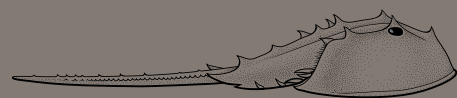


# Delaware Center for the Inland Bays Annual Report for 2009



*Bringing the energy of people and partnerships to this Delaware treasure*



“...energy manifests itself through every inch of the earth, the great process continues, the earth shifts and cracks, the winds roar, the sea erodes the land, the red wings migrate in the spring...” —JOHN BURROUGHS



Energy pulses through our Inland Bays as well.

**In July of this year, a wind turbine was erected at the Center for the Inland Bays...it rarely stops turning...a daily reminder to us of the extraordinary energy of this place between ocean and bay.**

The power generated from our wind turbine, combined with the output from our solar energy system, dramatically reduced our average monthly energy costs. Our bill for the month of September for our 4,300 sq. ft. facility was only \$19. We are able to sell our Renewable Energy Credits on the open market generating income to maintain and sustain our solar and wind energy systems.

In addition to the cost savings found in generating electricity from the sun and wind, we've eliminated tons of carbon production and hundreds of pounds of pollutants, such as nitrogen oxides and sulfur dioxides that foul the Inland Bays. These cleaner energy solutions are part of our on-going commitment to use our facility as a demonstration site for green building materials, technologies and practices in the watershed.

Healthy estuaries are among the most productive ecosystems in the world; places of tremendous energy that spawn remarkable bursts of plant and animal life. The rich bounty of food in our Bays is part of a cycle of abundance that attracts tens of thousands of migrating birds every year, that supports vast nurseries of finfish and shellfish...that is refueled with each incoming tide.

The energy of people also flows through and powers our organization. This energy can be found in their skills, their talents, their knowledge and their passions. Harnessing these collective resources and deploying this energy toward the work of our mission is critical to restoring and protecting the Inland Bays and its watershed. Evidence of that energy can be seen in the achievements of the past year; each a reflection of the energetic synergy of people, projects and partnerships.

With thanks to all who brought this energy and inspired our work during 2009!

**Ed Lewandowski, Executive Director**



# restoration: restoring energy to a marsh

The Slough's Gut Marsh Enhancement Project



A 24-acre salt marsh enhancement project at the James Farm Ecological Preserve on the east side of Cedar Neck in Ocean View.

The project was designed to return a more natural flow of water into the marsh by filling in former mosquito control ditches to create more natural meandering tidal creeks, mudflats and pools. The restored pools and channels improve habitat for fish and crabs, and feeding areas for wading birds and other wildlife species that inhabit Delaware's Inland Bays.

Great Blue Herons and several species of egrets are common in the Inland Bays watershed, but their breeding habitat has decreased at an alarming rate. Of special concern are rookeries on isolated islands around the Bays, such as Middle Island, where the birds are safer from predation and are also close to productive bay waters for food. In the last decade, many trees and shrubs on Middle Island that

supported a rookery have disappeared causing the birds to make their nests on the ground.

**After flooding from a major storm destroyed many nests in mid-May, CIB staff identified an opportunity to build an artificial nesting structure on Middle Island.**



The USDA Natural Resources Conservation Service provided cost-share assistance to manufacture and install 28 nesting baskets. Completed in late-March, the structure was used by eight breeding pairs of Great Blue Herons last spring.

*Partners: DE Department of Natural Resources and Environmental Control (DNREC), Conectiv, Sussex County, Entrix, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service*

## community outreach: energizing citizens

of all ages to join us in protecting and restoring the Bays



More than 100 runners showed up on a rainy morning in May to be part of the first **Diamondback Dash**, a new event to raise awareness about our native turtle, the Diamondback Terrapin, and to raise money to support the work of the CIB.

Each Saturday morning at ten, the children start arriving at the **Bethany Beach Nature Center** for learning adventures, outdoors and in. This year, we formed a partnership with the Town of Bethany Beach to provide nature experiences and watershed education at the Nature Center, and since starting the program on Halloween, more than a hundred children have attended with moms, dads or grandparents in tow.



Located on Route 26, the Center is an excellent point of contact for education and outreach in the southern resort area of the Inland Bays watershed. This fall, we began a Saturday morning program for children to come and experience this unique place at the edge of Salt Pond. Programs for adults are also planned.

With the help of volunteers, the CIB participates in community events throughout the watershed each year like the Horseshoe Crab Festival in Milton and Coast Day in Lewes...and our own Gardening for the Bays Native Plant Sale, Fall Barbecue at James Farm, the Inland Bays Clean Up, and summer fundraiser and friend-raiser, Decked Out!



# education: the energy of hands-on learning

Take it Outside!

# education



**“What is the extinction of the condor to a child who has never known a wren?”**

*—WALKING THE HIGH RIDGE: LIFE AS FIELD TRIP, ROBERT MICHAEL PYLE*

## Taking it Outside! Schoolyard Habitat Schools

Powered by a \$35,000 grant from the Chichester duPont Foundation, we built capacity in 2009 to carry this successful program into every school in the watershed.

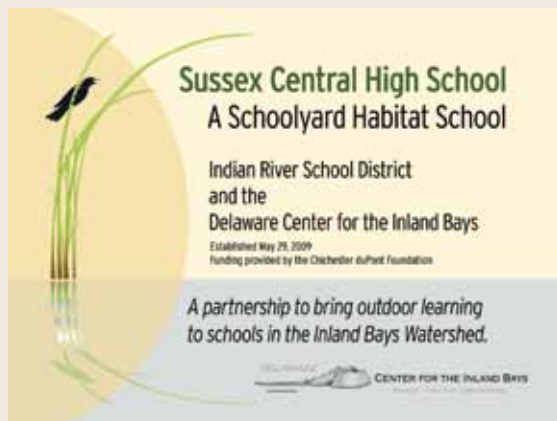
- We brought a career educator and biologist on board to be Schoolyard Habitat Coordinator
- Developed curriculum-aligned activities for every grade level and acquired the equipment and materials to support them
- Created Habitats at two more schools

*Partners: Indian River School District, Schoolyard Habitat Schools, Environmental Concern, Chichester duPont Foundation*

## James Farm Education Program

For over a decade, nearly a 1,000 7th and 8th grade students have come to James Farm each school year to learn about wetlands and watersheds.

They haul seine nets and examine their catch, they test the water and record their data, they make observations about the diversity of plant species and identify wetlands. It's full sensory learning, complete with clam rakes, chest waders and water monitoring equipment—taking abstract concepts out of the classroom and into the real world.





### Anchorage Canal Stormwater Retrofit Project

**Along the coastal corridor from Rehoboth to Fenwick, stormwater runoff from impervious surfaces such as roads, roofs and parking lots flows untreated and unfiltered into the Bays. The nutrients, bacteria, and oils carried by the water can harm aquatic life and people.**

This year, a retrofit strategy was developed for the 120 acres of urban land that drains into the Anchorage Canal. The assessment will be used to direct retrofit implementation beginning in 2010.

*Partners: Town of South Bethany, Sea Colony, Middlesex Beach, DE Department of Transportation, U.S. Army Corp of Engineers, Center for Watershed Protection*



### Frontiers in Nutrient Management Conference

The last decade has been witness to major changes in how nutrients are handled on and between farms since the passage of the DE Nutrient Management Law. At the same time, unprecedented development of agricultural land for suburban uses has changed the landscape.

In April, 110 people attended this conference to consider how these changes have affected water quality and nutrient management and to look ahead at the next ten years and reflect on how research and public policy might respond.

*Partners: Delaware Department of Agriculture's Nutrient Management Program, DNREC, University of Delaware College of Agriculture & Natural Resources, American Society of Agronomy Certified Crop Advisor Program*



# public policy: bringing energy to the debate

Hearing the voices of all stakeholders



## Environmental Indicators Reports

The Inland Bays Scientific and Technical Advisory Committee, a standing committee of the Board of Directors, began work this year to review the framework for assessing and reporting on the ecological status of the Inland Bays estuary, and to update and report on the state of the bays.

In 2009, the CIB published its first two Environmental Indicator reports in this series; the *Recreational Water Quality Indicator Report* and the *Wetlands Health Report*. Additional reports will be published in 2010.

During 2009, members of the Citizens' Advisory Committee, also a standing committee of the Board of Directors, energized the CIB to initiate efforts to inform public policy on a number of critical issues affecting water quality in the Inland Bays.

## Once-through Cooling

The Indian River Generating Station is currently permitted to use once-through condenser cooling that withdraws water from Indian River and discharges heated water to Island Creek off Indian River.

Studies have demonstrated that the fish habitat value of Island Creek and portions of the adjacent Ware Cove are degraded by this thermal discharge, and that the cooling water intake annually kills millions of adult fish and hundreds of thousands of adult blue crabs in the Inland Bays estuary.

Citizens' Advisory Committee members collaborated with CIB staff and our Board of Directors to support House Concurrent Resolution 7, which urged the Department of Natural Resources and Environmental Control to require all facilities that operate in Delaware waters and utilize cooling water intake structures to implement closed-cycle cooling.



# volunteers: bringing energy and experience to the mission



## Horseshoe Crab Research Project

This year, 43 volunteers and 19 students collected data from six sites on beaches in Rehoboth Bay, Indian River and Little Assawoman Bay—part of an on-going research project to conduct an annual survey of spawning horseshoe crabs in the Inland Bays.

The results surprised researchers. At a new survey site at Tower Road Beach on Rehoboth Bay, we found a high density of nesting crabs, further from the ocean than most of the surveyed beaches prompting us to add additional survey sites on Rehoboth Bay.

*Partner: University of Delaware College of Earth, Ocean and the Environment*

## Restoration

Planting days are powered by volunteers; this year planting native trees and shrubs at Thatcher's Landing on Vines Creek; planting a buffer along a stream at Lord Baltimore Elementary School; and planting trees at James Farm.

## Oyster Gardening

Over 200 residents on all three Bays raised oysters off their docks at over 100 sites around the Bays. A single oyster can filter more than 50 gallons of water a day...a good days work for the watershed.

## Education

Our education program is enriched by the experience and dedication of a cadre of retired teachers who are behind the scenes and out in front on nearly all of our education initiatives. This year, these teacher volunteers brought watershed education to the 2nd graders at Phillip C. Showell Elementary School for an afternoon in their schoolyard habitat learning about insects, to the children who come to the Bethany Beach Nature Center for Saturday morning watershed adventures, to Lord Baltimore Elementary to help plant a buffer along a stream, and to community events throughout the Inland Bays.

In 2009...volunteers gave more than 5,200 hours in service to the CIB mission.





## Delaware Center for the Inland Bays

Statements of Assets, Liabilities and Fund Balances—Cash Basis  
September 30, 2009 and September 30, 2008

### ASSETS

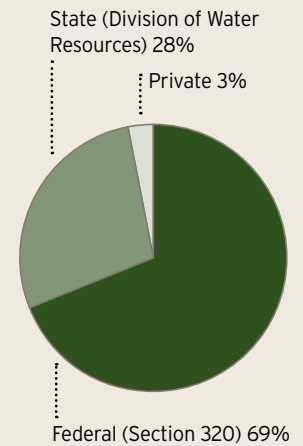
Current Assets	2009	2008
Cash in bank - operating	\$ 445,857	\$ 427,475
Cash in bank - restricted	20,283	30,438
<b>Total Current Assets</b>	<b>466,140</b>	<b>457,913</b>
<b>Property and Equipment</b>		
Land	125,000	-
Building	872,508	872,508
Furniture and equipment	442,890	404,173
	1,440,398	1,276,681
Less: Accumulated depreciation	(346,787)	(291,257)
<b>Total Property and Equipment</b>	<b>1,093,611</b>	<b>985,424</b>
<b>Other Assets</b>		
Delaware Community Foundation Endowment Fund	63,714	49,924
<b>Total Assets</b>	<b>\$ 1,623,465</b>	<b>\$ 1,493,261</b>

### LIABILITIES AND FUND BALANCES

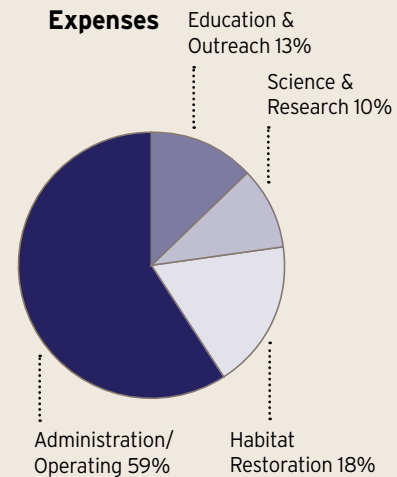
Current Liabilities	2009	2008
Payroll taxes withheld	\$ 26	\$ 1,509
<b>Total Current Liabilities</b>	<b>26</b>	<b>1,509</b>
<b>Fund Balances</b>		
Unrestricted - operating	445,831	425,966
Restricted - temporary	208,997	80,362
Restricted - fixed assets	968,611	985,424
<b>Total Fund Balances</b>	<b>1,623,439</b>	<b>1,491,752</b>
<b>Total Liabilities and Fund Balances</b>	<b>\$ 1,623,465</b>	<b>\$ 1,493,261</b>

## 2009 Operating Budget

### Revenue



### Expenses



The Delaware Center for the Inland Bays is a nonprofit 501(c)(3). We need tax-deductible donations to support our work.

Thanks to our donors whose support brings energy to power our



#### Grants and Contracts

The Chichester duPont Foundation  
Delaware Department of Agriculture, Forest Service  
DNREC, Division of Water Resources  
DNREC, Division of Soil & Water Conservation  
DNREC, Division of Fish and Wildlife  
Delaware State University  
Delmarva Atlantic Watershed Network  
Natural Resources Conservation Service  
South Bethany Property Owner's Association  
Southern Delaware School of the Arts  
State of Delaware, Division of Motor Vehicles  
State of Delaware, Energy Office  
Sussex County Council  
U.S. Army Corps of Engineers-Philadelphia District  
U.S. Environmental Protection Agency  
University of Delaware Sea Grant College Program

#### Event Sponsors

A.C. Schultes of Delaware, Inc.  
Allied Waste - A Republic Services Company  
Artesian Water Company  
Baker Petroleum  
Concierge by the Sea  
Connectiv Energy  
Duffield Associates, Inc.  
Entrix Environmental Consultants  
Greeley and Hanson  
Gary and Barbara Jayne  
JCM Environmental, Inc.  
Mountaire Farms, Inc.  
Perdue Farms Inc.  
South Bethany Property Owners Association  
Tidewater Utilities, Inc.  
Virginia Lake Management

#### Businesses for the Bays Members

Allied Waste - A Republic Services Company  
AMI Business Solutions  
Atlantic Homes, LLC  
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Bayside Resort Golf Club  
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Delaware Sports League  
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Virginia Lake Management



## \$500 and up

Lisa Aramony  
Charitable Games of Delaware  
Dewey Beach Lions Club  
Cynthia Flynn and Deirdre Boyle  
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Rehoboth Bay Foundation

## \$250-\$499

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Rehoboth Beach Main Street Inc.  
Elaine and Erik Rifkin  
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