

CHESAPEAKE CONSERVANCY 2021 SPRING NEWSLETTER

Shorelines

Saving the Chesapeake's Great Rivers and Special Places



Solar Energy & the Chesapeake

PHOTO BY OFFICE OF THE MARYLAND GOVERNOR
COVER STORY PAGE 4

Mission

The Chesapeake Conservancy's mission is to conserve and restore the natural and cultural resources of the Chesapeake Bay watershed for the enjoyment, education, and inspiration of this and future generations. We serve as a catalyst for change, advancing strong public and private partnerships, developing and using new technology, and empowering environmental stewardship.

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With Spring Comes New Hope

I want to begin by acknowledging the pain that so many people have suffered over the last year. So many people have lost loved ones, including myself. Yet this year, spring brings a feeling of hope in ways that I could never have imagined. As we begin to see what life might be like on the other side of this global pandemic, nature's awakenings touch our souls in more meaningful ways. I hope you are each finding ways to enjoy these treasured spring days in the Chesapeake, and your spirits are lifted by the sights and sounds of the season. For me, the return of the call of our neighborhood's osprey sounds even more beautiful than I remember.

Hope also abounds in our efforts to conserve 30% of the Chesapeake by 2030. In one of his first executive orders, President Biden set the goal to conserve 30% of the nation's land and waters by 2030 in order to protect wildlife habitat and mitigate the impacts of climate change. Fortunately, this has already been one of our top priorities for the Chesapeake watershed, where 22% of natural and agricultural lands are protected.

The recent confirmation of Secretary of the Department of the Interior Debra Haaland, a member of the Laguna Pueblo, is a historic moment for our nation as she is the first Indigenous person to serve in the presidential Cabinet. This day is long overdue for Indigenous people of our nation who have been historically excluded from participation in the federal government.

Secretary Haaland will oversee the National Park Service, U.S. Fish & Wildlife Service, U.S. Geological Survey, the Bureau of Land Management, the Bureau of Indian Affairs and several other agencies.

As part of President Biden's Cabinet, Secretary Haaland is a significant voice and advocate for conservation across the United States. We also welcome EPA Administrator Michael Regan, the first Black male to hold the position.



Chesapeake Conservancy President & CEO Joel Dunn
PHOTO BY CHRISTINA HAMILTON

As the former secretary of North Carolina's Department of Environmental Quality, Administrator Regan brings a special understanding of the challenges faced by state and local governments on matters of environmental justice, climate change, restoration, and public health, and how the federal government can best support these efforts.

Conserving land and restoring the health of the Chesapeake Bay require the active inclusion of all stakeholders, especially the Black, the Indigenous, and People of Color who have been historically excluded and separated from meaningful involvement and participation.

Join me in welcoming spring and this new era of conservation.

Sincerely,

JOEL E. DUNN, *President and CEO*

Support the

BAY PADDLE

Chris Hopkinson (right) at the finale in 2020.
PHOTO BY MEGAN HOPKINSON

Chris Hopkinson, who last summer captured the attention of thousands of people nationwide when he became the first person to traverse the entire Chesapeake Bay by standup paddleboard, has announced plans to expand Bay Paddle for summer 2021. This year's Bay Paddle will be a multi-team race benefiting both the Oyster Recovery Partnership and Chesapeake Conservancy.

Relay teams and solo paddlers will participate in the 215-mile, 8-day, staged paddle race from August 27 to September 3, 2021, beginning in Havre de Grace, Maryland, and finishing in Virginia Beach, Virginia.

In 2020, Hopkinson averaged 25 miles a day over nine days, raising more than \$180,000 for Oyster Recovery Partnership and helping to put 18 million oysters back into the Chesapeake Bay.

"Seeing the Bay the way I did last year gave me even more appreciation for its beauty and motivation to do more," said Hopkinson. "In addition to benefiting the Oyster Recovery Partnership's important work to restore the health of the Chesapeake, this year's paddle will also help support Chesapeake Conservancy in its coalition efforts to create official and permanent National Park Service presence in the Chesapeake Bay."



In March, U.S. Senator Chris Van Hollen (D-Md.) and U.S. Representative John Sarbanes (D-Md.) announced the formation of a working group to consider establishing a Chesapeake National Recreation Area.

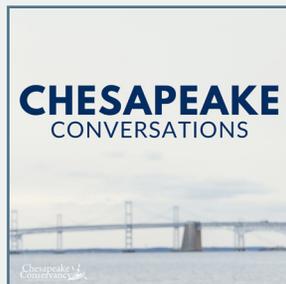
The working group features more than 30 regional organizations representing a diverse set of stakeholders such as Maryland and Virginia, Chesapeake Bay environmental nonprofits, representatives from the watermen

community, marine manufacturers, diversity and equality-focused organizations, conservation groups and national park experts.

To become a Bay Paddle sponsor, donate, join or create a team and learn more, visit baypaddle.org. To learn more about the effort to establish the Chesapeake National Recreation Area, visit united4cnra.com.

Tune In to Our New Podcast!

In the first episode of season two of Chesapeake Conversations, meet Chesapeake Conservancy's Executive Vice President Mark Conway. Hear our exciting plans to help inspire new conservationists to restore the health of the Bay and ignite efforts to conserve 30% of the Chesapeake's lands by 2030, and learn more about our partnership with the National Park Service. Check out the full episode on our website or wherever you listen to podcasts.



chesapeakeconservancy.org/chesapeake-conversations-podcast

Global Learning



INTERNATIONAL
LAND CONSERVATION
NETWORK

Chesapeake Conservancy has been selected to participate as a member of the second cohort of the International Land Conservation Network's (ILCN) Large Landscape Peer Learning Initiative. This initiative, which will take place through 2022, connects conservation practitioners around the world to build relationships, share insights, advance strategies and solve problems. From Canada to Chile, China, Kenya and far beyond, governments, nonprofit organizations, companies, private individuals, and indigenous peoples are working to protect and care for a wide diversity of landscapes, from high-nature value landscapes shaped by low-intensity farming to large expanses of wild lands. Learn more at chesapeakeconservancy.org.

Shining Light on Solar Energy for the Chesapeake

As we deal with the effects of climate change and look for ways to power our modern world with less of an impact on the health of our planet, solar and wind energy are quickly evolving. While these technologies are not new, they offer hope for the future. Along with those hopes come real challenges, and Chesapeake Conservancy is helping our partners plan for and navigate those challenges.

Solar Siting

Solar arrays—the collection of solar panels used to generate electricity—do great work, but they also take up a great amount of space. Maryland is one of 30 states in the U.S. with a renewable portfolio standard, which for Maryland requires 50% of the electricity sold by utilities to come from renewable sources, with 14.5% to come from solar. To accomplish this goal, careful consideration must be given to where solar panels will be located.

Two recent reports by the Chesapeake Conservancy have shown how the use of prime farmland and adverse environmental impacts, such as loss of forest, wetlands, or other ecologically important areas, can be avoided.

Baltimore County and City

As reported in the Summer 2020 *Shorelines*, Chesapeake Conservancy used geospatial analysis to identify optimal solar sites and to answer the key question: “Are enough optimal sites available to meet Maryland’s renewable energy goals for solar energy?” Valleys Planning Council, a nonprofit based in Towson, commissioned the report “Solar Siting Methodology for State and Local Governments Pilot: Baltimore County and City.” A draft was shared with the Governor’s Task Force on Renewable Energy Development and Siting, established by Governor Larry Hogan in 2019.

“The results of our analysis showed extensive opportunities for solar panel placement on optimal sites, including previously degraded lands; rooftops of commercial, industrial, and residential buildings; and creating solar canopies on parking lots,” said Chesapeake Conservancy’s Vice President of Conservation Technology Susan Minnemeyer. “By maximizing solar on optimal sites we can avoid using land now dedicated to farming or nature.”

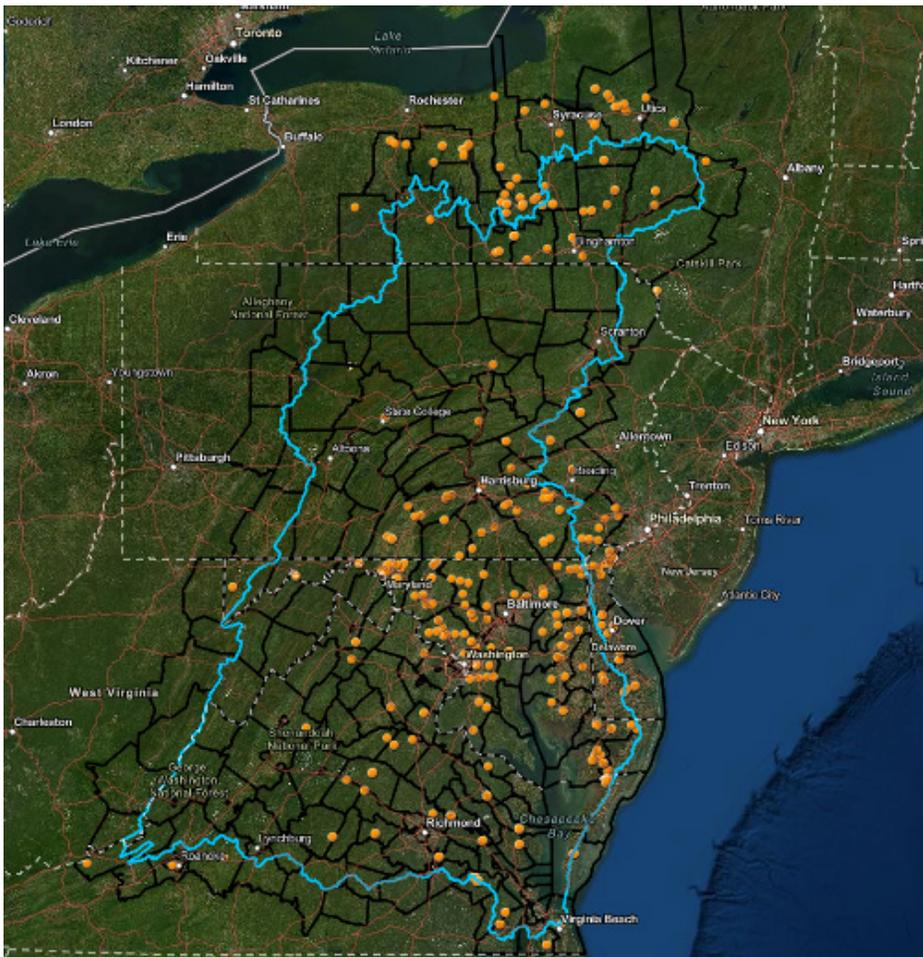
St. Mary’s County, Maryland

Soon after the Baltimore solar siting report was released, Minnemeyer heard from leaders in St. Mary’s County, Maryland, with a similar request, as community members raised concerns about recent applications and requests for utility-scale solar arrays in the county. In April, staff of Chesapeake Conservancy’s Conservation Innovation Center (CIC) met with the St. Mary’s County Solar Task Force and presented a new report: *Optimal Solar Siting for St. Mary’s County, Maryland*.

“Based on our analysis of solar energy development opportunities, St. Mary’s County demonstrates the potential to create 4,097 GWh/yr of electricity from solar energy from 4,431 acres of optimal sites such as degraded lands and landfills, rooftops, parking lot canopies, and publicly owned lands,” said Chesapeake Conservancy Senior GIS Analyst Emily Wiggins. “There is an additional 4,026 GWh/yr of potential electrical generation available from 2,614 acres of preferred ground-mounted opportunities less than one mile from electrical transmission lines. These numbers well exceed the 331 GWh/yr estimate for St. Mary’s share of solar compared to the rest of the state.”

“The best part of this model is that it can be easily scaled up for mapping solar arrays for the entire United States. The beauty of AI is that it learns more from a bigger dataset.”

Kumar Mainali
Chesapeake Conservancy
Geospatial Data Scientist



The first map of ground-mounted solar arrays in the Chesapeake watershed.

First Map of Ground-Mounted Solar Arrays

In March, using artificial intelligence (AI) and satellite imagery, Defenders of Wildlife and Chesapeake Conservancy partnered to make a dataset available for the first time that will enable researchers in a variety of fields to understand patterns of solar development and estimate environmental effects for the Chesapeake region. This project, funded by a grant from the Grayce B. Kerr Fund Inc., mapped ground-mounted solar arrays—a collection of multiple solar panels—to get an understanding of how solar is being built across the entire Chesapeake Bay watershed.

“Using artificial intelligence to map features like solar arrays is a breakthrough for land use management, conservation, and renewable energy, and we’re excited to make these data publicly available. While we are interested in better understanding land use dynamics in the Chesapeake Bay watershed, other researchers can use these maps to solve other important conservation challenges,” said Michael Evans, senior conservation data scientist at Defenders of Wildlife.



A ground-mounted solar array mapped using Artificial Intelligence.

The ways that a growing solar energy footprint impacts water quality in the Chesapeake Bay watershed are complex. On the one hand, solar panels can increase runoff that carries pollution because they are impervious surfaces—surfaces that are not easily penetrated by water. On the other hand, depending on the land use that the panels are replacing and other factors such as soil type or vegetation cover underneath the panels, they may benefit water quality.

For example, replacing agricultural land with solar arrays may result in using

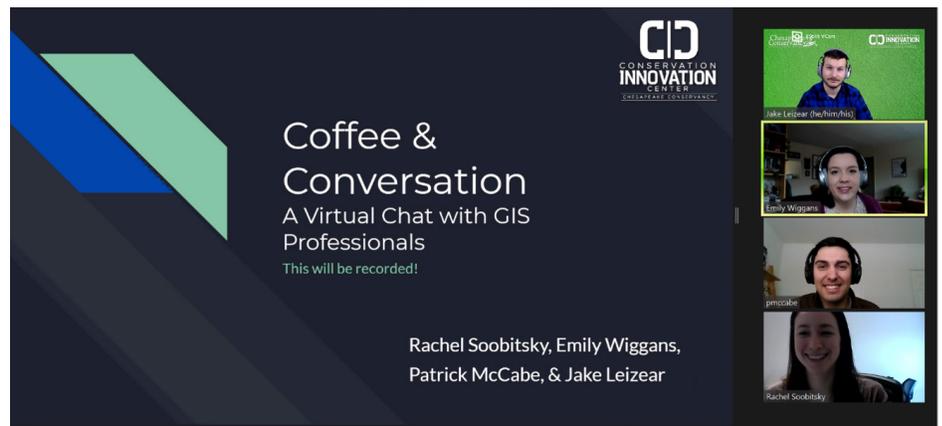
less fertilizer. Importantly, an increase in solar capacity will also likely lead to a decrease in greenhouse gas emissions and other deposition of air pollutants to the watershed as renewable energy replaces fossil fuel energy sources.

To read the reports or learn more about the new solar siting dataset, visit the Conservancy’s website at chesapeakeconservancy.org. If your jurisdiction is interested in a solar siting report, email Susan Minnemeyer at sminnemeyer@chesapeakeconservancy.org.

Coffee & Conversation

Members of the Chesapeake Conservancy Conservation Innovation Center team recently sponsored an interactive virtual chat with aspiring geospatial information science (GIS) professionals.

Staff shared their personal professional paths and helped answer questions about working in the exciting and growing field. Visit the Conservancy’s YouTube channel or LinkedIn to view the webinar recording.



The stars of Chesapeake Conservancy’s webcams are back on the main stage, live streaming for your enjoyment. In partnership with explore.org, Chesapeake Conservancy hosts three live-streaming webcams that take viewers inside the nests of ospreys, peregrine falcons, and great blue herons. Approximately 10 million

viewers from around the world watch these cams each season. They are great tools to help people engage with the Chesapeake and strive to protect the birds’ habitat. Thank you to the Crazy Osprey Family, Transamerica, and the owner of the great blue heron rookery for making these webcams possible. Tune in at chesapeakeconservancy.org.

Welcome New Board Members



Rich Batiuk

Chesapeake Conservancy welcomes five new members to our board of directors.

Rich Batiuk is the former associate director for science, analysis and implementation at the U.S. Environmental Protection Agency's Chesapeake Bay Program Office (CBP). In his 33 years with EPA and working for CBP, he led the integration of science into multi-partner policy-making and collaborative decision-making. Batiuk recently cofounded CoastWise Partners, providing help with development and implementation of collaborative watershed management strategies. He received his Bachelor of Science in environmental science from the University of New Hampshire and his Master of Science in environmental toxicology from American University. Rich lives in Annapolis, Maryland, with his wife Susan, enjoying more time for fly fishing, kayaking, hiking, camping, bird watching and traveling to some amazing natural places.



Matthew Earl

Matthew Earl is the owner/operator of three World of Beer restaurants in Maryland. Prior to becoming a restaurateur, he was an associate professor in the Radiation Oncology Department at the University of Maryland School of Medicine (2000-2013), where he oversaw the technical operations of the radiation oncology program at Baltimore Washington Medical Center. During his time there, he authored and co-authored numerous journal articles, was the director of the dosimetry education program, and authored two patents. Matt earned a bachelor's degree in physics from Johns Hopkins University in 1994 and a doctorate in physics from Boston University in 2000. He currently resides in Edgewater, Maryland, with his wife, Diane, and two sons, Austin and Matthew. In his spare time, Matt enjoys exercising, playing golf, cooking and traveling.



Colin Harrington

Colin Harrington is the CEO of Zephyr Energy PLC, a London-based energy company focused on bringing environmentally responsible development practices to the natural resource sector. Over his 25-year career in the investment markets, he has worked on projects ranging from carbon capture to compressed air energy storage and has arranged or managed over \$2 billion of equity investment in the energy sector.



Pam Marks

He holds an M.B.A. from the Wharton School at the University of Pennsylvania, a B.A. from Colby College, was a Hansard Scholar at the London School of Economics and is an alumnus of the National Outdoor School of Leadership (NOLS). He lives by the South River with his wife and two young children, on land shared with an energetic yellow Lab, a handful of pet chickens, and countless oysters suspended from the dock.

Pam Marks practices environmental law as a principal with the national environmental law firm of Beveridge & Diamond PC and helped to establish the firm's Baltimore office. She assists clients with environmental regulatory issues and litigation, with a focus on water, waste and land remediation issues. Prior to entering private practice, she served in the public sector as an assistant attorney general representing the Maryland Department of the Environment. She earned her J.D. from University of Pennsylvania and her undergraduate degree from University of Michigan. Pam enjoys exploring creeks and rivers within the Chesapeake watershed by canoe, often with her husband Michael and two (now grown) daughters. She also loves to hike, enjoys photography and is a life-long sailor.



Beatra Wilson

Beatra Wilson, a diversity strategist and urban forester, is founder and managing director of IDEATION308, a diversity and inclusion consulting firm that provides workforce inclusion solutions and community engagement strategies. She has a 20-year public service career and currently leads urban and community forestry at the U.S. Forest Service—overseeing assistance to more than 7,500 communities annually. She has completed leadership assignments to the White House Council on Environmental Quality and the Office of Management and Budget and led committees for the Office of the Secretary at the U.S. Department of Agriculture. She has a B.S. in urban forestry from Southern University and a master's in public administration from Kennesaw State University. Beatra lives in Upper Marlboro, Maryland, and enjoys biking neighborhood trails with her husband and two children.

Maryland Governor Larry Hogan recently named Chesapeake Conservancy President and CEO **Joel Dunn** a “Chesapeake Bay Ambassador.” Lt. Governor Boyd Rutherford and Maryland Department of Natural Resources Secretary Jeannie Haddaway-Riccio presented the honor virtually at a meeting of the state’s Board of Public Works. According to Secretary Haddaway-Riccio, “This is one of the highest and most prestigious awards that the state confers upon citizens who are active leaders in the fight for the Chesapeake Bay.”

Chesapeake Conservancy congratulates several staff members on recent promotions: **Adrienne Gemberling**, senior project manager; **David Saavedra**, senior geospatial technical lead; **Rachel Soobitsky**, geospatial program manager; and **Emily Wiggins**, senior geospatial analyst.

We welcome to our team Geospatial Analyst **Patrick McCabe**, formerly with the Maryland Department of Natural Resources.

We also want to welcome back four returning Susquehanna University interns: **Grace Chamberlain**, **Kaitlyn Gardineer**, **Darlene Slavick** and **Rose Wetzels**. They will be supporting our work in the Susquehanna region. **Elena Trujillo**, a student from Salisbury University, has joined the communications team as a graphics design intern.

Mende Naylor, former executive assistant, and **Sara Ramotnik**, Chesapeake Conservation Corps member, both accepted new positions. We want to extend our heartfelt thanks for their hard work and dedication.

Five new board members were elected to the board of directors (see article page 6). **Rick Scobey** resigned from the board due to moving abroad. We thank him for his years of service and leadership!

Chesapeake Conservancy congratulates **Kym Hall** on her new position as director of the National Park Service National Capital Area. Director Hall showed remarkable leadership and achievements



Steve Williams, acting superintendent, Colonial National Historical Park and the Captain John Smith Chesapeake National Historic Trail PHOTO BY NPS

while serving as the superintendent of Colonial National Historical Park and the Captain John Smith Chesapeake National Historic Trail (Chesapeake Trail). The National Park Service has selected Colonial’s Deputy Superintendent Steve Williams to serve as acting superintendent for the park and the Chesapeake Trail. We look forward to working with Acting Superintendent Williams.

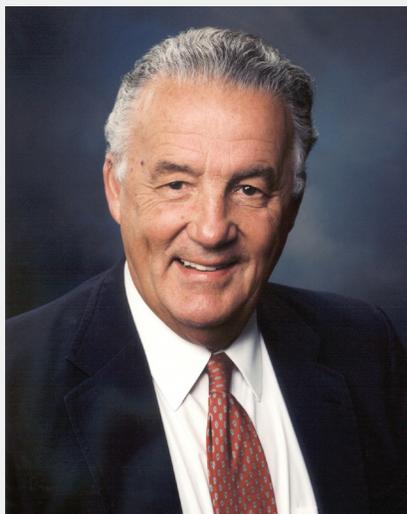
In Memoriam

U.S. Senator Paul Sarbanes

Former U.S. Senator Paul Sarbanes of Maryland, an honorary member of Chesapeake Conservancy’s board of directors and the recipient of the organization’s 2016 Champions of the Chesapeake Award, passed away on December 6, 2020.

“Senator Sarbanes often said, ‘If a state could have a soul, Maryland’s would be the Chesapeake.’ The Chesapeake Bay lost one of its most dedicated advocates,” said

Chesapeake Conservancy President and CEO Joel Dunn. “As a member of Chesapeake Conservancy’s board of directors, he served as a mentor to our relatively young organization and to me, personally. As a force behind the creation of the Captain John Smith Chesapeake National Historic Trail, in many ways he was also a force behind the creation of our nonprofit.”



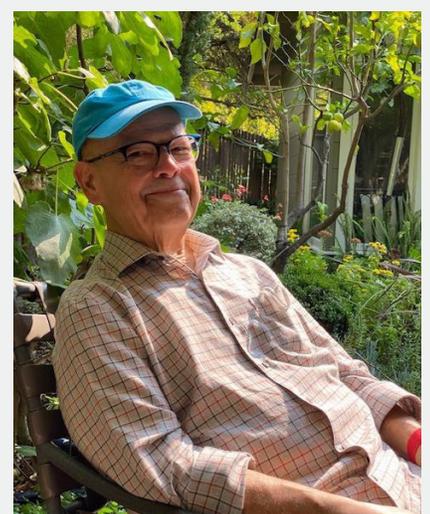
Former U.S. Senator Paul Sarbanes COURTESY PHOTO

John Maounis

John Maounis, former superintendent of the National Park Service Chesapeake Bay Office and original co-convenor of the Chesapeake Conservation Partnership, died at home in Santa Rosa, California, on December 4, 2020.

“The moment he walked in the door, John was faced with standing up the Captain John Smith Chesapeake National Historic Trail, the legislation having just passed. The trail management

plan he shepherded is a testament to his vision and to the many collaborators he engaged,” said Assistant Superintendent Jonathan Doherty, National Park Service Chesapeake Bay Office. Maounis was also the first superintendent of the Star-Spangled Banner National Historic Trail until his retirement from the National Park Service in 2013.



John Maounis COURTESY PHOTO



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CHESAPEAKE CONSERVANCY RELIES ON OUR MANY FRIENDS TO PROTECT AND CONSERVE THE CHESAPEAKE'S GREAT RIVERS AND SPECIAL PLACES. YOUR TAX-DEDUCTIBLE CONTRIBUTION OF ANY AMOUNT IS TRULY APPRECIATED. CHESAPEAKE CONSERVANCY HAS A 4-STAR RATING FROM CHARITY NAVIGATOR. OUR TAX ID NUMBER IS 26-2271377. OUR CFC ID NUMBER IS 27293.

LEAVE A LEGACY OF THE CHESAPEAKE FOR FUTURE GENERATIONS

Please consider making a special gift to Chesapeake Conservancy by naming the organization in your will or by designating Chesapeake Conservancy as a beneficiary of your bank account, 401(k) or other retirement account, or life insurance policy.

You can help immediately by joining the Chesapeake Stewards Club and providing monthly support for Chesapeake Conservancy's ongoing habitat and land conservation programs.

For more information, call 443.321.3610.



Photo by Phong Nguyen