DNERR is also working closely with The Nature Conservancy through the Blackbird-Millington Corridor Conservation Area Plan. This plan, supported by the Delaware Department of Natural Resources and Environmental Control, looks at preservation for the 50,000 acre ribbon of green stretching from the mouth of Blackbird Creek on the Delaware Bay to the town of Millington in Maryland.

DNERR staff met with local and regional stakeholders on Wednesday, January 31<sup>st</sup> to identify needs and opportunities for environmental education, land stewardship, and research in the Blackbird Creek Watershed. This meeting provided a forum to discuss opportunities for collaboration among

government agencies, non governmental organizations, and others in the region. There will be opportunities arising this spring for public input. Please keep an eye out in the Smyrna Clayton Sun Times and Middletown Transcript for upcoming events.

#### **DNREC AWARDS GRANTS, *continued from page 1***

**Irish Hills Service Corporation:** Grant funding was awarded to the Irish Hill Service Corporation to establish 14.2 acres of early successional dry meadow habitat with embedded windrow native tree components within two large passive open spaces of the Irish Hill. The primary objective of this restoration plan is to enhance habitat and reduce maintenance costs associated with mowing.

**Lake Shore Village Homeowners Association:** Grant funding was awarded to the Lake Shore Village Homeowners Association to establish 5 acres of early successional meadow habitat around three water retention basins abutting forested wetlands, increase the canopy density in 5.5 acres of active open space, and control invasive species. The primary objective is to restore and enhance habitat for wildlife species through reforestation and establishment of warm season grasses, control nuisance species and reduce nutrient input into stormwater ponds.

**Lord Baltimore Landing Homeowners Association:** Grant funding was awarded to the Lord Baltimore Landing Homeowners Association to vegetate the portion of Banks Bennett Tax Ditch within the subdivision, as well as the stormwater management facility. The overall objectives of this project include improvement of pre-discharge water quality, provide vegetation enhancements, increase biodiversity, control invasive species and improve aesthetics.

**Meadowdale Maintenance Association:** Grant funding was awarded to the Meadowdale Maintenance Association to remove and control invasive species, establish stands of native trees, provide wildlife habitat, improve water quality, reduce mowed areas in 1 acre of community open space.

**Pilottown Village Homeowners Association:** Grant funding was awarded to the Pilottown Village Homeowners Association to restore 0.5 acres of community open space. The primary objective of the project is to enhance habitat, reduce sediment and nutrient inputs into stormwater ponds, reduce maintenance costs associated with mowing, and educate residents.

**Town of Odessa:** Grant funding was awarded to the Town of Odessa to prepare draft ordinances for amending the Town Zoning Code to allow for planned unit developments, restricted zoning, and design standards for future development and address environmental factors, including the protection and preservation of open spaces, water resources, recharge areas, and well-head regions.



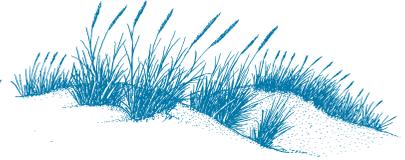
# Coastal Workshops & Events

## Reminder: Adopt-A-Beach Spring Cleaning!

Those groups who have adopted beaches are reminded that their Spring Cleaning should occur between April 15th and May 15th and that they should contact their area coordinators when they have picked their dates in order to get supplies in time. For further information contact Jennifer Wheatley at (302) 729-9921 or [Jennifer.Wheatley@state.de.us](mailto:Jennifer.Wheatley@state.de.us)

## Delaware Coastal Clean Up

Delaware's next Coastal Cleanup is set for **Saturday, Sept. 15, 2007**. Check DNREC's website at <http://www.delaware.dnrec.gov> this summer for registration information.



## An Evening at the Hook

Prime Hook National Wildlife Refuge Second Thursday of every month at 7:00 pm in the Refuge Auditorium, free and open to the public. Please call the Refuge at (302) 684-8419 or visit website <http://primehook.fws.gov> for more information.

April 12, 2007 - Enhancing Wildlife Friendly Habitat on Your Property, Al Rizzo, US Fish and Wildlife Service

May 10, 2007 - Fishing Techniques Using New Scented Soft Plastic Baits, Delmarva Fishing School by Dave Beall

June 14, 2007 - Birds & Birding at Prime Hook NWR, Ed Sigda, Local Birder, Bombay Hook National Wildlife Refuge



## Bombay Hook National Wildlife Refuge

Please call the Refuge at (302) 653-6872 or visit website <http://bombayhook.fws.gov> for more information

April 29, 2007 1 pm – 3:30 pm Bicycle Tour on the Refuge Join Tina Watson for a guided bicycle tour. We will stop to discuss habitats, wildlife management techniques, and to do bird identification. The guided trip will be approximately 6 miles. Riders may continue their bicycle tour on their own through the 8 miles of Refuge roads. Roads are packed dirt and a bicycle with hybrid tires is suggested. Bring your helmet and check the air in your tires!

May 6, 2007 2:45 pm Afternoon Saltmarsh Boat Ride The trip will take you into the Leipsic River, Delaware Bay and the saltmarsh. Dress for the weather. May be canceled due to wind conditions. Call to Register.

May 19, 2007 Migratory Bird Festival 9:00am – 4:30 pm The theme for International Migratory Bird Day is Birds in a Changing Climate. Come join us for a day filled with information, fun, hands on activities, exhibits, wildlife photography and art, birding tours, and more. Check back at later date for a schedule of events.

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