

# Shore Lines

Newsletter of the Association to Preserve Cape Cod

Spring 2017

Climate change will impact the Cape in significant ways, especially as sea levels rise. With national leaders retreating from a progressive climate change policy, APCC is intensifying our push for action on climate change issues that threaten the region. See page 2 to find out how.



**APCC**  
Association to  
Preserve Cape Cod

An exceptionally high tide offers a preview of future sea level rise.

Photo credit: Tara Racine



## APCC and the EPA

by Ed DeWitt, Executive Director

Many APCC members voiced support for our comments about the new Environmental Protection Agency administrator, Scott Pruitt, during the confirmation process. It was flattering to have Senator Elizabeth Warren read our letter during the Senate debate on Mr. Pruitt's confirmation. While APCC from time to time has been critical of the EPA, mostly for inaction, we have also worked closely with the agency on projects that had positive impacts on Cape Cod's water and air quality. Our work as the regional service provider for the MassBays National Estuary Program is made possible through EPA funding passed through the state. This program allows APCC to provide services that benefit the 11 towns that border Cape Cod Bay. In 2016 APCC turned \$61,000 in EPA funding into more than \$600,000 in direct, measurable impacts.

Likewise, in 2016 APCC received an EPA Southeast New England Program grant of just under a half million dollars to improve stormwater management in the Three Bays watershed of Barnstable. The goal of the three-year project is to reduce contaminant runoff in the watershed and demonstrate methodologies that can be transferred elsewhere on Cape Cod. In addition to reducing contaminants in ground and surface waters, the project aims to reduce contaminant sources such as fertilizer use through public engagement. In addition to APCC projects, the EPA is a critical player in the Clean Water Act Section 208 area-wide water quality plan. APCC praised the innovative work done on the 208 plan and the facilitation by the EPA.

At this point, APCC is unsure of the future of EPA grants and programs. We have not always agreed with the EPA, but without question it has been a positive force in environmental protection and restoration for the region. We are concerned about the future based on the announced changes in priorities at the EPA. Changes in regulations that make it easier to pollute are not in the public interest. Budget cuts and program reductions will almost assuredly impact water quality on Cape Cod. APCC is devoting more staff resources to monitor developments in the agency and advocate for protecting programs important to the Cape.

## APCC expands climate change programs in response to evolving policy challenges on the national level

From our beginnings nearly half a century ago up to the present, APCC has relied on sound science to guide our policies and actions. This practice holds true with climate change. The science is in: climate change is real, it is caused by the burning of fossil fuels for energy and its effects are already being experienced worldwide, including here on Cape Cod.

Especially now, when some voices question or even seek to suppress the scientific evidence behind climate change, APCC is fully engaged in the regional, state and even national discourse to promote action to reduce the

use of fossil fuels and to adapt to the impacts of a changing climate.

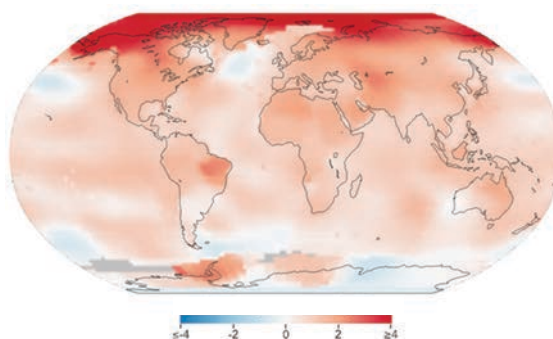
APCC is, and will continue to be, a strong voice for the environment.

What exactly is climate change?  
How is it affecting our planet?  
Our region?

Visit  
[www.apcc.org/climatechange](http://www.apcc.org/climatechange)  
to find out.

### 2016 Temperature Anomaly (°C)

Yearly analysis of world-wide temperatures shows that 2016 was the warmest year ever recorded since modern record keeping began in 1880. It is the third consecutive year that a record has been set, and the fifth time in the 21st century for record-high temperatures. Image source: NASA/GISS



What follows is a brief description of APCC's current climate change initiatives. For more information, go to [www.apcc.org/climatechange](http://www.apcc.org/climatechange).

- 🌿 **Cape Cod Climate Change Collaborative:** APCC is a founding member of the Cape Cod Climate Change Collaborative, which is initiating a Cape-wide campaign to promote regional actions to mitigate the impacts of climate change and reduce our regional carbon footprint.
- 🌿 **Massachusetts Climate Change Adaptation Coalition:** APCC participates in the Massachusetts Climate Change Adaptation Coalition, which advocates for passage of the Climate Adaptation Management Plan (CAMP). The legislation would require the state to develop a comprehensive plan for protecting environmental resources, public health, public safety and the economy from climate change impacts.
- 🌿 **Cape Cod Coastal Resilience Project:** APCC is partnering with the Cape Cod Commission on a NOAA grant to identify the Cape's coastal vulnerabilities, identify technologies and strategies to address vulnerabilities, evaluate costs and risks, and engage the public in choosing a path forward for our region.
- 🌿 **Evaluating the Effects of Sea Level Rise on Cape Cod's Aquifer:** Through a grant from the Massachusetts Environmental Trust, APCC commissioned a U.S. Geological Survey study to model the effects of sea level rise on the mid-Cape's ground water system. The study found that rising sea level could raise the water table and adversely affect public and private infrastructure.
- 🌿 **APCC's Restoration Coordination Center:** APCC's RCC assists towns with implementation of environmental restoration projects, including coastal resilience projects that help protect the Cape's environment and population from climate change impacts. APCC also conducted an assessment of Cape Cod salt marshes to identify those with the potential to migrate inland as sea levels rise.
- 🌿 **APCC Climate Change Advocacy:** Whether submitting an *amicus curiae* brief to the Massachusetts Supreme Judicial Court over meeting emissions reductions benchmarks in the Global Warming Solutions Act or voicing concern to the U.S. Senate about potentially harmful climate change policies under a new EPA administrator, APCC is speaking out on climate change issues.

## APCC's advocacy program identifies priorities for 2017-2018 session

APCC is closely tracking over 25 bills filed in the state legislature for the 2017-2018 legislative session that are relevant to environmental issues on Cape Cod. The following are some of the high priority bills APCC is actively supporting.

- 🌿 **An Act Relative to a Climate Adaptation Management Plan in Response to Climate Change** (Sen. Pacheco, Rep. Smizik): Known as the Climate Adaptation Management Plan (CAMP), it requires the state to develop a comprehensive plan to protect the state's citizens, economy and environment from climate change impacts.
- 🌿 **An Act Building on the Future of the Commonwealth** (Rep. Kulik, Rep. Peake): A refiling of the state land use and zoning reform bill, this legislation improves the ability of municipalities to adopt smart growth planning and to protect natural resources.
- 🌿 **Pilgrim Nuclear Power Station** (Sen. Cyr, Sen. deMacedo, Rep. Peake, Rep. Whelan): Motivated by ongoing concerns regarding the Pilgrim Nuclear Power Station, several bills were filed by Cape Cod state legislators that address emergency planning and decommissioning issues.
- 🌿 **An Act to Sustain Community Preservation Revenue** (Sen. Creem, Rep. Kulik): This bill increases the amount of registry of deeds recording fees dedicated as state match for local Community Preservation Act funds, with the goal of maintaining a 50 percent minimum state contribution.
- 🌿 **State Budget:** APCC is a member of the Green Budget Coalition advocating for restoring environmental program funding to one percent of the state operating budget. Current environmental funding is only 0.6 percent.





Bacteria contamination from stormwater runoff has caused shellfish bed closures in the Three Bays embayments. Photo credit: Three Bays Preservation

**You have a say in Cape Cod's future.**

**Without the generous support of concerned individuals like you, APCC could not continue the important work we do every day—protecting Cape Cod's fragile environment.**

**Please use the attached envelope to send in your donation today, or go to [www.apcc.org](http://www.apcc.org) to make a secure online contribution.**



Cape Cod Academy student Junqing "Simon" Xu assisted APCC staff with a salt marsh project in Brewster this February.

## Cleaning up Three Bays through stormwater management

A significant stormwater management project to improve water quality in Barnstable's Three Bays watershed is moving forward. Under the management of APCC's Restoration Coordination Center, the goal is to reduce pollution from stormwater runoff and fertilizer use by treating the water to remove nutrients and bacteria before it enters the bays. Excess nutrients can cause major algal blooms and fish kills, and high bacteria counts result in shellfishing and beach closures. The project includes construction of two or more stormwater treatment systems using innovative "green" technology, incorporating plants to maximize the amount of pollution removed.

APCC hired Horsley-Witten Group as the stormwater engineering firm to complete assessment, prioritization and design of the treatment systems. Field assessment of the watershed to examine stormwater runoff problem areas will begin this spring. A report on prioritized treatment sites will be completed by end of summer.

APCC along with our partners, Three Bays Preservation and the town of Barnstable, will host public meetings in April to discuss stormwater pollution impacts on the bays, provide project overview and receive input about areas to include in the initial site assessment. We will also host a demonstration rain garden workshop at the Osterville Library in June. Follow-up meetings in August will discuss the top priority sites proposed for installation of the stormwater treatment systems. Construction won't get underway until late 2018, but now is a great time for residents to get involved to learn more about stormwater management and help with this project. (See calendar of upcoming events on page 6.) Contact April Wobst at [awobst@apcc.org](mailto:awobst@apcc.org) for more information.

## CCA student delves into salt marsh science

Junqing "Simon" Xu, a science intern from Cape Cod Academy (CCA), assisted APCC staff with salt marsh monitoring at the Stony Brook salt marsh this past February. Simon is attending CCA as an international student from Shanghai, China.

Through CCA's Science Internship Program, Simon worked with APCC staff during his school vacation to assist with and learn about salt marsh restoration and associated field monitoring procedures.

After introductory reading about salt marsh restoration, Simon assisted with measuring and mapping salt marsh vegetation at the Stony Brook salt marsh in Brewster using a GPS device, photo-documenting the marsh from previously selected GPS locations, collecting water quality readings, and entering and organizing field data in a spreadsheet.

APCC's monitoring at the Stony Brook salt marsh is part of an ongoing effort to measure the success of a tidal restoration project completed in 2010. APCC was a member of the project team.

Simon's work served as an educational experience and also made a real contribution to APCC's ecological monitoring efforts. To fulfill the requirements set by CCA's science department, Simon will complete a report and presentation summarizing the work he did during his internship.

Currently a junior at CCA, Simon is interested in chemistry and hopes to continue his education in the U.S. and to attend New York University.

*There's more to learn at APCC's website!  
Check it out at [www.APCC.org](http://www.APCC.org)*

## Cheryl Lubin joins board of directors

APCC welcomes Cheryl Lubin to APCC's board of directors. Cheryl joined the board in February to fill an unexpired term.

Cheryl has had a long career in the life sciences industry working in operational and executive management roles. For the past 10 years she has been an independent consultant and advisor to investors, inventors, academics and start-up companies. She specializes in business development, business management and strategic marketing. Cheryl has a passion for science, education and the environment, and has been instrumental in creating STEM programs in K-12 schools. She and her family recently became full-time residents of Chatham.



## Herring counts are underway!

Volunteer herring counts are underway at 19 herring runs in 12 Cape Cod towns, the highest number so far. Of the 35-40 herring runs monitored in Massachusetts, Cape Cod has the largest number for a geographic region. Among states that monitor herring populations, Massachusetts has one of the highest levels of herring run monitoring, thanks in large part to the more than 200 citizen monitors on Cape Cod.

APCC's herring count program began in 2007 with the Stony Brook run in Brewster, only the fourth herring count program on the Cape at that time. Working with the Division of Marine Fisheries, NOAA's Restoration Center, Massachusetts Bays National Estuary Program, herring wardens and many organizations, APCC provided training and support to encourage volunteer counts along other runs.

Volunteer counts provide valuable scientific data on herring populations for fisheries managers to manage and protect herring stocks. Herring counts are also used to document the need for fish run restoration and to document the success of restoration projects. Run timing and temperature are also being examined as a possible source of information on climate change impacts on herring migration.

APCC is a member of the River Herring Warden Network, formed in 2011 with a MassBays grant, which provides herring wardens with the latest information on policy, science and management. To learn more about APCC's herring count program, visit [www.apcc.org/herring](http://www.apcc.org/herring) or contact Dr. Jo Ann Muramoto at 508-619-3185.



*Michelle Jenness, herring counter at Bound Brook on the Dennis-Brewster border, is one of over 200 citizens who volunteer each spring to document the Cape's annual herring migration.*



# Calendar of Upcoming Events

**Thursdays, April 6<sup>th</sup>, 13<sup>th</sup> & 20<sup>th</sup> – Lifetime Learning Courses at Snow Library.** *Freshwater Ponds: The Jewels of Cape Cod*, presented by APCC staff, 1:30-3:00 PM at Snow Library, 67 Main St., Orleans. Sign up with Friends of Snow Library at [www.friendsofsnowlibrary.org/Friendsofsnowlibrary/LTLWinterSpring2017.html](http://www.friendsofsnowlibrary.org/Friendsofsnowlibrary/LTLWinterSpring2017.html)

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**Sunday, April 16<sup>th</sup> – Rain Barrels for Cape Cod ~ Harvesting Raindrops.** Last day to buy Rain Barrels online at [www.APCC.org](http://www.APCC.org)

**Saturday, April 22<sup>nd</sup> – Rain Barrels for Cape Cod ~ Harvesting Raindrops.** Pick up pre-purchased Rain Barrels from [www.APCC.org](http://www.APCC.org) 9 AM – 12 PM at Cape Abilities Farm, 458 Main St (Rt. 6A), Dennis

**Wednesday, April 26<sup>th</sup> – Cleaning Up the Bays;** public meeting at Cotuit Library, 871 Main St. at 7 PM; Come hear about this exciting project to improve water quality in the bays—all are welcome!

**Thursday, April 27<sup>th</sup> – Cleaning Up the Bays;** public meeting at Osterville Library, 43 Wianno Ave. at 7 PM; Come hear about this exciting project to improve water quality in the bays—all are welcome!

**Saturday, April 29<sup>th</sup> – Town of Dennis & Dennis Conservation Trust sponsored Dennis Natural Heritage Day—APCC will participate. Save the date.\***

**Tuesday, May 2<sup>nd</sup> – Growing a Greener Cape Cod Garden ~ find your inspiration at Cape Abilities Farm.** *Using Colorful Native Plants for Easy-Care, Pollinator-Friendly Gardens*—Second in a series of expert talks at Cape Abilities Farm, 458 Main St. (Rt. 6A), Dennis at 2 PM, sponsored by APCC.

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**Tuesdays, May 2<sup>nd</sup>, 9<sup>th</sup> & 16<sup>th</sup> – Eldredge Public Library Learning Series.** *Freshwater Ponds: The Jewels of Cape Cod*, presented by APCC staff at Eldredge Public Library, 564 Main St., Chatham. Sign up with Friends of Eldredge Public Library at [www.eldredgelibrary.org/programs-classes-and-events/learning-series/](http://www.eldredgelibrary.org/programs-classes-and-events/learning-series/)

**Sunday, May 7<sup>th</sup> – Herring Event at Mashpee River,** at the Mashpee Wampanoag Indian Museum, 10 AM - 2 PM.

**Thursday, May 18<sup>th</sup> – Planting an Edible Garden.** Come get your hands dirty and help us plant our edible garden. Workshop fee \$15; Registration required. **Save the date.\***

**Tuesday, June 6<sup>th</sup> – Growing a Greener Cape Cod Garden ~ find your inspiration at Cape Abilities Farm.** *Bringing Magic to your Garden - Designing with Native Plants*—Third of a series of talks at Cape Abilities Farm, 458 Main St. (Rt. 6A), Dennis, at 2-2:30 PM, sponsored by APCC

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**Thursday, June 8<sup>th</sup> – APCC Film Event. Time to Choose** at Cape Cinema, 35 Hope Ln. (off Rt. 6A), Dennis; doors open at 6 PM for socializing; film at 7 PM (97 min.); discussion to follow with climate scientist TBA. See [www.APCC.org](http://www.APCC.org) for information. Tickets can be purchased in advance from Cape Cinema.

**Thursday, June 15<sup>th</sup> – Itsy Bitsy Spider's Rain Garden Workshop & Installation** at Osterville Library, 9 AM. Registration required. **Save the date.\***

**Tuesday, June 20<sup>th</sup> – Kayak Muddy Creek with APCC,** 10 AM. Registration required. **Save the date.\***

**Wednesday, June 21<sup>st</sup> – Come along with APCC to the New England Wildflower Society's Garden in the Woods** in Framingham, MA. Registration required. \*

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**Wednesday, September 6<sup>th</sup> – Kayak Muddy Creek with APCC,** 2 PM. Registration required. **Save the date.\***

\*More information will be available at [www.apcc.org](http://www.apcc.org). Don't miss a thing! Sign up to receive APCC email notices. Contact Kristin Andres, Director of Education and Outreach, at [kandres@apcc.org](mailto:kandres@apcc.org) for more information.

## Ed DeWitt bids farewell to APCC

In March, Ed DeWitt retired as executive director of APCC, a position he served in since 2011.

As executive director, Ed worked to establish the APCC Restoration Coordination Center, an initiative to support the 15 Cape Cod towns with planning, management and implementation of environmental restoration projects. He was integrally involved as a supporter of the establishment of the Environmental Protection Agency's Southeast New England Program (SNEP), which provides funding for water quality improvement projects to the coastal communities of Rhode Island and southeastern Massachusetts, including Cape Cod towns on Nantucket Sound and Buzzards Bay.

Several years ago, he coordinated an Environmental Summit to develop consensus among the Cape's environmental nonprofit organizations on the need for regional wastewater management and monitoring standards. Much of his attention during his tenure has been focused on the issue of wastewater management on the Cape, including development of the 208 Plan.

He was also actively involved in issues surrounding the Pilgrim Nuclear Power Station, particularly regarding potential environmental impacts and planning the plant's decommissioning process.

Most recently, Ed led the organization in the purchase of APCC's new permanent home in Dennis. The property includes a barn that is being renovated to serve as a meeting space and education center where APCC can host more workshops, lectures and outreach activities within the community. The property is also being used for development of our Living Landscape Laboratory, an effort to demonstrate alternative landscapes that support the environment.



## Harvesting Raindrops



**There's still time to order your rain barrel!**  
**Save 20% off the retail price**

**Only  
\$79**

- Water your garden and flower boxes without adding to your water bill
- Give a second life to upcycled plastic food barrels otherwise destined for landfill
- Make your garden happy with the raindrops you harvest
- Support APCC's work to preserve, protect and enhance the Cape's natural world

Rain barrels come in your choice of

**GRAY   BLACK  
BLUE  
TERRACOTTA**

*GRAY and BLACK are the appropriate colors in a historic district*

**Purchase Online – Visit [www.APCC.org](http://www.APCC.org)**

**Pickup Date & Time: Sat., April 22<sup>nd</sup>, 9 AM – 12 PM**

**Pickup Location: Cape Abilities Farm, 458 Main St. (Rt. 6A) Dennis**

**Last day to purchase online is Sunday, April 16th**

**Proceeds support APCC**

**Association to  
Preserve Cape Cod**

482 Main St., Dennis MA 02638  
508-619-3185  
info@apcc.org  
www.apcc.org

The Association to Preserve Cape Cod is a 501(c)(3) non-profit organization founded in 1968 to foster policies and programs that promote the preservation of natural resources on Cape Cod.

Support comes from over 5,000 members, and from gifts and grants from individuals, foundations and businesses.

**APCC Staff**

Ed DeWitt, *Executive Director*  
Don Keeran, *Assistant Director*  
Jo Ann Muramoto, Ph.D., *Director of Science Programs / Mass Bays Program Regional Coordinator*  
Kristin Andres, *Director of Education and Outreach*  
April Wobst, *Restoration Ecologist*  
Bryan Horsley, *Restoration Technician*  
Patrick Frye, *Membership Field Coordinator*  
Laura Curry, *Information Services Director*  
Lauren Powers, *Grants Administrator*

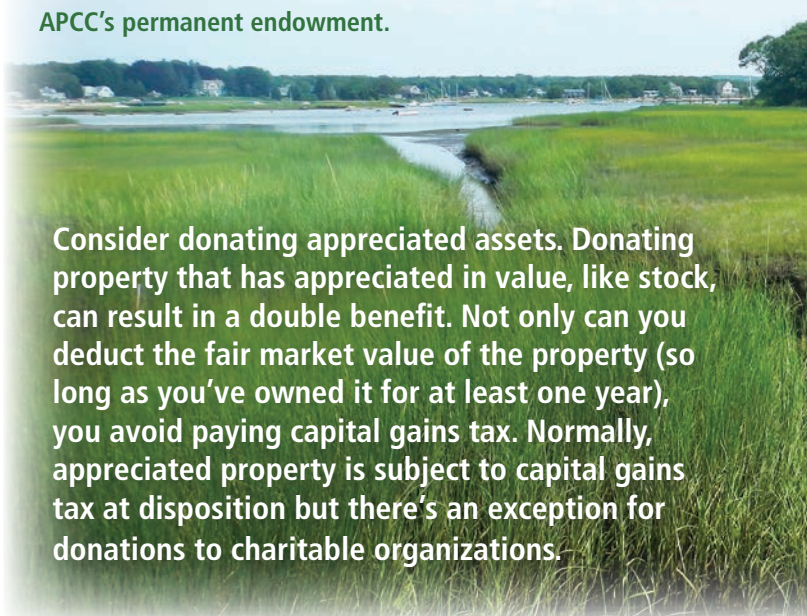
**Board of Directors**

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Daniel Webb (*Falmouth*)

## *Leave a Lasting Legacy*

Bequests from our members and friends help make it possible to continue our efforts to speak out for Cape Cod and fight for the protection of our environment, just as we have done since 1968. The sample language shows just how easy it is:

I bequeath to the Association to Preserve Cape Cod, Inc. (APCC), a charitable corporation established by law in the Commonwealth of Massachusetts, the sum of \_\_\_\_ dollars (or percentage of estate) to be used for the general purposes of APCC at the direction of its Board of Directors or added to APCC's permanent endowment.



Consider donating appreciated assets. Donating property that has appreciated in value, like stock, can result in a double benefit. Not only can you deduct the fair market value of the property (so long as you've owned it for at least one year), you avoid paying capital gains tax. Normally, appreciated property is subject to capital gains tax at disposition but there's an exception for donations to charitable organizations.

*Please note: This information should not be considered as legal, tax or financial advice. Consult your professional advisor for further information and guidance.*