



SOUND OUTLOOK

A NEWSLETTER OF THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION
EXPLORING LONG ISLAND SOUND – ISSUES AND OPPORTUNITIES









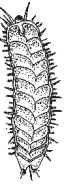

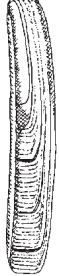
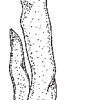





New Barn Island Wildlife Management Area Acquisition Preserves Vital Coastal Resources

An outstanding environmental achievement has been realized with the impending addition of 144 acres of private property to the state’s 869-acre Barn Island Wildlife Management Area (WMA) in Stonington, Connecticut. The WMA, including the new property, is part of the Barn Island and Continental marsh complex, described as “the finest wild coastal area in Connecticut.” The new property had been permitted for a golf course development that could have caused irreparable harm to this extraordinary ecosystem. Instead, this acquisition will secure the last link in the protection of the marsh complex and adjoining coastal forest.

Over two years ago, the DEP worked with the Stonington Planning and Zoning Commission to review various plans for the proposed golf course, and to draft permit conditions to minimize impacts to coastal resources. Eventually, due in part to the conditions necessary to protect the unique ecological value of the property, DEP was able to negotiate a purchase and sale agreement with the landowner. Interestingly, earlier attempts to purchase the property in the 1970s and 1980s failed. Critical to the acquisition was the “bridge financing” provided by The Nature Conservancy, which is holding the property until long-term acquisition funding provided principally through a \$1 million U.S. Fish and Wildlife Service Coastal Wetlands Conservation grant is received.

The acquisition will protect 36 acres of tidal wetlands, 108 acres of coastal forest, four large vernal pools, and inland wetlands. It will preserve the biological diversity of the area, protect wildlife habitat, and prevent the pollutant loading of the Barn Island marshes and tidal creeks that would have resulted from the proposed golf course. The marshes and creeks are home to invertebrates and forage fish on which commercially and recreationally important species such as bluefish, summer flounder and striped bass depend for their survival. Barn Island is also inhabited by a variety of threatened or endangered birds, and has been nominated as an “Important Birding Area” by the National Audubon Society and as a “Connecticut Coastal Birding Trail Site.” The acquisition will preserve the integrity of ongoing scientific studies, and will increase public recreation opportunities by linking trails at the existing WMA with the new property. Look for additional articles in this issue on these important topics.

The DEP wishes to thank its partners in this successful initiative, including The Nature Conservancy, U.S. Fish and Wildlife Service Coastal Program, Town of Stonington, Denison Pequotsepos Nature Center, Connecticut Corporate Wetlands Restoration Partnership, Connecticut Waterfowl Association, Hartford Audubon Society, New Haven Bird Club, and the Estate of Sarah Ann Martin. Such partnerships will be critical to future conservation success stories in an era of declining public land acquisition resources. For more information, contact David Kozak at 860-424-3034 or by email at dave.kozak@po.state.ct.us.

			
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Connecticut River Gateway Standards Updated

A 1960's-era controversy over a proposed National Recreational Area in the Connecticut River corridor highlighted the need to preserve the river's unique scenic values, particularly those of the "Gateway" area near the river's mouth. In response, the Connecticut legislature created the Connecticut River Gateway Commission, with the charge to prevent "deterioration of the natural and traditional riverway scene for the enjoyment of present and future generations of Connecticut citizens."

The Commission, established in 1974, is composed of representatives from the towns of Chester, Deep River, East Haddam, Essex, Haddam, Lyme, Old Lyme and Old Saybrook,



The Gateway Conservation Zone boundaries extend from ridgetop to ridgetop and encompass approximately 30,000 acres.

the MidState and Connecticut River Estuary Regional Planning Agencies, and the DEP. The Commission's major responsibilities are to oversee conservation land acquisition and to set protective zoning and land use standards within the Gateway Conservation Zone, which runs from ridgeline to ridgeline in the eight towns, encompassing some 30,000 acres. The Commission developed initial minimum land use standards in

1974 for such criteria as building height limits, lot coverage and setbacks from the River, which were in turn adopted by the Gateway towns.

Today, the lower Connecticut River is both a prominent success and a threatened resource. The area has received well-deserved recognition under the Ramsar Convention on Wetlands of International Importance, and from The Nature

Conservancy as a Last Great Place. However, its increasing popularity for boating, birdwatching and other recreational uses, and for highly visible "trophy homes" has led many area residents to question whether incompatible development would forever change the Gateway's scenic character. Spurred by public input received during a series of River Roundtables in 2002, the Gateway Commission took up the challenge of managing the area's future development. After a lengthy process of consultations with local stakeholders, officials and citizens, including several public meetings, the Gateway Commission substantially revised its land use standards for the first time in almost 30 years.

Adopted on February 26, 2004, the new standards do not limit the size of new residential structures, but aim to reduce their visual and environmental impact on the River's landscape. New provisions include a 100-foot setback from the river for



"McMansions:" Wooded buffers maintain the vegetation's ability to protect the River from pollution, as well as to help screen development. (photo: C. Joyell, CRWC)

new structures (increased from 50 feet), a 50-foot vegetated buffer, new provisions for calculating height limits from the original grade, and a special permit review for new houses over 4,000 square feet that will require minimal disturbance and context-sensitive design. The revised standards are now in the process of being adopted by the individual Gateway towns. For further information on the

Gateway Commission or the Gateway standards, contact the Commission's staff at the Connecticut River Estuary Regional Planning Agency, 860-388-3497, or www.crerpa.org/gateway.html.

Benefit for Long Island Sound - Help for Distressed Communities

As discussed in previous issues of *Sound Outlook*, Connecticut is committed to reducing nitrogen discharges from municipal sewage treatment plants (STPs) in order to meet the Total Maximum Daily Load (TMDL) for Long Island Sound (see Issue 9, available at www.dep.state.ct.us/olisp/soundout/sofeb02.pdf). The Department of Environmental Protection is presently working with 79 communities across the state to upgrade their STPs. Connecticut has been fortunate to secure federal funds through the Long Island Sound Restoration Act (LISRA) amendment of section 119 of the federal Clean Water Act and has dedicated those funds to helping distressed communities reduce their nitrogen discharges.

Based on physical and economic thresholds established by the federal Department of Housing and Urban

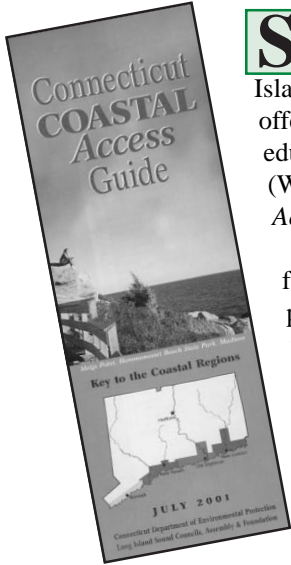
Development, the Connecticut Department of Economic and Community Development has identified 25 communities in the state as distressed. Since 2001, Connecticut has received nearly \$5.4 million in State and Tribal Assistance Grants through the Long Island Sound Study to assist these distressed communities in implementing nitrogen removal upgrades at STPs. The federal funds are awarded as a 50% grant with the remainder of the costs eligible for state Clean Water Fund (CWF) financing available on a first-come, first-served basis.

One of the LISRA projects is the upgrade of the Town of West Haven's STP to provide additional capacity for biological nutrient removal. The \$612,000 planning project will help reduce the average concentration of nitrogen discharged in the plant's effluent

to the 6 to 8 mg/l range, thereby helping West Haven to meet its commitment to the state's nitrogen reduction goal. Assistance has also been given to Norwich, where the STP discharges to the Thames River and, eventually, eastern Long Island Sound. A \$377,000 planning project will evaluate how to improve nitrogen removal at the city's STP.

To date, 23 distressed communities have been aided by LISRA funding. The DEP has received grant applications totaling over \$6.3 million from ten distressed communities for the remaining funds for STP design and planning projects. LISRA authorized funding for up to \$40 million dollars through 2005. Ideally additional funds will be allocated in the 2005 federal budget. For more information, contact Bill Hogan at 860-424-3753 or by e-mail at william.hogan@po.state.ct.us.

SPOTLIGHTED Coastal Access: Barn Island Wildlife Management Area

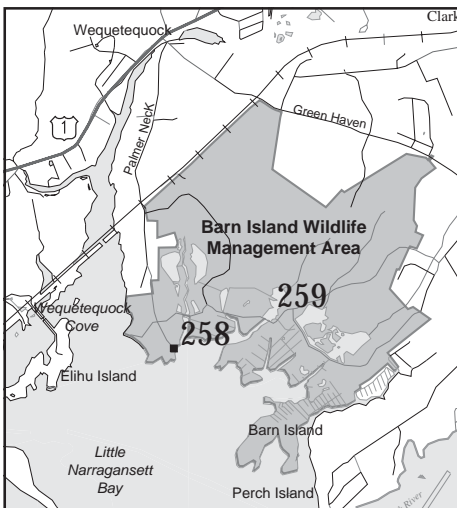


Summer arrives this month, and the promise of longer, warmer days draws us once again to the shores of Long Island Sound. If you are looking for a coastal destination that offers natural panoramas, recreational opportunities and educational benefits, Barn Island Wildlife Management Area (WMA) in Stonington – site #259 in the *Connecticut Coastal Access Guide* - has something for everyone.

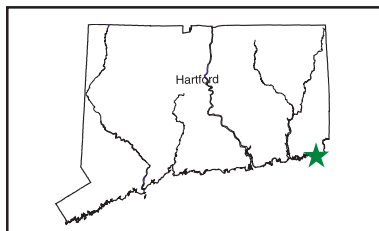
More than four miles of foot trails lead the casual hiker to a fascinating variety of coastal wetland and forest habitats, and provide exceptional opportunities for birdwatching and other wildlife observation, not only during the summer months but in all seasons. Some of the birds that may be seen at Barn Island are highlighted in the Spotlighted Coastal Resource article on page 5 of this issue. The foot trails are described on a map produced by a member of a local Boy Scout Troop. The map is generally available at the trailhead opposite the parking area on Palmer Neck Road. The main route leads from the trailhead along a dike road and past several tidal ponds that were originally created to preserve freshwater waterfowl habitat and that have since been restored to fully functioning estuarine systems. Open wetland expanses south of the dike road offer scenic views of Little Narragansett Bay and Rhode Island's Napatree Point barrier beach. The trails may be used for cross-country skiing and snowshoeing during winter months. Additional foot access to the newly acquired property described on page 1 of this issue will be developed in the future.

The waters of Little Narragansett Bay and Long Island Sound may be accessed for saltwater fishing or other recreational navigation, including canoeing and kayaking among the marshes, from the Barn Island state boat launch (site #258 in the *Connecticut Coastal Access Guide*). The boat launch and parking lot have been closed for renovation, but are expected to re-open by approximately July 1 of this year. Deer and waterfowl hunting are also allowed in the WMA with a valid hunting license. Hikers and other non-hunters should wear protective orange clothing during hunting seasons, which are posted on the DEP website.

While the warmer weather draws us to the coast, Barn Island welcomes visitors year-round. So if you enjoy Barn Island this summer, be sure to return to view the brilliant colors of fall and the dramatic landscapes of winter. Barn Island WMA may be reached by taking Exit 91 off I-95 and proceeding south on North Main Street to U.S. Route 1, Stonington. Turn left onto Route 1, right onto Greenhaven Road, and then right onto Palmer Neck Road. For information about the *Connecticut Coastal Access Guide*, call the DEP at 860-424-3034. 🌿



Aerial view of Barn Island marshes and surrounding upland.



LOOK OUT for upcoming events!!

June: Rivers Month

July: Osprey young begin to fly.

Norwalk Maritime Aquarium

Marine Life Study Cruises

Weekends in June, Daily in July & August,
1:00 pm. Cruise Norwalk Harbor aboard the research vessel *Oceanic* to collect marine life. Learn about different sampling techniques. Call 203-852-0700 for program, cost and registration information.

Maritime Explorers Summer Program **June 21 through August 27**

One and two week educational, age specific programs in marine science, sailing, boat building, SCUBA diving.

Brochure available at www.maritimeaquarium.org/whats_going_on/kids_programs4.html. Call 203-852-0700 for program, cost and registration information.

Current Exhibits

Sea Turtles.

Coral Reefs, Clownfish.

Harbor Seal Feedings

The Aquarium's harbor seals are fed daily at 11:45 a.m. and 1:45 & 3:45 p.m.

Connecticut's Rivers Educator Workshop

Tue., August 24, 2004, 8:30 AM - 4:30 PM

Kellogg Environmental Center, Derby
Explore the history and ecology of the Naugatuck and Housatonic Rivers, and how they affect Long Island Sound. The workshop is for educators working with grades 6-12. Call 203-734-2513 to register.

Late August: Plovers and terns begin southward migration.

August-September: Sea turtles move into LIS. Boaters, please watch out for them!

Coastweeks Events

Sun., Sept. 12: Coastweeks Row Regatta

2,000 meter regatta on the Mystic River for racing shells and traditional pulling boats. Call CT Sea Grant, 860-405-9110, for information.

Sat., Sept. 18: International Coastal Clean-up Day

Volunteer to be part of a global event to help rid our shorelines of marine debris. Call Save the Sound, 1-888-SAVE LIS, for information.

Sat., Sept. 25: National Estuaries Day

Please be sure to check the Calendar of Events listed on DEP's website:

www.dep.state.ct.us

Explore the Shore – On-line!

Look for the *Connecticut Coastal Access Guide* this summer on the DEP website: www.dep.state.ct.us. Coastwide, 288 sites are listed that offer recreational and educational opportunities for the entire family. Amenities and directions are described for each access site.

Putting Your LIS Plate Money to Work: New Haven Land Trust Works Hard to Preserve the Marshes of Morris Creek

Urban marshes such as those at Morris Creek in New Haven, though small in size in comparison to the Stonington property described on the cover of this issue, are critical to maintaining the health of Long Island Sound and its resources. With a \$25,000 grant from the Long Island Sound Fund, the New Haven Land Trust is undertaking an ambitious project to purchase a series of wetland and upland parcels along Morris Creek, with the ultimate goal of preserving the entire marsh. This area is one of two remaining natural marshes in New Haven, and abuts Lighthouse Point Park. The Park provides an ideal spot for fall hawkwatching, and is used by the



Morris Creek wetlands protected through New Haven Land Trust initiative.

New Haven Bird Club to monitor migrating songbirds. The American bittern, a state-listed endangered species, is among the many birds sighted in the marsh.

At one time, the 12-acre marsh was headed for extinction. In 1917, local approval was granted for a subdivision called Marion Park. The marsh was divided, on paper, into 44 building lots, and rights-of-way were designated for city roads. Lots were sold, but fortunately, work on the development never started. The marsh survived, surrounded by dense residential development and a growing urban port. Though small, the Morris Creek marsh helps to protect Long Island Sound by filtering pollutants from surrounding development, producing energy to supplement the marine food web, and providing habitat for a variety of

estuarine and marine species.

Thanks to the passage of the Connecticut Coastal Management Act and the Tidal Wetland Act, many of the previously sold parcels are not developable today. However, the Land Trust, with assistance from City of New Haven has



Protected Morris Creek wetland parcel.

plans to ensure that they are permanently preserved. As of March 2003, the Land Trust owned 11 of the 40 parcels, and another 6 were in the City approval process for transfer to the Land Trust. With these 17 parcels, the Land Trust has already preserved half of the marsh.

For more information about the Long Island Sound Fund, please contact the Long Island Sound Fund Coordinator, Kate Hughes Brown, at 860-424-3034, or visit our website at www.dep.state.ct.us/olisp/licplate/licplate.htm. For information on ordering a Long Island Sound plate, call 1-800-CT-SOUND. 🌿

Purchase of a LIS License Plate supports the LIS Fund



As of March 31, 2004:

- Plates sold: 123,461
- Funds raised: Over \$4.3 million
- Projects funded: 246

The LIS Fund supports projects in the areas of education, public access to the shoreline, habitat restoration, and research.

For information on ordering a Long Island Sound license plate, call 1-800-CT-SOUND.

Sound Tips

Looking for More Information on LIS?

In *Sound Outlook* we offer information about coastal access, educational and recreational opportunities, including activities conducted by nature centers and environmental organizations as highlighted in our **LOOK OUT for upcoming events** column (see page 3). However, there are many other sources of information about Connecticut's shore. The websites for some, but not all, are listed alphabetically below:

Audubon Rare Bird Alert

www.virtualbirder.com/vbirder/realbirds/rbas/CT.html

Bruce Museum of Arts and Science, Greenwich

www.brucemuseum.com

Connecticut College Arboretum publications

camel2.conncoll.edu/ccrec/greenet/arbo/pub.html

Connecticut River Estuary Regional Planning Association, Old Saybrook

www.crerpa.org

Connecticut Sea Grant

www.seagrants.uconn.edu

Denison Pequotsepos Nature Center, Mystic

www.dpnc.org

DEP Boating Division

www.dep.state.ct.us/rec/boating/index.htm

DEP State Parks website

www.dep.state.ct.us/stateparks/index.htm

DEP Wildlife Magazine

www.dep.state.ct.us/burnatr/wildlife/geninfo/cw.htm

Long Island Sound Resource Center, UCONN, Avery Point, Groton

www.lisfoundation.org/lisrchom.html

Project Oceanology, Groton

www.oceanology.org

Save the Sound, East Norwalk

www.savethesound.org

Schooner, Inc., New Haven

www.schoonersoundlearning.org

SCIENCE EpiCenter, New London

www.science-epicenter.org

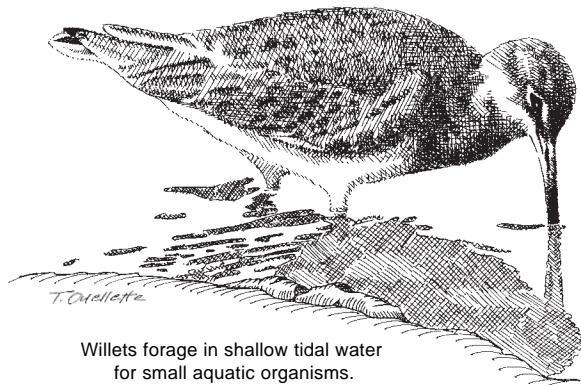
The Sound School, New Haven

www.soundschool.com

If you did not receive this issue of *Sound Outlook* in the mail and would like to be placed on the mailing list, please send your name and address to: *Sound Outlook*, Connecticut DEP, Office of Long Island Sound Programs, 79 Elm Street, Hartford, CT 06106-5127; or email your address to laurie.valente@po.state.ct.us.

SPOTLIGHTED Coastal Resource: The Birds of Barn Island

The marshes and associated habitats of the Barn Island Wildlife Management Area (WMA) were regarded by the late Dr. William A. Niering, an internationally renowned conservation biologist, as “the finest wild coastal area within the State of Connecticut.” These tidal wetlands are part of an extensive brackish marsh complex that is extremely valuable to coastal bird diversity. The marsh restoration that is ongoing throughout the marsh system and the expansion of the area described in this issue’s cover article have greatly enhanced the value of the marshes as habitat for birds year-round.



Willetts forage in shallow tidal water for small aquatic organisms.

Many of these species, some of which are briefly described below, are listed by DEP as endangered, threatened or of special concern in Connecticut.

The Barn Island marshes have been recognized under the North American Bird Conservation Initiative due to the presence of breeding populations of, among other species, saltmarsh sharp-tailed sparrow. This secretive sparrow is found only in the narrow strip of saltmarshes that fringes the U.S. Atlantic seaboard. Widespread loss, degradation and fragmentation of these marshes are the biggest threats to this species. Due in part to its interest in protecting saltmarsh sharp-tailed sparrow, the National Audubon Society has nominated Barn Island for inclusion in its Important Bird Areas Program, a worldwide initiative designed to better focus conservation and research efforts.


Similarly, willet, another recorded breeder at Barn Island, is considered a

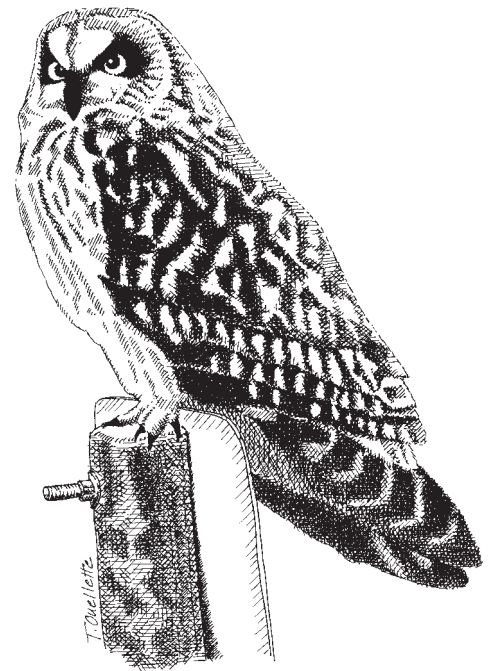
priority species under the U.S. Shorebird Conservation Plan, which describes the importance of habitat diversity to breeding, migrating and wintering birds. The plan focuses specifically on coastal, freshwater and brackish wetlands, forested wetlands, and mixed hardwood forests. The willet, a relatively large member of the sandpiper family, was probably a common inhabitant of Connecticut’s once abundant coastal marshes and beaches. Extensive, unregulated market hunting and egg collecting in the 1800s and early 1900s caused a serious decline in the willet population in the northeastern United States. There has been a slow comeback of the population, but habitat loss on coastal islands and in marshes jeopardizes further population recovery.

Other noteworthy nesting birds at Barn Island include seaside sparrow, least bittern and yellow-breasted chat, all of which are state-listed, and marsh wren. The endangered yellow-breasted chat, a member of the wood warbler family found in successional habitat, overgrown fields and abundant thickets, was a common summer resident in Connecticut from the late 1800s through the early 1920s. However, as farmlands and pastures disappeared and reverted to forests or were developed for human occupation or commercial use, the chat’s preferred habitat was lost and their populations declined. Fortunately, Barn Island today still provides the environment favored by this species.

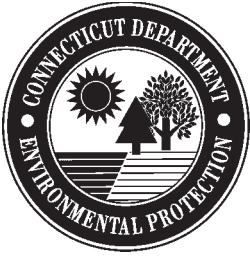
Barn Island serves as summer foraging habitat for a number of species that nest in nearby areas. Great egret, snowy egret and glossy ibis, which nest in colonies on islands along the Connecticut shore, forage in the marsh ponds and tidal waters of the WMA. Common terns and threatened least terns nest on nearby barrier beaches, including Sandy Point, and can be seen plunge-diving for fish in the tidal creeks. Barn Island is also an important

migratory stopover in both fall and spring, offering birds a place to rest and feed enroute to breeding or wintering grounds. Visiting species include shorebirds such as black-bellied plover, semi-palmated plover and lesser yellowlegs, and waterfowl such as gadwall and blue-winged teal. Winter visitors to the Barn Island marshes include the endangered northern harrier, formerly known as the marsh hawk, and the threatened short-eared owl. Short-eared owls hunt mainly at dawn and dusk, but on rare occasions can be observed gliding over the marshes in search of rodents, their main source of food.

The species described above are only a few of the many birds that can be seen at Barn Island. Further information about these birds, and others that utilize Connecticut’s coastal marshes, can be obtained from the DEP Wildlife Division (visit www.dep.state.ct.us/burnatr/wildlife/wdhome.htm) and the *Atlas of Breeding Birds of Connecticut*, available at the DEP Store. 



Short-eared owls roost on low perches or on the ground.



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Industry Update -- Reducing Pollution at Connecticut Marinas

In this issue of *Sound Outlook*, we begin a new column describing initiatives by Connecticut's marine industries to improve the quality of Long Island Sound.

The small steps that marinas and their customers across Connecticut take to reduce pollution can have a big environmental impact. To illustrate the potential effect, consider three changes in boat maintenance practices at a hypothetical 100-slip marina with boats averaging 26 feet in length:

- 1) A simple best management practice at marinas is the use of dustless vacuum sanders that collect approximately 95% of sanding dust. Estimating that the average 26 foot boat bottom can produce 4 to 6 pounds of dust, and that all vessels at the hypothetical marina are sanded with vacuum sanders once a season, the marina keeps 380 to 570 pounds of sanding dust out of the environment annually. Sanding dust may contain toxic materials, such as copper.
- 2) Shrink-wrap boat covers are not biodegradable and can take up a lot of space at landfills and trash-to-energy plants. A shrink-wrap recycler estimates that the used shrink-wrap from a 26 foot vessel weighs about 19 pounds. Our hypothetical marina keeps at least 1,900 pounds of shrink-wrap out of landfills or trash to energy plants every year by requiring that all boats be covered with multi-season, reusable boat covers, or that used shrink-wrap be recycled.
- 3) All the boaters at our hypothetical marina empty their on-board sewage holding tanks using one of Connecticut's 79 pumpout stations, 11 pumpout boats or 16 dump stations, rather than discharge untreated sewage directly into the marina basin. That keeps at least 1,000 gallons of waste out of the water assuming that each boater pumps out a 10 gallon holding tank once a season.

Luckily our hypothetical marina is not so far-fetched; many of Connecticut's more than 300 marinas use vacuum sanders, recycle shrinkwrap or encourage reusable boat covers, and provide for the proper disposal of boat sewage. Small steps do add up. For more information about pollution prevention at marinas and on boats visit: www.dep.state.ct.us/olisp/cleanmarina/index.htm.

Visit the DEP website at www.dep.state.ct.us

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