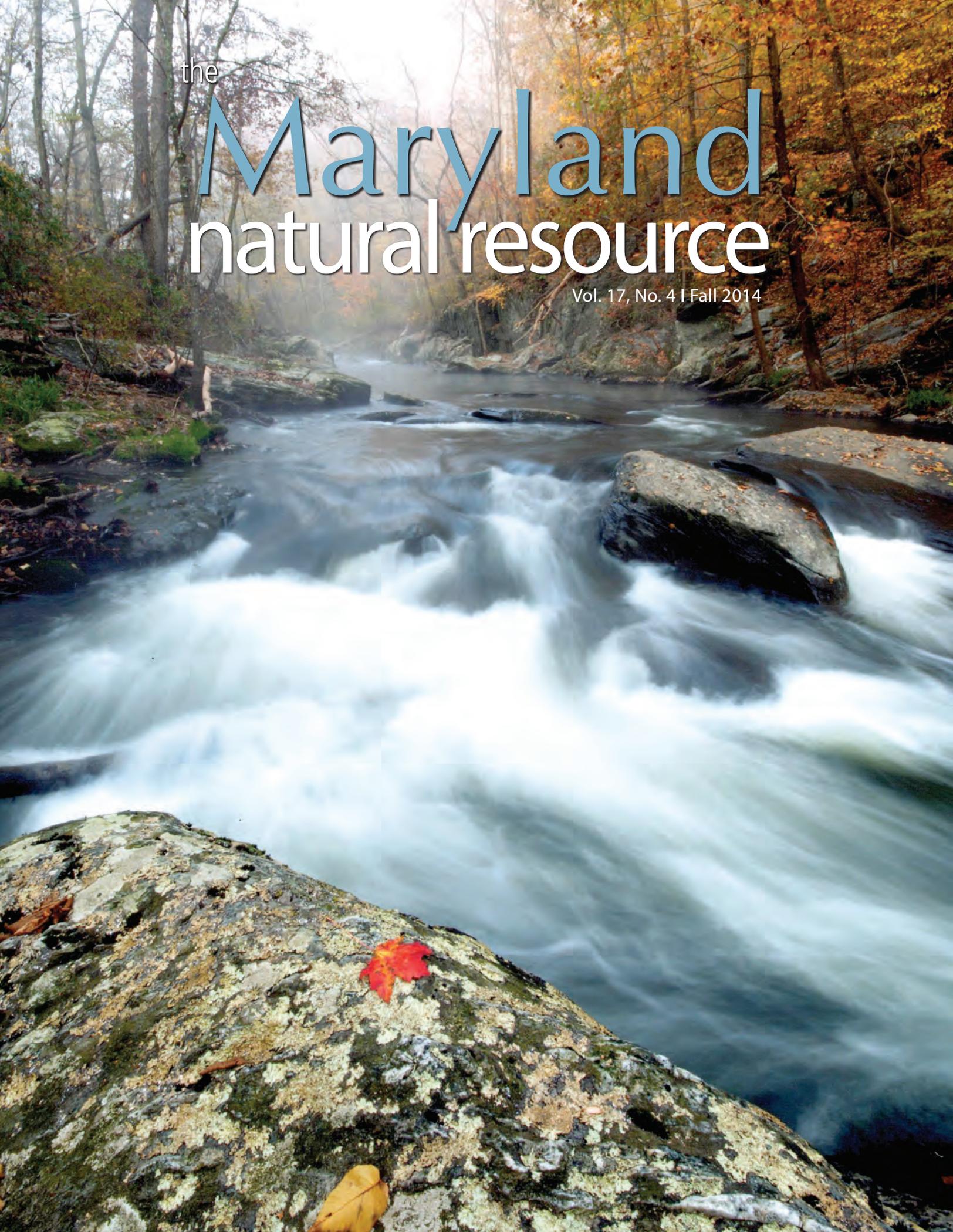


the

# Maryland natural resource

Vol. 17, No. 4 | Fall 2014





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Governor

**Joseph P. Gill**  
Secretary

**The Maryland Natural Resource**  
...Your guide to recreation & conservation in Maryland

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*Wilde Lake in the Fall*  
Chuck Aaron

# the Maryland natural resource

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James Stimpert

# THE COMMON GOOD



Richard Lippenholz

As my second term as Governor nears its end, I've been reflecting on the accomplishments we have made together as one Maryland — to create a smarter, greener, more sustainable future. One of our key efforts in "Governing for Results" is restoring the Bay. Maryland is leading the way in meeting its goal of reaching the Healthier Bay Tipping Point by 2025.

When we began our hard work nearly eight years ago, holding ourselves accountable to deliver results was imperative.

In 2008, we adopted two-year milestones to focus Chesapeake Bay Watershed states on short-term achievable restoration goals. We ensured you, our citizens, were informed of these developments through programs such as *BayStat*, which shows progress on each strategy and its associated goal.

According to our Maryland progress data, we achieved our 2013 pollution reduction milestones for nitrogen, phosphorus and sediment. Our Chesapeake and Coastal Bays Trust Fund, which was created by the Maryland General Assembly in 2007, aided these efforts and has directed a total of \$256 million to local governments and organizations for more than 1,000 nonpoint source pollution projects that reduce harmful runoff.

Another part of restoring the Bay is rebuilding our vital aquatic resources such as oysters and crabs, which are both a foundation of a healthy Bay ecosystem and an important economic resource for local communities around the watershed. We have seen significant progress under the *Oyster Restoration and Aquaculture Development Plan*, launched in 2010. Under the Plan, we

have increased Maryland's network of oyster sanctuaries from 9 percent to 24 percent of remaining quality habitat, planted a national record 1.25 billion native spat in Maryland last year, and expanded citizen stewardship efforts through the *Marylanders Grow Oysters* program.

Even our efforts on land support restoring our waters. Through Program Open space and the Rural Legacy program, we have preserved more than 157,000 acres of land since 2007. What's more, we have planted certified crops on more than 410,000 acres this year alone. Through *Marylanders Plant Trees*, we exceeded the three-year statewide goal of planting and registering 100,000 trees.

With *Explore & Restore Your SchoolShed* and the *Partnership for Children in Nature*, our State stands as a national model for expanding environmental learning and opportunities for young people to connect with our natural world. We were the first in the nation to launch an environmental literacy graduation requirement, passing the baton to the next generation of stewards to continue to create a smarter, greener Maryland.

As the 2014 chair of the Chesapeake Executive Council, I had the honor of hosting the signing of the new Chesapeake Bay Watershed Agreement in Annapolis, which includes emerging issues like toxic contamination, climate change and environmental literacy and stewardship. We are united as a region to achieve our two-year milestones and ultimately reach our 2025 restoration goals.

Collaboration is at the heart of all of these efforts, as there are some challenges so large that we must work together — with our partners in federal, State and local governments, citizens and stakeholders — to succeed. It is indeed the essence of *The Common Good*.

Martin O'Malley  
Governor

# THE NATURE OF THINGS

It's been said that a person who plants a tree plants a hope. Trees play a huge role in making the Bay healthier and cleaner. And this season's cooler temperatures make for a perfect time to plant larger native species like oaks and maples something we can all do to help restore the Bay.

By their very existence, trees provide a myriad of benefits to Maryland, its citizens and its waterways. They help cool temperatures, reduce greenhouse gases caused by burning fossil fuels, and even cut down on energy costs. They take in nitrogen and phosphorous while filtering dirty stormwater runoff — all major pollutants of the Chesapeake.

And the rewards don't stop there. Trees clean the air we breathe and provide homes for all types of wildlife. They beautify our neighborhoods and highways, increase property values and contribute to safer communities.

Here in Maryland, under the leadership of Governor Martin O'Malley, we have worked hard to earn a reputation as leaders and innovators in forestry practices. We launched *Marylanders Plant Trees* in 2009 with two distinct goals: to have State inmates plant one million trees by 2011, and to inspire citizens to plant 50,000 trees by end of year 2010. The inmates met their goal and citizens were indeed inspired, planting more than 110,000 trees to date toward a new goal of 150,000 trees by January 1, 2015. We set a goal for students as well, who are now planting buffers along streams near their schools through the *Stream Restoration Challenge*.

Last year, the General Assembly passed a no-net-loss of forest law — the first-of-its-kind legislation in the country. It commits

us to take steps to assure we maintain or expand our current 40 percent tree canopy by 2020. Earlier this year we launched *Lawn to Woodland*, a program to provide free trees, planting and technical services for landowners who agree to convert one to four acres of unused lawn to forest cover.

Every tree we plant improves water quality, air quality and property values.

Available incentives at [trees.maryland.gov](http://trees.maryland.gov) including coupons, free trees, planting assistance and technical advice make it easy for each of us to act. It's a small investment with a large, long-term payoff.

Plant today — for a better tomorrow.



Josh Davidburg

Joseph P. Gill  
Secretary



# The Chesapeake Bay Watershed Agreement

RECOMMITTING TO THE FUTURE

By Chris Becraft

On June 16, the Chesapeake Executive Council signed the new *Chesapeake Bay Watershed Agreement*, recommitting program partners to restore and protect the Bay, its tributaries and the lands around them.

“Today we celebrate the most inclusive, collaborative, goal-oriented Agreement the Chesapeake Bay watershed has ever seen, highlighted by unprecedented participation from the headwater states and the public,” said Chesapeake Executive Council Chair, Maryland Governor Martin O’Malley, who hosted the Council’s annual meeting.

## Collaboration

The governors of Maryland, Virginia, Pennsylvania, West Virginia, New York and Delaware signed the Agreement along with the mayor of the District of Columbia, the chair of the Chesapeake Bay Commission, and the administrator of the U.S. Environmental Protection Agency on behalf of the Federal Leadership Committee for the Chesapeake Bay.

June’s signing marks the first time that the Bay’s headwater states of New York, West Virginia and Delaware have pledged

to work toward restoration goals that reach beyond water quality, making them full partners in the Bay Program’s watershed-wide efforts.

## Commitment

The Chesapeake Bay Program partners have made much progress since 1984, when the first Bay Agreement was signed. However, there is much more to do — especially in the face of new challenges developing: renewable energy sources, population growth, and loss of farm and forest lands. The Agreement not only addresses our continuing water quality and land-use challenges, it also confronts critical emerging issues — environmental literacy and climate change.

The new Agreement includes 10 goals and 29 measurable, time-bound outcomes that will help create a healthy watershed by lowering nutrient and sediment pollution; ensuring our waters are free of toxic contaminants; and managing for sustainable blue crab, oyster and forage fish populations. They are also designed to restore wetlands, underwater grass beds and other habitats; conserve farmland and forests; boost public access and

environmental education; and increase the climate resiliency of the watershed’s resources, habitats and human communities.

## Action

Public input had a direct impact on the content of the Agreement — encouraging partners to include goals related to environmental stewardship, toxic contaminants and climate change — and will continue to contribute to how the goals are achieved. Indeed, partners plan to work with local governments, universities, watershed groups, citizens and businesses in creating essential management strategies.

“The Agreement builds upon the strength of our diverse citizenry, calling to action the nearly 18 million people that call our watershed home,” adds Governor O’Malley. “Together, we can and will achieve our united vision of a healthy Bay and a productive watershed, cared for by engaged citizens at every level. ■

[dnr.maryland.gov/ccs](http://dnr.maryland.gov/ccs)  
[chesapeakebay.net/publications](http://chesapeakebay.net/publications)

**Chris Becraft** is a Policy Analyst with DNR’s Chesapeake & Coastal Service.

Maryland’s Chesapeake & Coastal Service is a partnership among local, regional and state agencies. CCS collaborates with many private organizations, such as local land trusts and economic development groups. We provide technical assistance, training, information, tools and science, and by administering state and federal funds to help the State and local communities restore local waterways; prepare for future storm events, shoreline change, and sea level rise; protect habitats, foster clean coastal industries and encouraging citizens to become caring stewards. Over the past three decades, this partnership has helped Maryland work to reduce the environmental impacts of coastal development, resolve significant conflicts between competing coastal uses and provide critical assistance to local governments in coastal planning and resource protection.



Sherrie vonSternberg



Program partners sign the Chesapeake Bay Watershed Agreement.

Jay Baker

# The Bay Blueprint

ACCOUNTABLE RESTORATION

By Kristen Fleming



The Chesapeake Bay from Sandy Point State Park

For more than 30 years, elected officials, organizations and concerned citizens from across the Bay Watershed have worked to restore the Chesapeake. In the past, these clean-up efforts have been voluntary, and have made progress. Nevertheless, there is still important work to be done fully restore the Bay.

In 2010, when it was clear that Bay restoration progress continued to lag, the U.S. Environmental Protection Agency set limits to reduce three major pollutants from entering the water: nitrogen, phosphorus (nutrients) and sediment (soil). These pollutants come from all areas of the landscape including farms, cities, forests and lawns. Actions carried out on land to reduce these pollutants help prevent them from reaching rivers and streams and, ultimately, the Bay.



Water sample

## A New Model

In order to meet these new pollution limits called Total Maximum Daily Loads, (TMDL) each state in the Bay Watershed created a plan detailing the exact actions to be taken to limit pollution from entering our tributaries. This plan and all of its actions must be in place by 2025.

To ensure that Maryland is on course with its pollution reduction plan, the State and relevant agencies adopted two-year milestones. These targets, developed by the Departments of Natural Resources, Agriculture, the Environment and Planning track progress toward the 2025 goal, allowing leadership to adjust actions if needed today...instead of a decade from now.

"By setting goals to be met way off into the future — when someone else would be in the leadership position and would need to deal with the implications of another failed goal — we were not doing what was best for the Bay," says Joe Gill, Secretary of DNR and Chair of the Chesapeake Bay Program Principal Staff Committee. "Our milestones keep today's leadership accountable."

## Turning the Tide... Today

The good news: we are at the defining moment of success, the critical point in time where the tide of restoration will finally turn. Maryland is leading the states in cleaning up the Chesapeake — consistently meeting our two-year

milestones. The Chesapeake Bay Program announced this summer that we achieved our State's 2012-2013 pollution reduction goals, in large part due to cross-agency efforts such as planting cover crops and forest buffers along streams as well as upgrading wastewater treatment plants and septic systems.

Next up, the 2014-2015 milestones, which include 46 specific, measurable actions and associated goals for reducing pollution, restoring habitats, and fostering smarter, greener growth and living. In addition to State and local efforts, there are also actions that every citizen can take to improve water quality and protect aquatic life.

"All Marylanders are part of the problem, and all Marylanders must be part of the solution," says Donald Boesch, President of the University of Maryland Center for Environmental Science. "We must all play a role in implementing these actions and work together if we are to be successful." ■

[dnr.maryland.gov/ccs](http://dnr.maryland.gov/ccs)

**Kristen Fleming** is the Division Director of Chesapeake, Coastal & Climate Policy.

Follow the causes, solutions and progress of these efforts online at [baystat.maryland.gov](http://baystat.maryland.gov)

This website was designed to inform and engage citizens in restoring our State's most precious natural resource, the Chesapeake Bay.

DNR@WORK

# Kristen Fleming

## Division Director Chesapeake, Coastal & Climate Policy

By Katherine Stanford

Born and raised in Hyattsville, it's no surprise that this Maryland native chose to pursue a career with DNR to preserve the beauty of her home state. In fact, Kristen's appreciation of Maryland waters eventually led her to her current position as the Division Director of Chesapeake, Coastal & Climate Policy.

Kristen attended the University of Maryland for her undergraduate studies, receiving a degree in Psychology. After spending a few years working for Lockheed Martin in Human Resources, she decided to change focus, leaving the private sector to join DNR.

Although Kristen was not experienced in the environmental field, she was able to apply her project management skills and offer seasonal help to DNR's tributary team, where she coordinated strategies for the Upper Potomac River Basin.

After her one-year contract was up, she was pleasantly surprised when offered a full-time position. Fifteen years later, Kristen is an integral part of the CCS team.

CCS, a partnership among local, regional and State agencies, collaborates with many private organizations, such as land trusts and economic development groups. Although Kristen has typically managed administrative and financial tasks for the past several years, she recently switched her focus to concentrate more on policy and legislative duties. In fact, the majority of Kristen's work is policy-related — supporting executive staff on relevant Chesapeake Bay issues — which means there is no predicting when something new will crop up and she will need to drop everything to address it.

Kristen is also the point person for *BayStat*, the State program that advances accountability and coordination among key government agencies in improving the health of the Bay.

She liaises with other agencies to make sure everyone is contributing, data is accurate and that Maryland is on track to achieve designated goals. She is in charge of overseeing the management strategies for the new Bay Agreement as well.

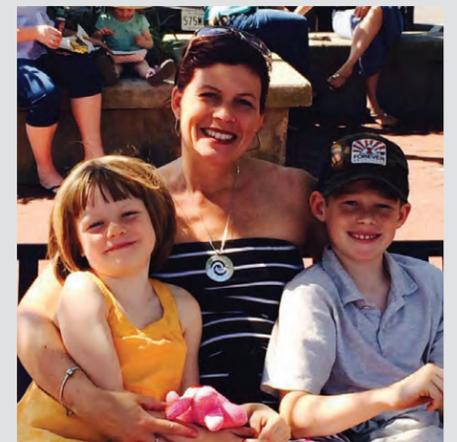
"While we have the Agreement goals and the end results laid out, each state must develop tactical plans on how exactly we are going to achieve those goals and submit them to the Chesapeake Bay Program by June of 2015," explains Kristen.

When asked how exactly CCS works, Kristen reveals that they view themselves as problem solvers.

For example, the Arundel on the Bay community in Annapolis just underwent a major renovation involving shoreline restoration to control flooding and stormwater issues. In this case, as with many others, a community association and a watershed group partnered with CCS to solve the problem in a practical and sustainable way while creating a nice aesthetic.

Kristen's favorite part about her position is that it is ever-changing and dynamic. She finds the challenge important, but also enjoys the satisfaction when the hard work of a completed multi-year project finally pays off.

The job forces her to be focused and sharp — skills that are just as useful outside the office, especially when that means keeping up with two young kids.



Free time is scarce for the Fleming family, but they love to spend time outdoors as often as possible. When winter rolls around, various indoor sports, from the hockey rink to the gymnastics mat, keep them all plenty busy and active.

As a strong team player, Kristen is not only there for her family, but also her unit, where she has had tremendous success. It will be exciting to see what the next fifteen years have in store for her here. ■

**Katherine Stanford** was a summer intern with DNR's Office of Communications.

# Building Coastal Resiliency

## PREPARATION FOR A CHANGING CLIMATE

By Zoe Johnson, Sasha Land and Kate Skaggs

Landscapes are sinking. The climate is changing. Data indicates an observed rise in sea level and predicts increasing rates of future sea level rise. Photos show the destructive aftermath of storms. Today's flood may be tomorrow's high tide. This is a new normal.

A recent NOAA report, *Sea Level Rise and Nuisance Flood Frequency Changes around the U.S.*, substantiates these predictions. According to the report, Annapolis and Baltimore led the pack of coastal communities across the nation being impacted by nuisance flooding, experiencing a 920 percent increase in the number of flood days since 1960.

Of concern is that Maryland is not only seeing more coastal flooding, but also a rise in the number of extreme rainfall events. *The National Climate Assessment*, released in June, showed that the Northeast Region of the country has experienced a 71 percent increase in the amount of precipitation falling in very heavy events from 1958 to 2012.

This data, coupled with the past summer's rainfall totals, indicates a clear trend toward a greater amount of precipitation being concentrated in very heavy events.

Maryland's shorelines extend more than 3,000 miles along the diverse

landscapes of the Chesapeake Bay, the Coastal Bays and the Atlantic Ocean. These landscapes are highly susceptible to coastal storms, flooding, hurricanes, and are vulnerable to the long-term effects of a changing climate. These events are predicted to become more intense and more frequent in the future because of changes in sea level, temperature, wind and wave energy.

DNR has the lead role among State agencies in advancing the scientific understanding of Maryland's vulnerability to climate change, and in advocating for sound planning to minimize impacts, particularly in the coastal zone.



### Coast Smart Communities

So if we can see sinking lands and encroaching tides now, what do we do?

Anything we can, with whatever resources we have available, from inspiring people to simply pay more attention to the extent of tidal inundation, or to incorporating adaptation strategies into a local hazard mitigation plan. DNR's *Coast Smart Communities Program* was created to help local governments with these issues, in any way that addresses their values, interests, risks and vulnerabilities.

Coast Smart is dedicated to assisting Maryland's coastal local governments address short- and long-term coastal hazards, such as coastal flooding, storm surge and sea level rise. The program — a collection of partners supporting this common goal — connects local communities to essential information, tools, people and trainings.

Since the official kickoff in 2009, Coast Smart has supported more than 50 state-local government partnership efforts throughout the coastal zone, and has

awarded more than \$600,000 to support projects in six coastal counties and 19 municipalities.

Currently, Coast Smart is supporting Calvert County, Baltimore City, and Baltimore County, in their individual efforts towards increasing local resiliency. Each community is unique, therefore each solution is tailored specifically for that community. Calvert County is developing small area flood mitigation plans in Cover Point and Broomes Island. Baltimore City is developing an outreach and awareness



campaign, while implementing actions from their combined climate adaptation and hazard mitigation plan. Baltimore County is updating their floodplain ordinance in concert with new Flood Insurance Rate Maps from the most recent FEMA coastal study. All three communities are applying to FEMA's Community Rating System: a program that rewards local governments who go above and beyond the minimum requirements of the National Flood Insurance Program, by discounting homeowner's flood insurance premiums.

If the overall goal is increasing the resiliency of Maryland to coastal hazards, the process is to help institutionalize awareness around these events and their risks. To aid in this goal, along with providing financial support to local governments, Coast Smart is partnering

with the Chesapeake Bay National Estuarine Research Reserve, Coastal Training Program to offer skill-based trainings and technical assistance. Topics include the Community Rating System, Floodplain and Critical Area Management. New courses are also in development.

The impacts of coastal hazards are most intensely experienced at the local level; and therefore require local action. Coast Smart is available to help local governments prepare and increase resiliency for the next event. The program and its partners provide direct assistance to communities to further support their efforts. Along these lines, Coast Smart planners are currently involved in efforts with the Deal Island and Smith Island communities to build awareness and ability to respond to flooding events. ■

*Coast Smart Communities is a program within the Chesapeake & Coastal Service, funded by the National Oceanic and Atmospheric Administration, through Maryland's participation in the Coastal Zone Management Act.*



A summer storm brewing near Annapolis



Hurricane Sandy flooding in Crisfield

### Coastal Training Program

It is a cold, windy, rainy day and 25 participants are standing on the shores of the Corsica River, peering through the mist at the living shorelines created to slow erosion, provide habitat and act as a buffer between water and land. There is nothing like a hands-on experience to make the information taught meaningful and relevant.

Local government staff, non-profit organizations and others are attending a course offered through the Maryland Coastal Training Program. With skill based courses on topics including *Managing Effects of Shoreline Development, Watershed Management & Sustainability, Coastal Flooding & Resiliency* and *Restoration & Conservation*, the program's reach is wide.

The Program's goal is to help inform decision makers on how to further stewardship, conservation and waterway restoration, promote sustainable growth and development, and prepare for and adapt to climate change impacts, including storm surge and flooding.

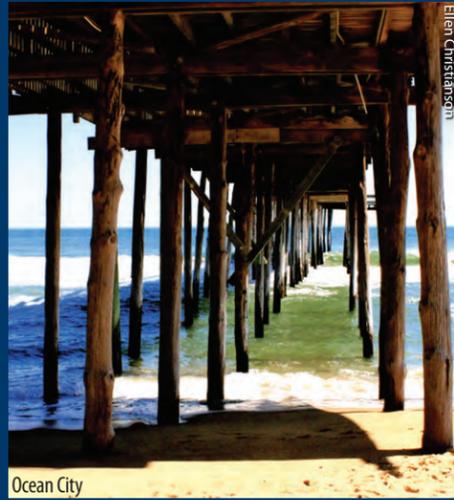
Program staff strives to provide a mix of classroom and experiential learning opportunities for professionals. Participants include local government staff, non-profit organizations, consulting firms and private businesses. Whatever their day jobs, all are interested in obtaining the skills and knowledge that will assist them in protecting the Chesapeake Bay watershed.

Training topics are based on the needs of participants and are designed to provide the most current, relevant science and data to inform daily decisions that impact the Bay, its rivers and its streams.

Each course is developed with a variety of State and local agencies and other organizations to develop curricula and identify experts to teach a broad range of perspectives. The program would not exist without strong partnerships and experts willing to share and pass along their knowledge.

Moving forward, the Coastal Training Program will partner more closely with the Coast Smart Communities Program. Together, these efforts are uniquely positioned to ensure that restoration, resiliency and conservation measures are taken efficiently, and in the most beneficial way. ■

[coastaltraining-md.org](http://coastaltraining-md.org)



Ellen Christianson

Ocean City

## Majority of Marylanders Want Government Action on Climate Change Preparedness

A recent survey released by DNR indicates 73 percent of Marylanders want their state and local governments to take actions to protect their communities against the impacts of climate change, and more than half (55 percent) believe protecting coastal areas from sea-level rise should be a high or very high priority for the Governor and the General Assembly.

The report is the first of four to be released this fall from a survey of over 2,000 Maryland citizens conducted this spring by George Mason University in conjunction with the Climate Communication Consortium of Maryland. The current report focuses on sea-level rise and its impacts on Maryland, perceived threats to local resources, and preferred policies to protect communities at the state, county and local levels.

[climatemaryland.org](http://climatemaryland.org)

### Coast Smart Construction

In the construction industry, there are two essential principles that govern how man-made structures, such as buildings, roads or bridges are built. The first has to do with where structures are located on the ground. The second is centered on how those structures are designed and built. In an era of climate change, many policy makers and emergency managers are rethinking and reshaping these standards.

The Coast Smart Council is the entity leading the charge here in Maryland. Created in response to the House Bill 615 enacted during the 2014 legislative session, the Council is currently working to develop new construction standards for State agency buildings in areas vulnerable to sea level rise and coastal flooding.

What might these look like? The work of the Council is building off work of the Coast Smart Construction Working Group, which recommended infrastructure siting and design guidelines.

DNR Secretary Joe Gill is serving as Chair of the Council, comprised of agenda heads from the State departments of Budget and Management, Business and Economic Development, the Environment, General Services, and Transportation; the Maryland Emergency Management

**SITING GUIDELINES**

- New State structures, the reconstruction of substantially damaged State structures, and/or other new major infrastructure projects should be avoided within areas likely to be inundated by sea level rise within the next 50-years.
- New State "critical or essential facilities" shall not be located within Special Flood Hazard Areas designated under the NFIP and should be protected from damage and loss of access as a result of a 500-year flood.
- Ecological features that may serve to buffer a project from the impacts of future sea level rise, coastal flooding or storm surge or that support general climate adaptation practices, shall be identified, protected and maintained.

*Exceptions to these guidelines may be considered, under certain circumstances, provided that it can be demonstrated that projects have been designed to increase resiliency to future impacts.*

**DESIGN GUIDELINES**

- New State structures, the reconstruction of substantially damaged State structures, and/or other new major infrastructure projects shall be designed to avoid or minimize future impacts over the anticipated design life of a project.
- New State structures and the reconstruction or rehabilitation of substantially damaged State structures located in Special Flood Hazard Areas shall be constructed with a minimum of two (2) feet of freeboard above the 100-year base flood elevation, as defined by NFIP.
- State structures serving transportation purposes that are not water dependent or dependent on integral infrastructure shall be constructed with a minimum of two (2) feet of freeboard above the 100-year base flood elevation, as defined by the NFIP.
- Flooding potential should be considered when choosing building materials for all structural projects, including minor improvements or maintenance and repair.
- Structures and infrastructure proposed within a Limit of Moderate Wave Action boundary as mapped under the NFIP, shall be designed in compliance with construction standards applicable for V Zones.

*Exceptions to these guidelines may be warranted based on consideration of certain factors.*

Agency; the Critical Area Commission; and the University System of Maryland.

Additionally, five members have been appointed by Governor Martin O'Malley to represent local government, environmental and business interests — The Honorable Dennis Dare, Ocean City Councilman; Chris Elcock, GWWO, Inc., and Architects; Dr. Gerald Galloway, Jr., the University of Maryland College Park; Sepehr Baharlou, BayLand Consultants and Designers, Inc.; and Thomas J. Lawton, Somerset County.

Upon appointing the Council, Governor O'Malley stated, "As our seas

rise and our weather changes, it is vital we do all everything within our power today to ensure the future health and safety of Maryland and its citizen.

The newly established Coast Smart Council will ensure we are at the front of this very real, very serious issue, gathering data and developing plans for a ready and resilient Maryland."

The Council met for the first time on July 22, in Annapolis and is set to meet an additional four to six times before June 30, 2015 to further develop the siting and design criteria, as required by the legislation. ■



## Trust in Action

A PHOTO ESSAY

In coordination with other State agencies, DNR works with local and federal governments to administer funding through innovative approaches that engage the community at large. One such program, the Maryland Chesapeake & Atlantic Coastal Bays Trust Fund accelerates Bay restoration by supporting the most effective projects.

Largely financed through Maryland's motor fuel and rental car taxes, the Trust Fund has been further augmented by Governor O'Malley's direction of \$100 million in Capital Funds. To date, it has invested in more than 1,100 water quality improvement projects, including those showcased on the following pages. Local funding and other grants also contribute to their success, as do the countless hours dedicated by passionate and devoted volunteers.

Find more details on these projects and track their progress at [dnr.maryland.gov/ccs](http://dnr.maryland.gov/ccs)

For more information on the Coast Smart Council or to receive notice of future meetings, please contact Zoë Johnson by email at [zoe.johnson@maryland.gov](mailto:zoe.johnson@maryland.gov) or by phone at 410-260-8741.



## Parks and People

**Trust Fund: \$60,000**

Last March, the Parks & People Foundation coordinated funding, hired designers and constructed a large rain garden system in front of the Baltimore ToolBank, which lends high-quality tools to nonprofits and their volunteers for community projects throughout the city. Partnerships with the U.S. Forest Service and the Wildlife Habitat Council guided an entire stormwater management plan to create a filtering process to prevent toxins from entering the Bay. Built long before runoff was a consideration in urban areas, the site's new gardens beautify the entrance to the warehouse while the native plants catch and retain rainwater from the 10,000 square foot roof.



## Tidal Back River

**Trust Fund: \$787,000**

Part of an overall strategy for the restoration of the Tidal Back River watershed, this greening project involved work at seven local schools, the community center and the Essex Park and Ride lot. The implementation met various program requirements while also meeting citizen needs for a healthy environment, clean water and an aesthetically pleasing neighborhood. This includes the design and construction of 8 bioretention areas treating 7.7 acres, one acre of impervious cover removal, 457 feet of stream enhancement, and nearly four acres of tree plantings. These improvements will ultimately remove 115 pounds of nitrogen, 20 pounds of phosphorus, and 10,213 pounds of total suspended solids per year from local waterways.

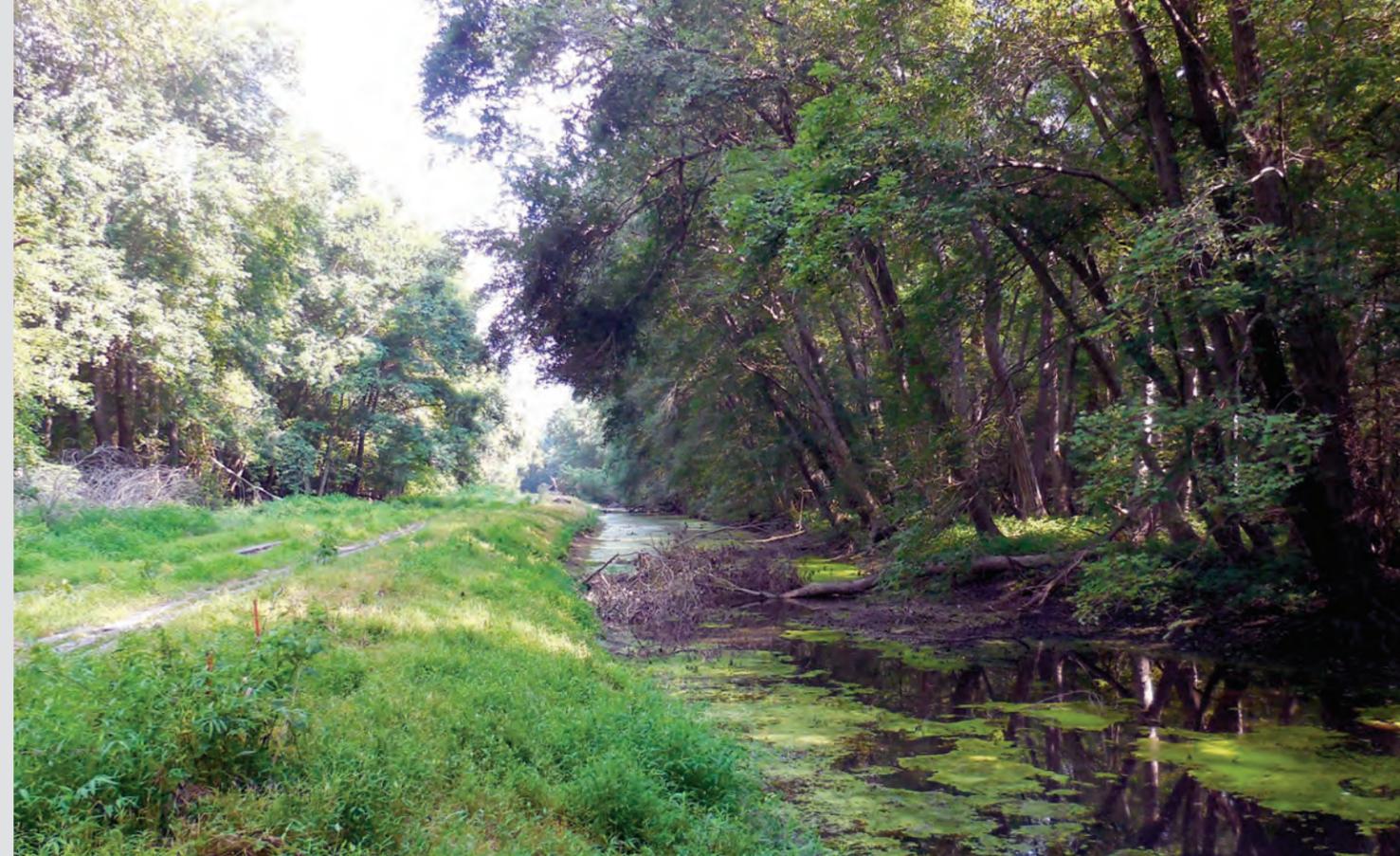




## Arundel on the Bay

Trust Fund: \$788,600

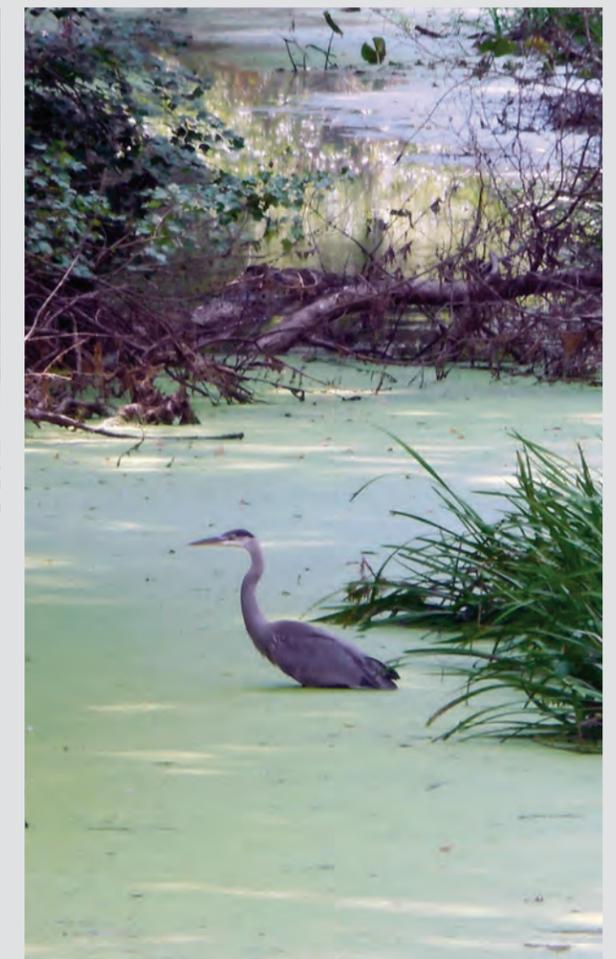
With little capacity for runoff, the Arundel on the Bay neighborhood near Annapolis was accustomed to experiencing flooding and other stormwater issues. Partners including the Chesapeake Bay Program and the South River Federation joined the community to develop a watershed plan, which includes stormwater retrofits (such as rain gardens), a living shoreline and wetland expansion. Designed by Biohabitats Inc. and constructed by Keith Underwood and Associates, the completed project now serves as an example to further educate residents on how to best handle the results of storm events.



## Horsebridge Creek

Trust Fund: \$90,000

Channelized to drain farmland, the project at Horsebridge Creek — a tributary of the Pocomoke River — will reduce the impacts of the *berm* (raised land) bordering the western edge of the stream. The State and Wicomico County own a large portion of forested floodplain wetlands along the western shore and the Nature Conservancy (a project partner) owns other sections across the creek. DNR Engineering and Construction staff is replacing 14 *culverts* (tunnels inserted to allow water to enter the floodplain when the creek level rises) with wide openings that will allow more regular water flow into the floodplain from the creek.



# Water Ways

PUBLIC ACCESS IN MARYLAND

By Lisa Gutierrez



Kayaking around Kent Island



Photos by Lisa Gutierrez

“Water: no matter how much, there is still not enough.” –Seamus Heaney

Maryland’s extensive network of navigable waterways in the Chesapeake Bay watershed and Atlantic Ocean has made interaction with water second nature to many residents of the region. While public access to the water may be limited in some states, Maryland is fortunate to have more access sites than any other jurisdiction in the Chesapeake Bay watershed. Statewide, there are currently 257 public boat ramps that primarily serve trailered boats, 321 facilities that provide access for soft launching, and several other facilities that provide docking or transient use. All are important components of the State’s boating infrastructure and help support recreational boating.

But in a State where water-based recreation is a popular outdoor activity among residents, there is a significant desire for additional opportunities for water access. The summer issue of *The Maryland Natural Resource* featured an article on the State’s Land Preservation and Recreation Plan, *This Land is Your Land*, which touched on this request for additional water access and even provided

data in support of this claim. To create the Plan, DNR surveyed the State about land use and recreation and found that due to the popularity of boating recreation, expanded water access was a priority across Maryland.

But it’s not just citizens who want more sites; expanding water access is a priority at the federal, State and local level.

## The Multi-faceted Benefits

The State recognizes the physical and mental health benefits of being on the water. It allows citizens to exercise and relax—whether on a kayak, sailboat, motor boat, or whatever their vessel of choice.

It has been documented that simply being near the water can be as beneficial to our overall quality of life as being in the water. So, DNR is also working to provide additional public open space along waterways where visitors can explore the outdoors, view wildlife, enjoy trails or camp near the water’s edge.

Providing water access also offers substantial benefits to the environment and the State’s economy. The environmental value of water-based recreation —

which helps build a stewardship ethic, encourages protection and preservation and is a platform for outdoor classrooms — is recognized throughout local, State and federal governments. It is estimated that recreational boating and marine-related industries contribute approximately \$2.41 billion to Maryland every year.

## Providing More Sites

Even though Maryland has a good deal of existing sites, DNR continues to work with partners to improve or create additional public access locations. Many jurisdictions are upgrading or expanding their water access facilities to provide separate accommodation for non-motorized users and to provide universal accessibility for persons with disabilities.

DNR provides technical assistance and funding through programs like the Public Access, Water Trails and Recreation Planning Program and the Waterway Improvement Fund.

The Public Access, Water Trails and Recreation Planning Program coordinates the development of water trails and access sites statewide and provides technical,

mapping and design assistance to local governments, while promoting safe and responsible boating and paddling practices.

The Waterway Improvement Fund was created in 1966 to support the development, use and enjoyment of all Maryland waters for the benefit of the general boating public. Revenues for the Fund are obtained primarily from the one-time 5% excise tax that is paid when a boat is purchased and titled in the State.

## Resources for Boaters

DNR actively tracks and coordinates activity related to public water access in the State and provides a variety of resources and information.

The Maryland Online Water Access Guide gives detailed information on existing sites such as boat ramps and soft launches, and includes information on fees, permits, hours of operation, parking and contacts.

The guide is presented in the form of a user-friendly, interactive map and the access sites are organized by jurisdiction. Fees and permits vary by location, so it is highly recommended that you contact the local entity before you go.

In addition to developing water trails, DNR also maintains information on trails throughout the State. These trails provide well-mapped routes in a variety of settings with options for paddlers of all experience levels. To date, Maryland has over 600 miles of State-designated water trails. In 2014, DNR launched new trails in four Maryland counties: Somerset, Charles, Queen Anne’s and Frederick.

Through partnerships with local governments, citizen associations, and nonprofit organizations, DNR is working

## New Trail in Somerset County

This August brought about the completion of the Monie Bay Water Trails, which features three paddling routes that provide visitors a unique view into the wildlife, plants and maritime history. These trails were created by a successful partnership between the Chesapeake Bay Trust, the Chesapeake Conservation Corps, Somerset County and several units within DNR, including the Chesapeake Bay National Estuarine Research Reserve Maryland. The Reserve protects and manages more than 6,000 acres of natural lands and waters in Maryland, which serve as living laboratories and classrooms to address key Bay issues.

Despite being the Reserve’s largest and longest-established component, Monie Bay lacked visitorship. To remedy this, a Chesapeake Conservation Corps intern pioneered the trails to give visitors the opportunity to experience firsthand the rich ecology of this salt marsh habitat. A total of 40 signs were installed over the three trails to provide navigational aid and indicate points of interest. The trail map is available for download online.

[dnr.maryland.gov/waters/CBNERR/MonieBay.asp](http://dnr.maryland.gov/waters/CBNERR/MonieBay.asp)



Paddle boarders taking on the Chesapeake

to build and expand a statewide network of water trails. Existing trails or developing projects can be found in every region of the State. ■

[dnr.maryland.gov/ccs/pawt.asp](http://dnr.maryland.gov/ccs/pawt.asp)

Lisa Gutierrez is the Director of Maryland’s Coastal Access, Water Trails and Recreation Planning Program.



Canoeing on Wicomico River

Anglers, you've already experienced a full season of fishing this summer — why leave the Bay when you're at your best?

A long-time angler, Joe Evans, DNR Fisheries public affairs officer, shares his knowledge of and tips for — both personal and professional — fishing in the fall.

"Autumn is my favorite time of year for this sport. Not only is the air crisp and fresh, the conditions are ideal for fishing all day long," says Joe.

Many anglers, novice and seasoned alike, are often surprised to find that with the right location, a little know-how and some practice, fall can be one of the most enjoyable times to cast a line. The weather is cool, the boaters are few, and, if you know where to go, the fish are still biting strong.

### Location, Location, Location!

As water temperatures cool, the Bay comes alive with a variety of catch-worthy fish that venture to the mouths of small waterways to feed on baitfish moving downstream to the Chesapeake for the winter.

These sections of the Bay are swimming with Maryland's State Fish, the striped bass, which remain in the Chesapeake year-round. These are mostly males from

one to 10 years old. Older and larger migratory fish will also show up after spending the summer in New England waters. Other possible catches include bluefish and speckled trout, which can be found feeding on white perch, bay anchovies and minnow bait.

Certain locations could bring in continuous fishing throughout the day, so throw your lure where they will bite, follow the bait and you'll find success.

"My favorite spots are open water areas, such as the Choptank River, the Chester River, Hackett's Shoal, and the waters between Tolly and Thomas Points," says Joe. "But my *absolute* favorite is the Poplar Island complex."

Off the Eastern Shore, Poplar sits out in a mix of currents from Eastern Bay, the Choptank River, Poplar Narrows, and Chesapeake Bay, making it the home to an abundance of fish. For Joe, this spot is where most of his family outings take place.

"Spending a day on the water with my family is special," explains Joe. "Everyone gets the chance to catch a rockfish or a blue this time of year at Poplar."

### Ideal Time of Day

According to Joe, the best time to fish on a fall day is at sunset and sometimes under

a big moon. Stripers feed at night, and with the sunset and moon as guiding lights, the search for food goes into full swing.

"Right at the end of the day, the temperature grows cooler, the night air begins to settle, the water is quiet and most boaters are headed in for the day. This prime opportunity could lead to a great catch," says Joe.

"Not only are bass feeding, but these fish will feed persistently until they have had their fill. So stay out for a couple hours, enjoy the sunset and the cool breeze," he adds.

### Special Encounters

Fishing in the fall can be a huge success no matter the skill of angler, especially when encountering a *blitz*. A blitz occurs when dense groups of baitfish rise to the surface followed by aggressive predator fish, causing a feeding (and fishing!) frenzy. The sure signs of a blitz are diving seagulls and a crowd of anglers looking to get in on the action.

Silence is important for catching fish during a blitz. Turn off your engine before drifting in close. If the fish are spooked or disturbed, they will disperse, leaving you with nothing to catch. ■

[dnr.maryland.gov/fisheries](http://dnr.maryland.gov/fisheries)

Jessica Hawkins was a summer intern with DNR's Office of Communications.

# Tackle Tips

**CHOOSE BAIT WISELY.** Fish want one thing — food. Selection of tackle could be the difference between catching fish or going home empty-handed.

"In the fall, you don't need heavy tackle," says Joe. "The lighter the tackle the more realistic the bait will seem, which is key to successfully catching fish."

**LIVE BAIT WORKS WONDERS** as well. Stripers are predators; they will feed on anything that moves, and as temperatures cool, bass instinctively look for food to fatten up for the winter. Live minnows are the bait of choice — the freshest bait will make the difference in an angler's success.

Enjoy the season, grab your rod and relax. High water traffic from summer is slowly dying down. The fall fish are out and about. Go explore and take advantage of this glorious time of year!



Striped bass

Chris Stephens



Bluefish



Striped bass

Kevin Corbin



An unexpected onlooker

Bill Brown



Alan Klotz



Bluefish

Thomas Wazlavsek



Courtesy of Enoch Pratt Library

# Saving the Places We Love

## Patapsco Valley State Park

By Max Buffington

*“Most of us do not have the time, the money or the bandwidth to save the planet, a concept far too abstract and daunting. But our homes and neighborhoods, and places where we go on vacation, are real to us...As we get to know these marvelous spots, we want to protect them so we can keep coming back and eventually pass them on to our children. We develop a bond with them...and therein lies the key to saving special places, our country, our planet and, finally, ourselves.”*

—Ned Tillman

From *Saving the Places We Love: Paths to Environmental Stewardship*

The Patapsco River rises from small springs in Maryland’s Piedmont region and flows eastward through a lush valley into Baltimore’s Inner Harbor. For much of its length, it lies within Patapsco Valley State Park, where its clear water is bound by forested ridges so steep that it is often labeled a gorge.

### The Park We Love

This Park became a special place for me gradually over a lifetime. Many of my fondest memories were made there: tubing with my kids at Avalon, bicycling the Old Main Line Trail, paddling from Sykesville to the Harbor with buddies, relaxing with coworkers at office picnics at McKeldin and Pickall, celebrating my wife’s retirement at Hollofield, and taking my grandchildren for an adventure at the Orange Grove Swinging Bridge.

While many Marylanders share my love for this Park, not everyone knows how badly the Valley was mistreated by its past industrialization or the effort that was

required to restore it to its glory. It is easy to note the beauty of water splashing over the Park’s dams, but harder to remember to connect them to the Valley’s past, when railroads, farms and mills dotted the River. One might believe the river and forest appear today much as they would have to Captain John Smith on his first visit in 1608; however this is far from the case.

Located between two great metropolitan areas, it would have been nearly impossible for such prime real estate to remain undeveloped for 400 years. In fact, soon after English explorers discovered the Patapsco River, its development began.

### Shipping and Manufacturing

In the 1700s, it was a water link between English merchants and Maryland’s great colonial plantations —tobacco was shipped out and trade goods were shipped in. The river quickly filled with sediment washing in from the stripped ridges, and additional sediment came from tributaries

near tobacco plantations. Before loading their cargoes, English merchant ships dumped ballast into the river.

Easily exploited ore and trees for fuel led to the development of iron furnaces, which played a significant role in Maryland becoming one of the world’s largest iron producers...for a time. The area’s dense forest was the first to be destroyed as ridges were cleared to fuel this production.

These human activities combined to choke the Patapsco River.

### Railroads and Resources

By the early 1800s, the 15-foot high falls and the town of Elkrige Landing’s deep water harbor had both disappeared.

Energy and transportation also changed industrial development in the Valley during this time. Water was captured and channeled by nearly 30 wooden and concrete dams to provide cheap energy. Low-cost transportation was provided by the Baltimore and Ohio Railroad, which had laid its first tracks through the area on

its route to the new western states of Ohio, Indiana and Illinois.

Inexpensive transportation also fostered the abuse of the valley’s mineral resources. Granite, marble, soapstone, potash, asbestos, chromium and iron ore were mined or quarried from the Valley. More than 30 textile, grist, paper and saw mills along with their dams, company towns, and mill workers and their families were located along the river to exploit these resources.

### A Changing Dynamic

The 1900s saw waterpower give way to electricity. Wooden dams prone to destruction or heavy damage from frequent flooding were replaced by larger concrete ones producing electricity. Even so, the Patapsco Valley, with a combined industrial output that once rivaled more famous towns of the American Industrial Revolution, began to wane.

By the 1970s, the last of the textile and paper mills had closed, leaving only a few in operation. Today, the only Patapsco mill still in business is a gristmill in Ellicott City. Indeed, there are few artifacts left of the former mills — iron furnaces, wooden dams and company towns — as their sites were scoured by floods or purposeful demolition.

The Patapsco Valley paid a heavy price for four centuries of industrialization.

### A River Close to Ruin

The Patapsco was nearly destroyed by pollution. In the 1970s, Maryland’s water quality agency described the River as

*“When they had dye in the dye house, the dye come out of them kettles, went into the river and when it come up by that turbine down there, it made the whole river green, red, all different colors. And the fish couldn’t live in it. They was jumping clear out the water...People was eating them with that dye in them, yeah.”*

—Wallace Earl “Bunky” Merryman, Millworker at W.J. Dickey and Sons  
From *Patapsco: Life Along Maryland’s Historic River Valley*

“grossly polluted.” It carried agricultural waste from canneries in western Howard and Carroll Counties, dyes and industrial chemicals from the mills, and spent mash from distilleries in nearby Arbutus.

Mill towns like Oella and rural communities like Sykesville were among the last in Maryland to replace their outhouses with modern public sanitation systems, adding to pollution. Many visitors today are surprised to learn that as late as the 1980s the community of Oella had no public sewer system and that Park Rangers had to keep swimmers and boaters out of the river.

### A 100-Year Effort

Federal, State and local government organizations, however, joined to rebuild the Park, starting in the early 1900s, before they even knew they were rebuilding. A forest preserve was established in 1907 to begin its reforestation. As a result, Patapsco Valley evolved into Maryland’s first State Park.

In the 1930s, the State’s environmental initiative was advanced by 400 young men from the Civilian Conservation Corps, who planted trees as well as built trails and shelters. State and federal governments attacked water pollution following the passage of the Clean Water Act in 1972,

aggressively forcing Patapsco industries to cease dumping waste into the river and to fund public sanitation systems.

Like most successful efforts, government agencies partnered with the public to make a difference. Citizen volunteers devoted thousands of hours of labor to the restoration effort. Responding to conscience, calls for community service and love for the area, they have planted trees, removed debris and litter, attacked invasive plants, and rehabilitated worn trails.

### Patapsco Today

Approximately 750,000 people now visit Patapsco Valley State Park annually. Yet, despite its present idyllic appearance, the river faces ongoing environmental threats. Storm run-off pushes a heavy load of sediment and pollution in the form of plastic bags, water bottles, lawn chemicals and pet waste from nearby commercial and residential developments into the water.

Park visitors leave behind litter and diapers. The forest is stressed by too many deer, and an explosion of invasive plants and animals like the wavy leaf basket grass and emerald ash borer beetle. In the not-too-distant future, warmer temperatures and rising Chesapeake water levels will bring more changes to Patapsco’s flora and fauna.

But hope still remains that we can preserve this beloved Park. While Patapsco can’t be everyone’s special place, for me, maintaining the beautiful clean river and thick green forest is non-negotiable. I’m optimistic that citizens will not only *Leave No Trace*, but will also consider joining the volunteer ranks to ensure that our children, and theirs, can continue to enjoy this amazing piece of history. ■

[dnr.maryland.gov/publiclands](http://dnr.maryland.gov/publiclands)

Max Buffington is a Park Ranger at Patapsco Valley State Park.



Max Buffington

At the Swinging Bridge at Orange Grove, park visitors enjoy the clean water and forest trails where a wooden dam and millrace once stood.



Tom Clifton

It was Christmas Day last year when Natural Resources Police Corporal Dan Yankie got the call about a bald eagle shot dead on his Montgomery County beat. Three days later, his phone rang again, this time about a gravely injured eagle that died a short time later of a gunshot wound.

The outcry was immediate and intense. Media outlets across the country publicized the killings. Anonymous donors and animal advocacy groups quickly created a reward fund of \$8,000 for information leading to the arrest and conviction of the shooters.

“Bald eagles affect everyone, from the bird lover to the patriot,” says Yankie, a 25-year veteran of NRP and the Maryland Park Service. “But there are definitely people out there who are craven enough to kill an eagle.”

Despite the fact that the bald eagle is revered as our national symbol and was only recently removed from the federal and state lists of endangered species, more than a dozen eagles are felled each year in Maryland.

“They are found shot, poisoned, tangled in debris or can ingest toxins,” says Dr. Cindy Driscoll, the State’s wildlife veterinarian, who often helps investigators look for clues in their cases. “People should remember that although eagles are no longer endangered, they are still protected.”

But it’s not only eagles that suffer. For example, a total of 129 Maryland raptors — ranging from eagles and hawks to owls and vultures — were treated last year by Tri-State Bird Rescue and Research, a Delaware-based clinic that specializes in the care of ill, injured and orphaned wild birds.

“Every bird that comes in has a story,” says Dr. Sallie Welte, the non-profit clinic’s director. “It’s unfortunate that these injuries occur, but it’s fortunate that people care enough to take time out of their days to ensure that the birds get here.”

Wildlife experts and law enforcement officials insist that hard-fought efforts to restore the bald eagle population over the last four decades should not be undermined by indiscriminate killings.

The bald eagle was declared an endangered species in the United States in 1967. Protective laws and the banning of the pesticide DDT, which caused the thinning of egg shells, put the birds on the road to recovery.

In 2007, the bird was removed from protection under the Endangered Species Act and Maryland followed suit in 2010. But it is still illegal to shoot eagles\* — a conviction carries a maximum fine of \$5,000 and up to one year in prison.

As a result of tough laws and an adoring public, Maryland has more than 500 nesting pairs of bald eagles, at least one pair in every county. Eagles along the upper Chesapeake Bay and inland lay eggs in late February or early March that hatch in April.

Welte and Driscoll say there is no plausible excuse for shooting a distinctive mature bald eagle, with its white head and tail and golden beak and talons.

“It’s intentional,” says Welte. “There’s responsible hunting and then there’s poaching and freelance shooting without respect for life.”

Trying to excuse a shooting by claiming it was a case of mistaken identity won’t fly, either. Under the federal Migratory Bird Treaty Act, killing a turkey vulture — or a hawk, owl or osprey — is punishable by a fine of up to \$15,000 and imprisonment of up to six months.

As opportunistic feeders, bald eagles and other raptors often fall victim to another deadly hazard: secondary poisoning by farmers trying to eliminate nuisance rats or predators, such as foxes and raccoons. There have even been cases

**TO REPORT AN INJURED RAPTOR, call the Natural Resources Police Communications Center 410-260-8888.**

**TO ANONYMOUSLY REPORT A SHOOTING, call the catch-a-poacher hotline at 1-800-635-6124, where a reward is possible.**

of eagles dying after eating pets euthanized by veterinarians, but not buried in deep enough graves by the owners.

Eagles, hawks, owls and osprey face additional hazards created by traffic, power lines and lead poisoning from ammunition.

“Nursing raptors back to health is difficult because you can’t reason with the patients,” Welte says.

“They have to relax enough in captivity to heal, to eat without being tube- or force-fed. And we have to prevent secondary feather and foot damage that sometimes happens in captivity,” she explains.

According to Dr. Allison Wack, a veterinarian at the Maryland Zoo who assists DNR with cases, the outcome often comes with an emotional payback. Just recently, someone dropped off a fledgling kestrel that was being kicked by children in downtown Baltimore. After a little TLC, the bird was returned to downtown and released to the custody of its waiting parents.

“It’s an amazing feeling to know that you are contributing in some small way to helping wildlife,” Wack says. “It’s one of the highlights of our job — we deal mostly with captive animals — seeing them go back out to the wild.”

If rehabilitation is hard work, so is catching the perpetrators.

In Yankie’s cases, the first eagle was shot with a rifle in a Brookeville field as it fed on a deer carcass. The second was killed by shotgun as it flew through a Darnestown neighborhood.

Both cases remain unsolved, the \$8,000 reward money left unclaimed.



Jason Gerneroth

Hawk

“They’ll likely stay that way,” says Yankie, “unless someone steps forward with new information. People know the laws and know this is a serious crime. Someone convicted isn’t going to be sent to the county jail and eat bologna sandwiches for a week. They’re going to a federal facility.” ■

[dnr.maryland.gov/nrp](http://dnr.maryland.gov/nrp)

Candy Thomson is NRP’s Public Information Officer.

# FLYING FREE

## Protecting Maryland raptors

By Candy Thomson

\* An Eagle Depredation Permit may be granted by the U.S. Department on the Interior to take or disturb bald or golden eagles only if they have become injurious to wildlife, agriculture or other personal property, or human health or safety.

# WILD SHOT

Known for their voracious hunting habits, two of three praying mantis species found in Maryland were intentionally introduced for insect control. (The third is native to the area.) These predators can turn their heads a full 180 degrees, see up to 60 feet away and attack their victims with a paralyzing bite to the neck. Natural exterminators, they will take care of most garden pests, though they avoid areas treated with pesticides. ■

*FALL FOLIAGE* BY LORI R. BRAMBLE  
[dnr.maryland.gov/photocontest](http://dnr.maryland.gov/photocontest)

## Conservation Jobs Corps Graduates 261 Students



A graduation ceremony was held at North Point State Park in August.

This summer, the 2014 Maryland Conservation Jobs Corps (CJC) graduating class — 261 teenagers from six Maryland counties — joined the 1,800 students who have gone before them. Formed in 2008 by Governor Martin O'Malley, this unique summer employment program provides enthusiastic young people, ages 14 to 17, the tools, education and support to take part in building projects, stewardship

activities and conservation services to improve State Parks and other public lands.

CJC crews accomplished a great deal in a short time this year, contributing to projects at seven parks and recreation areas across the State: Assateague, Gunpowder Falls, Patapsco Valley, Seneca Creek and Susquehanna, as well as the Gwynns Falls Trail and Merkle Wildlife Sanctuary.

[dnr.maryland.gov/cjc](http://dnr.maryland.gov/cjc)

From designing a sensory trail for people with disabilities and planting forest buffers, to creating rain gardens and cleaning-up streams and rivers that feed into the Bay, CJC members were busy and productive. Members also participated in outdoor activities like hiking, canoeing and camping, helping these mostly urban young people build a connection with nature.

## State Parks Partner with Green Travel

Thirty-five Maryland State Parks are now *Maryland Green Travel* partners — part of a free and voluntary self-certification program that promotes and recognizes sustainable environmental practices by tourism businesses.

Maryland State Parks have long been community leaders in stewardship. Staff and volunteers frequently host restoration projects such as habitat construction, stream and river clean-up, invasive species removal and tree plantings. They also provide numerous educational programs

to schools, community groups and the general public.

“Our parks are designed to be sustainable, with minimal impact to the natural world around them,” said Nita Settina, Superintendent of the Maryland Park Service. “These areas offer a wide variety of landscapes and provide diverse recreation while preserving the ecology, beauty and sense of place of the local area. They are terrific choices for those seeking the best in environmentally-friendly tourism.”

[visitmaryland.org/green](http://visitmaryland.org/green)



Green Travel Manager Catherine Batawick presents Green Travel Certificate to Sandy Point State Park Manager, Ranger Steve McCoy and Christina Holden of the Maryland Park Service.

## Grant Boosts Project to Save Oyster House



Phillips Wharf Environmental Center rendering

The Maryland Heritage Areas Authority awarded a \$92,000 grant to the Phillips Wharf Environmental Center — the last waterfront oyster house on Tilghman Island — to transform an aging building surrounded by abandoned boats into a seafood processing, marketing and educational center. In operation for more than a century, this property will undergo measures to preserve the culture of the Island's working watermen, beckon tourists and boost economic development.

For the past 17 years, Maryland Heritage has supported projects that emphasize the State's cultural heritage and contribute to local economies through tourism. While the mix of capital projects and educational activities promote some of the most unique historical and natural sites and cultural events, they also improve resources that contribute to great Maryland communities.

[planning.maryland.gov](http://planning.maryland.gov)

## BayBucks Reward Restoration Action

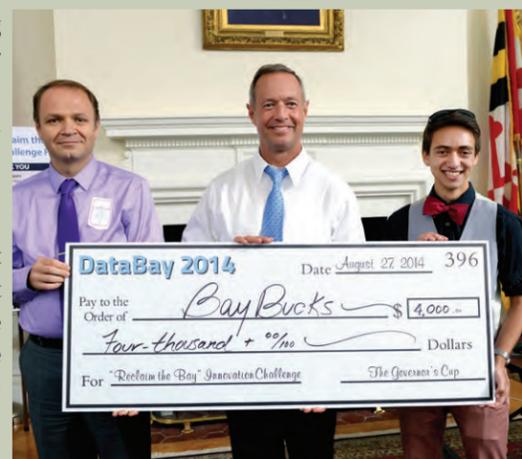
This summer, Governor Martin O'Malley held the first *DataBay: Reclaim the Bay Innovation Challenge* at the Smithsonian Environmental Research Center. This unique *hackathon* contest brought together more than 80 scientists, programmers, techies and others to collaborate and innovate for Bay restoration.

The BayBucks team claimed the \$4,000 grand prize for creating an app that uses an online reward system to track and encourage citizen contributions to a healthier Chesapeake Bay. With a fun and easy to understand points system, users

receive incentives from participating local businesses in exchange for sustainable actions. For example, a user may receive a discount at a coffee shop for installing a rain barrel in their yard.

According to Governor O'Malley, “The DataBay Challenge brought together some of Maryland's brightest minds and best technologies to create applications that make it possible for every citizen to have a hand in reclaiming the Bay.”

[databay.splashthat.com](http://databay.splashthat.com)



BayBucks creators were presented with \$4000 on August 27.

## Raise Your Voice! Sea levels are Rising.

Tell your community members to prepare for stronger and more frequent storms



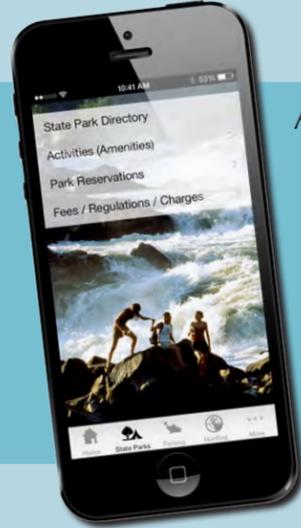
#ActOnClimate • [ClimateMaryland.org/adapt](http://ClimateMaryland.org/adapt)

[CLIMATEMARYLAND.ORG](http://CLIMATEMARYLAND.ORG) CLIMATE COMMUNICATION CONSORTIUM OF MARYLAND

What do 85k people know that you don't?

find out @AccessDNR





## AccessDNR App Awarded for Excellence

The free AccessDNR mobile app — available for Apple and Android devices — has recently received a VEMA Award for its innovative, artistic and creative integrity.

More than 10,000 users now have at their fingertips the ability to reserve State Park campsites, report hunting harvests, locate boat launches, purchase licenses and more! If you haven't already, download it today!



## Volunteer with DNR

Are you an outdoor enthusiast? Want to help protect Maryland's natural resources? Enjoy working with others who want to help?

Volunteer programs across the agency provide many ways to easily get involved in restoration projects.

Opportunities from environmental education to tree planting to water monitoring are available for students, adults, groups and organizations.

Whether you devote a few hours or several weeks, on weekdays or weekends, you will be making a difference towards preserving the beauty of our State.

[dnr2.maryland.gov/Pages/volunteer.aspx](http://dnr2.maryland.gov/Pages/volunteer.aspx)



Patapsco Valley State Park volunteers



Maryland Environmental Trust highway cleanup

## Sandy Point Boasts ADA Accessible Piers



Backe Pier

The State of Maryland has officially named the accessible boating piers at Sandy Point State Park in honor of the late Donald E. Backe — former DNR Disability Advisory Council member and Americans with Disabilities Act coordinator.

After a serious car accident left him paralyzed from the waist down, Don was determined to continue pursuing the outdoor activities he loved. In 1991, he created Chesapeake Region Accessible Boating (CRAB) — a nonprofit organization based in Annapolis that helps those with physical and developmental challenges sail. For more than 20 years, he helped people with disabilities enjoy boating.

His own obstacles aside, he was a finalist in the Paralympics Trials; earned the U.S. Sailing Marty Luray trophy for contributions to community sailing; and won the U.S. Sailing and Old Pulteney Maritime Heroes Award for his work with CRAB. He passed away in 2013 at the age of 77.

Recognizing the non-uniformity of disabilities, DNR staff members are trained to be aware of the varying needs of a diverse public, and are prepared to assist whenever and wherever possible. The agency continues to make a special effort to ensure all facilities and programs are accessible to all citizens and visitors. Ongoing improvements are being made to camping areas, cabins, docks, visitor centers and trails.

[dnr.maryland.gov/ofp](http://dnr.maryland.gov/ofp)  
[crabsailing.org](http://crabsailing.org)



2014 Fishing Challenge Finale



Stephen Badger

## Congratulations, Rick!

Rick Snider of Biglerville, Pennsylvania walked away with the 2014 grand prize of a boat, motor and trailer from Bass Pro Shops and Tracker Boats for catching the Angler-Award-qualifying 40.5 inch striped bass off Breezey Point in Calvert County.

Bobby Gibson of Church Hill, Warren Snoots of Davidsonville, William Albert of Catonsville, Lee Cheyne of Ellicott City and

Douglas Combs of Baltimore were among other winners at the 2014 Maryland Fishing Challenge Finale event.

The Challenge is a free, year-round tournament sponsored by the DNR Fisheries Service, recreational fishing organizations and generous donors across the State.

[dnr.maryland.gov/fisheries](http://dnr.maryland.gov/fisheries)



## KNOW THE LAW

Officers are cracking down on those who ignore State regulations on minimum sizes, possession limits, harvest hours and crab pot registrations. They are also on the lookout for recreational crabbers who keep female crabs, which is illegal in Maryland.

[eregulations.com/maryland.fishing](http://eregulations.com/maryland.fishing)

## Rockfish Ceviche

(2 Servings) — from Chef Antonio Baines

### Ingredients

- 1-pound fresh, skinless rockfish fillet, cut into ¼ inch cubes
- 1 large ripe tomato, diced
- 1½ ears of fresh corn (shucked, kernels removed)
- ½ med red onion, diced
- 1 jalapeño pepper (cored, seeded, diced)
- 1 tsp fresh crushed garlic (finely diced)
- ¼ oz chopped fresh cilantro
- ¼ oz chopped parsley
- 1 ½ cups fresh lime juice
- Juice from one fresh lemon
- Juice from one fresh orange
- Salt

### Preparation

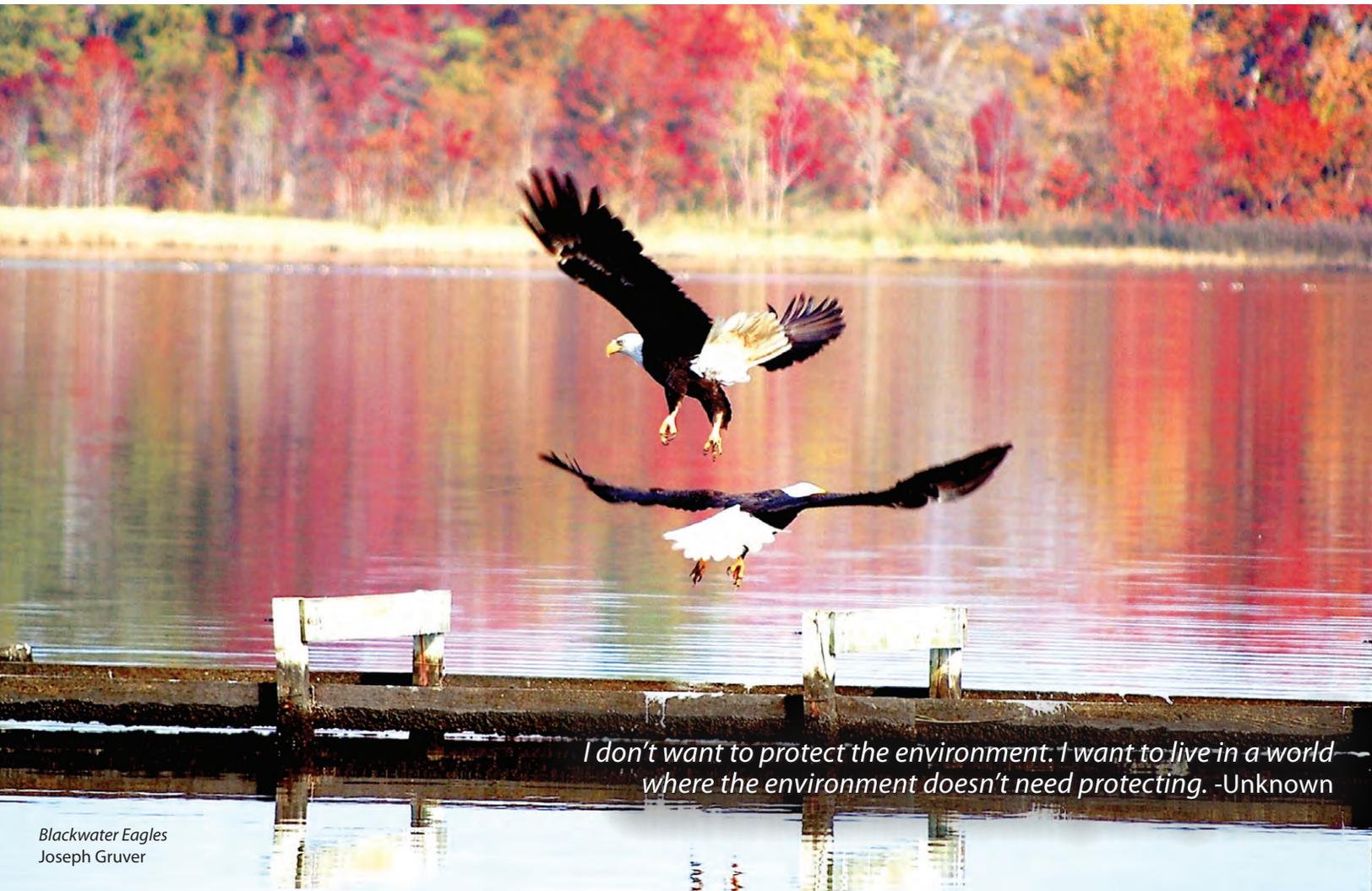
In a large bowl, combine the rockfish, garlic, citrus juice and salt to taste. Using a rubber spatula, gently mix ingredients until well incorporated. Let stand chilled for 20 minutes. Next, add the red onion, tomato, corn, jalapeño pepper, cilantro and parsley. Gently mix until all ingredients are evenly incorporated. Salt again if necessary. Serve with your crispy root chip of choice. The finished ceviche can be stored around 45 degrees or consumed after preparation.



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*I don't want to protect the environment. I want to live in a world where the environment doesn't need protecting. -Unknown*