



BAYWATCH

Volume 14 Issue 1

JANUARY 2011

CITIZENS FOR THE PROTECTION OF WAQUOIT BAY CPWB

Nitrogen Nemesis

Jayne Abbott, Steering Committee Secretary

CPWB members who live on the Cape year-round may well have been reading articles in *The Enterprise* and *Cape Cod Times* about the serious problem of nitrogen loading, primarily from septic systems, in our coastal ponds and estuaries which results in algal blooms causing harm to shellfish and finfish habitat, loss of eelgrass, and poor water quality. Summer residents may also be aware of this serious problem as many other areas such as Chesapeake Bay have been similarly affected.

Since 1997 the U. Mass Dartmouth Coastal Program under Dr. Brian Howes has been sampling 89 estuaries in southeastern Massachusetts, largely on Cape Cod. The data are submitted to the state Department of Environmental Protection (DEP) and are the basis for the Total Maximum Daily Load (TMDL) of nitrogen for each water body. Each town must send DEP a plan for reaching the allowed limits.

The fifteen towns making up Barnstable County have created the Cape Cod Water Protection Collaborative in the hope that by working together the cost of sewerage a major part of Cape Cod could be reduced. Unfortunately little collaboration has been evident. Chatham is moving forward with a plan for the entire town, and they have been the beneficiary of several large grants which will reduce the cost to its citizens.

Closer to Waquoit Bay the Town of Mashpee already has eight private treatment facilities which could become part of a town-wide system. Tom Fudala, Mashpee Town Planner and longtime member of the Sewer Commission, says they plan three municipal systems with traditional treatment. For Pirates Cove at the mouth of the Mashpee River they hope to install a permeable reactive barrier (PRB), one of the new alternatives to traditional sewers.

The Town of Falmouth's 2009 initial draft plan called for sewerage the entire area south of Route 28 from Little Pond to Waquoit Bay in Phases 1 and 2. The estimated cost of \$600 million caused many citizens to request further study and resulted in the creation of the Comprehensive Wastewater Management Review Committee of nine members chosen by the Selectmen last March. The committee met regularly inviting knowledgeable people to present information on many facets of wastewater management. They discussed additional solutions (not all of which have received approval by the state DEP) including "cluster" (small treatment) systems, Nitrex or other barrier applications, alternative toilet designs, wider openings into Vineyard Sound, control of road runoff and fertilizer use, and oyster culture. Three public meetings were held. The committee presented a new plan to the Board of Selectmen which calls for using the existing West Falmouth plant for treatment of the added sewage. They also moved the north and east sides of Waquoit Bay to Phase 3, one that is slated to begin in 2036 due to low population density. This is very disappointing to Mashpee which had hoped to work with Falmouth on alternatives suitable for both towns. Also it would have reflected the Cape Cod Collaborative's goal of shared wastewater projects. Since Waquoit Bay has been investigated by many scientists over the years, their studies could be beneficial in specific wastewater plans.

The CWMP suggests using some alternatives in the eastern portion while proceeding with sewerage in the Little Pond watershed. An article in the warrant at next April's Town Meeting will request \$6,000,000 for funding alternative demonstration projects, completing the UMass Dartmouth work on establishing TMDL's for the town's remaining estuaries, some emergency repairs to the existing sewer system, and funding preparation of a comprehensive wastewater management plan (CWMP) for submission to the state DEP. Construction would start in 2016, at the earliest.

The committee's estimated project costs for Phases 1 and 2 is \$290,000,000. Bonding will be staggered with various interest rates, and funding sources will include the State Revolving Fund, property tax levy, and betterment assessments, which will require more study.

As a supporter of greater use of alternatives to reduce the cost of sewerage, the writer believes that alternatives could be put in place more quickly than construction of large-scale collection and treatment and thus would begin the desired reduction in nitrogen much sooner.

Waquoit Bay National Estuarine Research Reserve, WBNERR, One of Twenty-eight

What is the NERR in our name, WBNERR

The National Estuarine Research Reserve was established by the Coastal Zone Management Act of 1972 to provide opportunities for long term estuarine research and monitoring, estuarine education and interpretative, resource management and to provide a basis for more informed coastal management decisions. This network of 28 reserves connected nationally through the National Oceanic and Atmospheric Administration (NOAA) to address regional and coastal management needs. NOAA provides funding, national guidance and technical assistance.

Each reserve is managed on daily basis by a lead state agency or university, with input from local partners. In Massachusetts the State Department of Conservation and Recreation (DCR) administers land classified as an Area of Critical Environmental Concern (ACEC). Waquoit Bay received the designation ACEC when established in 1979. The designation does not create new regulations, nor does it supersede local regulations or zoning. The DCR works closely with the Massachusetts Office of Coastal Zone Management (MCZM) regarding coastal ACEC's. These acronyms reflect the cooperative stewardship efforts from citizens and Federal agencies to preserve, restore and enhance the natural resources of the area.

In the Northeast there are five Reserves:

Narragansett Bay, RI: Designated NBNERR in 1980; upland habitat located on Prudence, Patience and Hope islands in the center of Narragansett Bay.

Hudson River, NY: Designated HRNERR in 1982; a network of 4 coastal wetlands located along 100 miles of the coastal estuary.

Waquoit Bay, MA: Designated WBNERR in 1988: 2,700 acres including salt ponds, salt marshes, barrier beaches/dunes, pine and oak forests, open water, Washburn Island.

Great Bay, NH: Designated GBNERR in 1989; 25,000 acres of tidal waters and uplands.

Wells, ME: Designated WellsNERR in 1990; 2,250 acres of salt marsh, freshwater wetland, beach, dunes, forest and field.

The National Estuarine Research Reserve System is a network of 28 locations in 22 states and Puerto Rico. The newest addition established October 26, 2010 when Wisconsin officials designated Lake Superior National Estuarine Research Reserve, will help understand the unique nature of fresh water estuaries. Research and monitoring programs of all the estuaries help evaluate the potential impacts of climate change, community development and population growth to ecosystems that will provide scientifically sound information to help communities and coastal managers deal with the impacts. Each NERR is a bio region offering opportunities to protect our natural water systems, flyways for migrating birds and through research restore coastal ecosystems.

January brings the enthusiasm of planning our calendars for the New Year. In our home the map comes out and in our list of what to do is the question of a location to visit we ask "is there an estuary to visit?" In the past years we have walked the paths in WellsNERR, visited Rookery Bay NERR to walk and take a boat ride to see birds return at dusk to their rookery. The unique opportunity on taking an Alaskan cruise was to visit Kachemak Bay NERR in Homer, AK. If this winter you are in Florida take time to explore the paths and visitor center at Rookery Bay NERR, Naples. The guided tours and programs on birds offer great experiences to take home.

Information for this article was gathered from the National Estuarine Research Reserve System web site www.nerrs.noaa.gov

Waquoit Bay Reserve Hosts DCR Training

In December, Joan Muller and Nancy Church welcomed DCR staff from across the state to the Reserve for a week-long National Association of Interpretation training course to become Certified Interpretive Guides. DCR staff from the Bureau of Ranger and Interpretive Services, from the top of Mount Greylock to the Boston Harbor Islands, and everywhere in between attended the workshop led by Tim Rayworth, DCR's Environmental Education Coordinator. Most of the group stayed in the gatehouse while attending the course and were grateful for the recent updates and weatherization projects completed by WBNERR staff. Classroom sessions were held in the boathouse, which provided the perfect backdrop and inspiration for planning programs and developing materials to connect park visitors to their resources. Each participant prepared and presented a short interpretive

program that was video- taped, discussed and critiqued by their peers in an effort to improve everyone's skills. Each evening, members of the group took turns preparing family style dinners before returning to work researching and planning for their presentations.

Future plans include training DCR personnel from other departments to use interpretive techniques when communicating with park visitors. DCR recognizes the importance of the first impression when someone visits any of our state parks. It is often the life guard at the beach, or the person mowing the lawn, that has the first contact with the public. The Interpretive Guide workshop is one of the first steps in a long range plan to improve customer service and visitor experiences across the state.

CPWB Donations

CPWB received several special donations in the last half of 2010: \$400 for science school scholarships or other educational purposes given by a regular anonymous CPWB member; \$175 in memory of Miriam Chase Chapman; \$100 in honor of Joel Kanter's 60th birthday; \$100 from the Seconsett Island Association; and \$150 from the Menauhant Yacht Club Ladies Auxiliary in appreciation for an exploratory program with the young people of their community presented by one WBNERR intern and one seasonal staff member. Thanks to all the generous donors. We also appreciate Nancy Church's invitation to families of science school attendees to become members of CPWB, and we thank the fifteen who responded.

SEASIDE GARDEN TOUR a Special Event and Great Success!

Toni Grady, Fundraiser Chairman

On August 4, 2010, CPWB sponsored the first of what we hope to be many, a new type of educational and fund raising event a garden tour! The SEASIDE GARDEN TOUR demonstrated ecologically sound gardening techniques for coastal and Cape homes. The garden committee made up of WBNERR staff, CPWB members and WBNERR volunteers started planning this event in November of 2009.

Seven area home owners agreed to display their gardens, each reflected the natural landscape and environmental gardening our goal. The Falmouth Art Guild joined us by having artists in the gardens to help us see the garden through their eyes. The tour of the gardens was followed by demonstrations at the Visitor Center, tour of WBNERR property and gardens. In the last hour of the tour refreshments were served at the Reserve while Dr. David Diamond entertained us with show tunes. He captured the audience as they enjoyed the Reserve in a special way.

Gardening discussions, free soil testing for attendees, and distribution of pertinent literature was part of the event. The committee spent months preparing every detail. Thank you to all the WBNERR staff, especially Joan Muller, Nancy Church, Mary Kay Fox, Laurie Tompkins and Sheri Profit provided us with topic and mental support! The committee, chaired by Toni Grady, Maureen Jankauskas co chair, included Tina Maloney, Jeanne Rooney, Terry Soares, Dianne Haagensen, Beverly Cobuzzi, Kathy Clarke and Maureen Jankauskas. It was this committee who must be given credit for putting the tour together. All worked hard, while enjoying taking part and forming new friendships as well!

The Steering Committee would like to report that the whole day was a fabulous success! More than 400 purchased tickets to attend the event. The proceeds of the ticket sales exceeded our expectations. The donations are to be used to benefit WBNERR research and educational programs.

The CPWB Garden Tour Committee, the Steering Committee as well as the staff at WBNERR especially thanks the seven homes who opened their gardens and allowed us to include them in our tour. These owners worked all summer preparing their gardens for the tours. Some of them even served on the tour committee, making signs, selling tickets, and on the day of the tour they were available to answer questions. They were all gracious hosts and shared not only their gardens but their knowledge as well. We are most grateful to them.

The garden owners are:

- Linda Despres, Ostrum Road
- Eleanor and Bill Kopp, Hamlin Point
- Kathy and Don Clarke, Hamblin Point
- Sunter and Kati Golzmann, Hamblin Point
- Sam and Freda Maldari, Hamblin Point
- Tina and Bob Maloney, Menhaunt
- Dell Drummy, Menhaunt

Thank you to the local businesses who assisted in the sale of tickets and ALL who volunteered their time making hard work fun and helping to educate the community about WEBNERR.

Our long list of contributors and volunteers:

Soares Flower Garden Nursery, the staff sold tickets for us and gave us a day to dress our porch with plants and freshened up the Visitors Center garden. They eliminated the weeds, edged and planted such a special gift.

Inez Norbis, Soil Testing expert brought aid to many anxious gardeners.

Maxine Wolfset, photographer and film producer created a CD you may have seen, the Seaside Garden Tour for benefit of WEBNERR on our local cable station.

Roche Bros. Market, ticket sales

Pura Vida Spa, ticket sales

Moonakis Café, ticket sales

Jack Conway Real Estate Co., ticket sales

Dr. David Diamond, vocalist and volunteer, he captured the audience.

Falmouth Artist Guild, Mimi Gregory and the artists who added to our day

Falmouth Garden Club Conservation Committee

Eleanor Kopp, Master Gardener, guidance and support from the start to finish.

C.L. Fornari, guidance and support from her Saturday radio program

West Falmouth Library

Betsey Wood

Julie Drake

Jewel and Barry Blake

Joan Francis

Merry and Steve Howlett

Boby Anderson

Laurie Wehr

Serena Borankay

Barbara Urban

George Noyes

Don Grady, Jr.

Jane Abbott

Bob MacFadyen

Mike O'Leary

Peggy Jones

Terry Kelley

Carole Johnson

Rita King

Roberta Clarke

Jill Tompkins

Will Clarke

Teri Navickas

Hyla Lyman

Donna Jewett

Pat Cowan

Michael Talbot

Tricia Herlihy

CALENDAR Notes:

The Reserve calendar is our best resource for what is happening. WEBNERR has been having public meetings to inform the community of river restoration studies. Mark your webpage to make the waquoitbayreserve.org a favorite site to visit. Maybe you would like to make it your home page. There is more happening and no chance you'll miss an opportunity.

CPWB Meeting – January 24th at 6:00pm, in WEBNERR Visitor Center – please join us. There are a number of projects needing assistance. Time commitments are flexible.

While it's early in the New Year for actual dates, write yourself a note to check the website for events. There will be an Estate Tour of WEBNERR building and grounds on January 11th. A program "Getting There: Bikes, Buses and Hybrids is scheduled for February 1st at 7:00pm.

April: Annual Coffee House for Earth Day, always a sellout; try to register early.

June: Washburn Island Cleanup – date will be announced for a Saturday in June.

July: Tuesday Nights on the Bluff

August: Block Party

Look for the white board in the Visitor Center. The white board is there to post the date, time of bird or animal sightings on WEBNERR grounds. Next season watch for the osprey to return, the plovers, maybe the sands will shift to uncover another ancient forest. Stop by the Visitor Center for what is going on, please add your notes to the white board, our chance to share what is happening on the property.

WBNERR Programs for 2011

Although the complete schedule of programs and activities for 2011 is still being developed there are a number of offerings already in the works. Additional programs will be posted to the web site as they are completed. The monthly estate tours will continue as a way to attract more people to the Reserve. It is also a great way to learn about the past and present uses of the historic buildings and facilities as well as learning more about future plans to enhance the site. The tours are scheduled on different days and times to attract a variety of people to visit and learn about the Reserve. The next tour takes place on January the 11th at 9:30 AM and again on February 23rd at 2:00 PM. Please meet in the visitor center for this one hour program.

Summer Science School, sponsored by CPWB, will run from July 5th through August 12th this year. Each of the weekly sessions will focus on a different age group from grades 2 through 12. Tidal Quest, a field science program for high school students will run the week of July 18th and will connect teens with students in similar summer programs throughout New England. Participants will be invited to attend a teen summit at the New England Aquarium on October 1st. Information and registration forms can be downloaded from the Reserve's web site, www.waquoitbayreserve.org or contact Nancy Church at 508-457-0495 ext.125.

School vacation programs for families will be conducted during the weeks of February 21st and April 18th. There will be indoor and outdoor activities including quest adventures, games, crafts, stories and nature back packs to borrow filled with field guides and ideas for exploring the Reserve. These programs are free and people can register either on-line or on the phone.

CPWB's first newsletter for 2011 is sharing with our members the research, education and staff news to keep you informed. We hope you are as excited about the material to continue your support and active participation in the coming year. Please join us at the next CPWB meeting at WBNERR.

Membership CPWB

Our membership year runs from July 1st through June 30th. Please check to see if your membership is current.

\$ 10.00 Membership \$ _____ Contribution

Names: _____

Address: _____

Phone: _____

Email Address _____

Summer Address: _____

I would like to be on the Steering Committee: _____

I would like to work on a CPWB project: _____

Please make checks payable to CPWB, P.O. Box 3021, Waquoit, MA 02536

Your \$10.00 membership fee supports educational programs. CPWB thanks the members who give additional contributions. We are committed to providing critical support through our membership base to support WBNERR.

BAYWATCH

CITIZENS FOR THE PROTECTION OF WAQUOIT BAY CPWB

CPWB is a non-profit organization concerned with the health of the area's waters. CPWB serves as the Friends Group for the Waquoit Bay National Estuarine Research Reserve, supporting their educational programs and seminars.

CPWB MEMBERS JANUARY 2011 NEWSLETTER

Nitrogen Nemesis

Waquoit Bay National Estuarine Research Reserve (WBNERR), One of Twenty Eight

Waquoit Bay Reserve Hosts DCR Training

Seaside Garden Tour a Special Event and Great Success

Calendar

WBNERR Programs for 2011

Citizens for the Protection of Waquoit Bay CPWB

P.O. BOX 3021

WAQUOIT, MA 02536

This document was created with Win2PDF available at <http://www.win2pdf.com>.
The unregistered version of Win2PDF is for evaluation or non-commercial use only.
This page will not be added after purchasing Win2PDF.