

#### SPRING 2017 | CONSERVATIONFUND.ORG

- 2 ECONOMIC VITALITY
- 3 VIBRANT COMMUNITIES

LAND, WATER AND WILDLIFE

4 HOW YOU CAN HELP



#### **CONNECTING PEOPLE AND NATURE**

## Rising Tides: Innovative Climate Strategies In The Chesapeake Bay

At Blackwater National Wildlife Refuge on Maryland's Eastern Shore, rising sea levels are swallowing acres of critical marshland. Black holes of brackish water now dot the more than 28,000 acres of sanctuary land. To prevent these marshes from completely disappearing, the U.S. Fish and Wildlife Service has joined forces with Audubon Maryland-DC and The Conservation Fund to implement an innovative climate resiliency project.

In a first for the Chesapeake watershed, we raised the surface of a key 40-acre marsh site by dredging 26,000 cubic yards of sediment from Blackwater River and layering it across the marsh. This thin-layer technique adds height to the marsh in the local Chesapeake tidal range and will stimulate more native plant growth. The added root mass of these marsh grasses will continue to lift the marsh surface in the future despite rising tides. To date, this is the largest wetland restoration project attempted at Blackwater. Strategic replanting in the marsh will take place this spring.

Coupled with other initiatives—such as protecting land in key future marsh migration areas—targeted thin-layer elevation is vital to the future of the refuge's wetlands. In fact, scientists predict that without such action to adapt to rising sea levels, virtually all of today's tidal wetlands in this part of the Chesapeake Bay will become open water by the end of the 21st century. If we lose Blackwater's marshes, we lose critical habitat for migratory birds, waterfowl and fish, as well as natural protection for nearby communities from storm surges. This ambitious project will help Blackwater's treasured wetlands persist for future generations—even in the face of climate-driven sea level rise.



### How Are We Creating A More Resilient Blackwater National Wildlife Refuge? Ask Matt.

### How have the marshes at Blackwater National Wildlife Refuge changed over time?

Remarkable changes often unfold gradually.

Since Blackwater was established as a Refuge in 1933,
more than 5,000 acres of tidal marsh, previously dotted with small
ponds, have been lost to open water, due largely to a combination of rising sea level, sinking land
and herbivory by the invasive nutria. My colleague and friend, the late Guy Willey, observed and
documented this slow conversion for six decades. Looking at long-term climate impacts is imperative to the marshes' resilience. We have to think about both managing the current conditions,
as well as what they will be in the future.

#### Why did you first begin partnering with The Conservation Fund?

We first partnered with The Conservation Fund and Audubon Maryland-DC to develop a Sea Level Rise Adaptation Plan for the refuge. Since then we have worked together to carry out that plan, most recently by using Superstorm Sandy relief funding to build 40 acres of resilient tidal marsh on the refuge by pumping mud from the bottom of the Blackwater River and placing a thin laver across the marsh.

#### Why is it so important to support the resiliency of the tidal marshes at Blackwater National Wildlife Refuge?

Loss of tidal marsh has both environmental and economic implications. It provides valuable nursery areas for commercial and recreational finfish and shellfish, breeding habitat for specialized marsh birds like the black rail and saltmarsh sparrow, and, most importantly, these wetlands have an invaluable role in maintaining water quality and flood protection. Their loss affects almost everyone, and recognizing the dynamic nature of these natural systems is increasingly important as we come to understand the impacts of climate change.

## Ensuring A Clean Water Future For North Carolina

The Upper Neuse River basin in North Carolina's Research Triangle serves more than half a million people and includes nine drinking water reservoirs. Since this part of the country is experiencing rapid growth and the population is expected to grow significantly over the next few decades, the need to protect these precious water resources and the lands that surround them are more important than ever.

The Conservation Fund is a member of the Upper Neuse Clean Water Initiative, a coalition of eight conservation groups which aims to protect priority lands near this vital river basin. The Initiative's efforts involve strategic planning, land acquisition, landowner outreach, monitoring and stewardship. Our Strategic Conservation Planning team helped develop and design a strategic plan and provides guidance on the design of a GIS-based Watershed Protection Model to identify critical properties that would aid in water quality enhancement, and our Conservation Acquisitions team is working to protect some of these properties in perpetuity. This Model is an update to the original 2006 plan, which has already served as a guide for the Initiative partners on great conservation successes: 90 properties, 84 miles of stream banks and 7,698 acres protected across the basin. We also brought together stakeholders and provided technical support for how the models were designed and run.

By protecting forests, wetlands and open fields near drinking water sources, water quality is enhanced and the surrounding forests and wetlands absorb rain and runoff before it enters the streams and lakes. Land conservation is a critical component to water quality. In addition to these water benefits, land protection in this region also creates added community benefits, such as new greenways and parks, natural flood protection and cleaner air.

Here at the Fund, we know strong partnerships are essential for success. With this model in place, and our Conservation Acquisitions team on the ground, we hope to help the Upper Neuse Clean Water Initiative reach its goal of protecting 30,000 acres over the next 30 years in this region.





#### **ECONOMIC VITALITY**



# Protecting Critical Buffer Land For People And Wildlife In Texas

Sabine Ranch is a unique and important place. The 12,356-acre property 75 miles east of Houston is adjacent to the boundary of the McFaddin National Wildlife Refuge (NWR) and lies within the larger Chenier Plain Refuge Complex, a dynamic wetlands ecosystem on the Texas-Louisiana coastline. The ranch is a critical component of the largest contiguous coastal freshwater marsh system in Texas—the coastal prairie and marshlands found on the property provide wildlife habitat to a range of coastal species, including migratory and shore birds, and serve as a buffer for hurricanes and storm surges. Unfortunately, thousands of acres of marsh have degraded due to erosion and saltwater intrusion.

In fact, over the past 30 years, more than 100,000 acres of coastal wetlands have been lost in the Upper Texas Gulf region. This loss puts an enormous strain on the region's wildlife habitat. In addition, large-scale development projects have increased the degradation of the landscape. The resiliency of coastal buffers is imperative as sea levels rise and storms intensify, acting as life-saving barriers to inland communities during intense storms and hurricanes.

That's why The Conservation Fund worked quickly last fall to acquire Sabine Ranch, preventing its wetlands from being subdivided and fragmented. The permanent protection of the ranch will help manage and restore its dynamic ecosystem, support threatened and endangered species populations, and create new opportunities for hunting, fishing, hiking and bird-watching. Working with our public and private partners, we look forward to transferring the property to the U.S. Fish and Wildlife Service as an addition to the McFaddin NWR.

#### Alabama

In spring 1961, groups of civil rights activists known as Freedom Riders began organizing integrated bus rides to the South. When a bus of Freedom Riders pulled into Anniston it was met by a mob that attacked the bus, forced the group out of town, and then set the bus on fire. In January 2017, President Obama officially designated the Freedom Riders National Monument. The Conservation Fund worked with the National Park Service, the city of Anniston, Calhoun County and other partners to protect the site of the bus burning and the location that once housed the Greyhound station to help establish the new national monument.

#### Virginia

The location of Werowocomoco—the seat of power for Chief Powhatan and the storied place where English explorer Captain John Smith met Pocahontas—has been debated for centuries. Over the past decade, archaeologists made significant findings that confirm the lost Native American village was once sited along the north shore of the York River in Gloucester County, Virginia. In collaboration with native tribes and landowners, The Conservation Fund purchased the 264-acre historic site for the National Park Service with funding from the federal Land and Water Conservation Fund. This is the first land acquisition for the Captain John Smith Chesapeake National Historic Trail—securing the undeveloped landscape for future research and interpretation.

#### California

LAND, WATER AND WILDLIFE

On April 1, a historic and sustainably sourced replica of a 19th-century tall ship set sail in San Francisco Bay. Its mission is to provide unique educational experiences for more than 10,000 youths each year. Through our North Coast Forest Conservation Initiative, we donated 73 Douglas fir logs—more than half a mile of lumber harvested from our sustainably managed Big River Forest in Mendocino County—to the Educational Tall Ship project for the construction of the Matthew Turner. The project provides both on-the-water and shore-based educational opportunities and hands-on experiences for students of all ages.

## Wyoming

The Fremont Lake bottleneck in Wyoming was once the most threatened portion along the internationally significant Red Desert-to-Hoback migration route that mule deer travel twice a year. When the 364-acre property near Pinedale was listed for sale in 2015, we moved quickly to purchase and protect the property from subdivision and development. With lead funding from the Knobloch Family Foundation and contributions from other state and private sources, we enhanced and donated the property to the Wyoming Department of Game and Fish Commission. This critical area is now designated as the Luke Lynch Wildlife Habitat Management Area to honor the legacy of the Fund's late Wyoming State Director. Lynch provided the vision and leadership to conserve this portion of the migration corridor, as well as many other vitally important properties across the state.



## CONSERVATION FUND

## Why wait for our next newsletter? Find us online today!

- Read our latest news at conservationfund.org
- Sign up for our e-newsletter at conservationfund.org
   Just enter your email address in the "Stay Informed" box.



Forest certification has fundamentally changed, for the better, the way forests are managed across the U.S. We are proud that this newsletter is printed on paper from a forest we have protected—certified to Sustainable Forestry Initiative (SFI) standards. 1655 NORTH FORT MYER DRIVE SUITE 1300 ARLINGTON, VA 22209

NONPROFIT U.S. POSTAGE PAID WASHINGTON, DC PERMIT NO. 3943

NAME ADDRESS CITY STATE, ZIP

#### **HOW YOU CAN HELP**

## Your Gift To Nature Makes A Big Impact

Climate change is a serious problem. Its impacts are being felt worldwide and in our own communities. With environmental challenges as vast as these, it is hard to feel that the actions of one person or one family can make a difference. But even small acts can have lasting results.

Over the past three decades, we've seen the success of building partnerships to achieve big accomplishments. Our entrepreneurial staff have worked to find innovative conservation solutions that directly address the growing impacts of our changing world.

Projects like the Blackwater Climate Adaptation Plan extend far beyond one refuge. Blackwater National Wildlife Refuge sits within the Chesapeake Bay watershed; more than 18 million people in six states live within the watershed.

Your support of smart conservation of these lands across the country, and restoration of lands that already have been affected by climate change is making a real difference. You can contribute to The Conservation Fund in several ways that make an impact—a gift of general support enables us to continue working with our partners to meet the unique challenges communities across the country are facing, a gift to an ongoing project in your region can address your specific concerns about climate impacts locally, or you can visit our online Carbon Calculator (gozero.conservationfund.org/calc/household) to estimate the annual carbon footprint produced by your family's energy use and make a donation that will plant trees of equal value.

#### Contact Us:

Alisa Borland
Vice President, Development
703-908-5832
aborland@conservationfund.org



