

NEW YORK UPDATE | SPRING/SUMMER | 2020

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The Nature
Conservancy 

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The Nature Conservancy is a private, non-profit 501(c)(3) international membership organization. Its mission is to conserve the lands and waters on which all life depends.

The Nature Conservancy meets all of the Standards for Charity Accountability established by the BBB Wise Giving Alliance. The BBB Wise Giving Alliance is a national charity watchdog affiliated with the Better Business Bureau.

Celebrating Conservation Milestones



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Dear Friend of The Nature Conservancy,

With all that is happening in New York and around the world, I hope this letter finds you and your family safe and well. During this difficult time, I'm especially grateful to you as a supporter and volunteer in our work to conserve the lands and waters that sustain us, now and for the future.

This year, we are thrilled to look back and celebrate some of the conservation milestones we've achieved throughout the state of New York.

One half century ago, the first Earth Day took place, launching the modern environmental movement as millions of Americans rallied for passage of the Clean Air, Clean Water and Endangered Species Acts.

At the same time, The Nature Conservancy took measures to protect ospreys and other wildlife by protecting Mashomack Preserve on Shelter Island. In 1980, this preserve opened its doors and trails to the public—contributing 2,039 acres to conservation in vast and meaningful ways—and bringing people together in a community of learning.

And just 10 years ago, the Conservancy partnered with the New York Department of Environmental Conservation to protect the 6,850-acre forest surrounding Hemlock and Canadice Lakes. With the only undeveloped shorelines in the Finger Lakes, these two lakes have provided fresh drinking water for the city of Rochester and neighboring communities for a century and counting.

More recently, you have helped us achieve tremendous conservation success as we helped New York pass the strongest climate legislation in the United States. This provides a clear path to expanding renewable energy, reducing emissions, and reaching a net-zero carbon economy by 2050.

Yet despite all that we've accomplished, climate change is altering our natural world more quickly than anticipated. The Nature Conservancy will continue to mitigate its harmful effects, help create a more resilient future, and protect places that provide habitat for wildlife and drinking water for communities—in New York and across the U.S.

Taking a lasting and holistic approach, our solutions ensure a world where all of nature, including people, can thrive for generations to come. Thank you for your support.

A handwritten signature in black ink that reads 'Bill Ulfelder'. The signature is written in a cursive, flowing style with a long, sweeping underline that extends to the right.

Bill Ulfelder
Executive Director
The Nature Conservancy in New York

Using Medical Technology to Study Marsh Health

For people, computer-aided tomography (CT scan) provides a closer look at what we can't see with our eyes, helping a medical team detect what's broken, diagnose an invisible disease, or assess a problem. The technology helps determine the best course of treatment and can inform the path to recovery. Now, The Nature Conservancy's coastal scientists are applying innovative ways to use CT technology with partners at Northwell Health, to study the health of salt marsh habitats.

Salt marshes play a critical role in filtering water, supporting the coastal food web and absorbing wave energy, but many marshes on the coast of Long Island are sick.

Chronic nitrogen pollution from septic systems and sewers has changed the way the plants grow. But for years, appearances told a different story.

Nitrogen produces bigger, greener plants. A declining salt marsh can look deceptively healthy above ground. Under the surface, however, marshes may lose the bulky underground structure they need and become flimsy and weak.

Without strong roots, a weakened marsh loses its ability to reduce risk to coastal communities—as it is less likely to buffer these areas from storms and sea level rise.

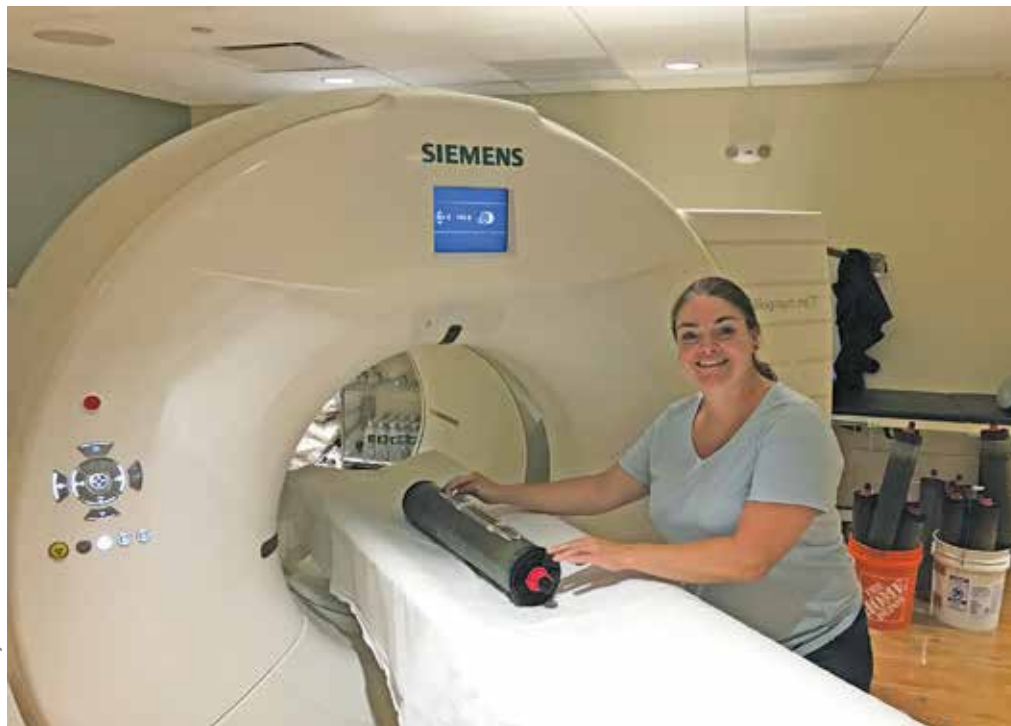
Monitoring Water Quality Through Marsh Health

In Hempstead Bay, \$1 billion in Sandy recovery funds will upgrade the Bay Park sewage treatment plant and connect it to an ocean outfall, effectively turning off the flow of pollutants that compromised this region for decades. By studying conditions here, The Nature Conservancy has access to the perfect

living laboratory. Samples collected before and after water quality improvements will help quantify marsh responses.

All study sites are part of the Conservancy's long-term marsh elevation monitoring network ranging from New York City to Shelter Island's Mashomack Preserve. Our team can test whether (and on what time-frame) improving water quality can help salt marshes rebound. This work will inform coastal restoration on Long Island and beyond.

The Nature Conservancy is grateful to its partners: Northwell Health; the Geology, Environment, and Sustainability Department at Hofstra; research partner, Dr. Troy Hill of Florida International University; and Dr. Earl Davey at the Environmental Protection Agency.



© Dr. Troy Hill

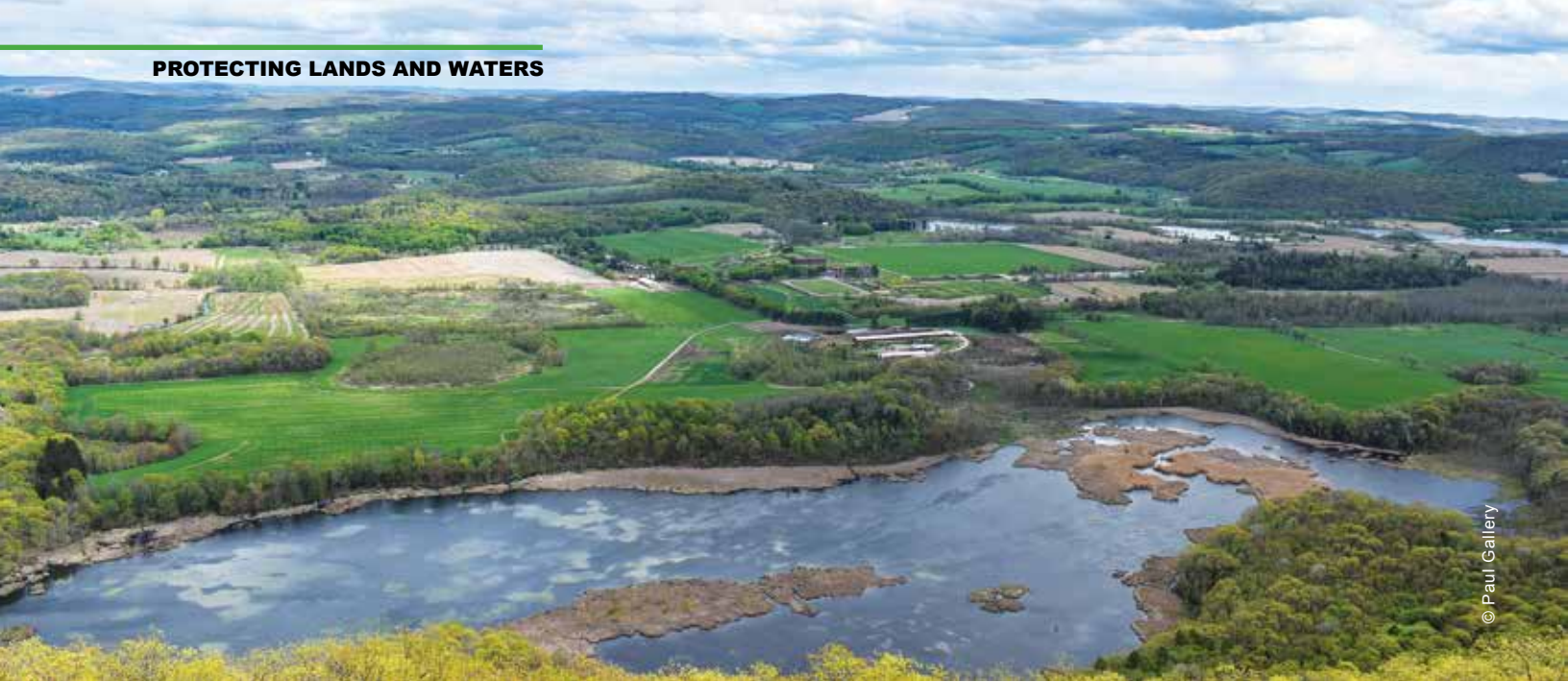
CT technology has proven to be a rapid, accurate and high-resolution method for determining salt marsh health by looking into its interior lattice of roots, rhizomes, peat and soil particles—a system that resembles the bronchioles in human lungs. At an imaging facility, this information is gathered in minutes.

The traditional method of assessing marsh health was a labor-intensive process of cutting thin slices of the sediment core, individually washing them through a series of sieves, and painstakingly picking through materials to sort and examine particles.

Dr. Nicole Maher sends a salt marsh core sample into the CT scanner.



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Bringing Nature Closer for All to Enjoy at Thompson Pond Preserve

Near the peak of Stissing Mountain in Pine Plains, New York, a golden eagle soars over an open field, gliding along a landscape that's ancient, yet familiar. The rare bird makes a turn and several wingbeats later is circling Thompson Pond Preserve, a 550-acre parcel owned and managed by The Nature Conservancy.

Thompson Pond was formed nearly 15,000 years ago when a melting ice chunk created a depression or kettle hole. Over time, the kettle divided into three interconnected water bodies, including Thompson Pond, which forms the headwaters of a major tributary of the Hudson River. But beyond its natural history and spectacular scenery, this spot now offers access to more visitors—a Conservancy-wide effort to connect more diverse communities to conservation.

“We’re thrilled to have completed a ½ mile long accessible trail with a finely crushed gravel surface that is smooth and durable and allows better access for wheelchairs and strollers,” said Gabriel Chapin, the Conservancy’s forest carbon manager who helped coordinate the project and see it to completion. “At the trail’s end, a panoramic lookout over the pond is spectacular.”

Several new parking spots have been added, and the updated lot allows for a handicap accessible van to unload directly onto the walkway.

“Research shows that time in nature results in improved outcomes for mental, emotional and physical health and wellness. By facilitating the experience of the outdoors for as many people as possible at our preserves, we are working to further our role as ambassadors of nature,” said Paul Gallery, preserve stewardship coordinator and project manager.

Currently, about 5,000 people visit Thompson Pond Preserve annually. The new trail, as well as future plans including boardwalk upgrades and trail modifications will make the site more attractive to a wide range of hikers, making it a destination and asset to the local community.

“This project is a fantastic example of the Conservancy’s strategic effort to expand accessibility and reach,” said Mathew Levine, director of stewardship. “In other parts of New York, we have plans to engage residents to identify and develop trails and preserve uses that the community wants. We are actively working to better serve a broader audience—from picnickers to ultra-runners.”

PROTECTING POLLINATORS AND SECURING A GREENER FUTURE

The Nature Conservancy is exploring a partnership with a local company interested in developing a community solar project near the Albany Pine Bush. This project could serve as a model to encourage other companies to plant native nectar species around solar arrays, providing both sustainable energy options and direct species conservation benefits—in this case for the endangered Karner Blue Butterfly.

By the Numbers

The Nature Conservancy was born with the purchase of Mianus River Gorge Preserve in 1955 in New York. From the Great Lakes to Long Island, we advance science, conservation know-how, and diverse partnerships to build a resilient future. We are united in the need to protect land, water, and all the life it sustains, including ourselves.

2019 was a remarkable year for The Nature Conservancy in New York. We are grateful for your support in helping us tackle the greatest environmental threats of our time. Here's a look at the recent accomplishments of our team:

70

members representing 50 organizations launched the NYC Urban Forest Task Force to protect, maintain, use, and expand the city's urban forest.

20

farmers engaged in exploring innovative practices to benefit soil health and water quality on agricultural lands in the Finger Lakes.

40,000

acres of rooftops in New York City targeted for solar panel sites as part of two newly enacted laws to make the city more sustainable.

87

acres of critical land in the Finger Lakes donated to The Nature Conservancy for future restoration.

40

year-old Mashomack Preserve on Shelter Island celebrated this milestone anniversary.

\$126 million

per year needed to improve water quality conditions on Long Island through septic system upgrades.

23,000

cubic yards of sand has rebuilt an eroded beach and protected communities in Sandy Creek, Lake Ontario.

21,000

mega-watts of solar capacity could be installed on Long Island's rooftops, parking lots, and developed land.

55,750

acres of Adirondack forest could be enrolled in our *Working Woodlands* program, an effort to save trees, combat climate change and generate revenue for landowners.

\$3 billion

environmental bond act proposed by Governor Cuomo to support water quality, land protection and climate resilience.

75 %

of New York's road-stream crossings are undersized, creating barriers for fish and reducing flood resiliency.

773

infestations of invasive species are being managed by staff and partners in the Adirondacks.



Bluebird, New York State's bird. © Derek Rogers



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Improving and protecting water quality means safe, accessible, and clean water for both people and nature. The Nature Conservancy is working to reduce the amount of pollutants that enter New York's waters to prevent harmful algal blooms, protect drinking water sources, and ensure healthy habitats for wildlife.

Protecting New York's Water

From the Great South Bay to the Finger Lakes, New York's waters are our most precious resource. But with unsustainable food production and insufficient wastewater treatment, 80 percent of our fresh and coastal waters are contaminated, and one-fifth of our river basins cannot support the combined needs of people and nature.

"What was for a long time considered an abundant and inexpensive resource becomes a priceless commodity when water is polluted and scarce," explains George Schuler, co-director of The Nature Conservancy's New York Water Priority. "Growing and changing demands for water are putting stress on a system that is already challenged by climate change and degradation of natural areas that protect water supplies. Today, nine out of 10 natural disasters linked to climate change are water related—whether too much water, too little water or water that is too polluted."

Throughout the state of New York, The Nature Conservancy is engaging communities and working toward solutions.

"We are coordinating closely with government, residents and businesses to reduce nitrogen and phosphorous pollution, as well as how waste and stormwater are being managed. We are ensuring that these systems work together to protect and provide adequate water for generations to come," says Stuart Lowrie, co-director of The Nature Conservancy's New York Water Priority.

Improving and protecting water quality is a key component of our work to provide safe, accessible, and clean water for both people and nature. Reducing the amount of pollutants that enter New York's waters is critical to prevent harmful algal blooms, protect drinking water sources, and ensure healthy habitats for marine and freshwater species. Developing and implementing strategies to reduce nitrogen and phosphorous pollution is key and includes a diverse array of projects, including installing upgraded septic systems on Long Island, protecting source water in the Adirondacks, and working with farmers in the Finger Lakes to implement better agricultural practices.

ONE WATER, NEW YORK

The Nature Conservancy is working to build the capacity of water professionals to improve and integrate management structures for better water quality and resources throughout the state of New York. Called our "One Water" initiative, we are working with local water managers to take into account all water—drinking water, wastewater, stormwater—as resources that must be managed holistically and sustainably.



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Global Focus: Update on Australia's Bushfire Crisis

2019 was Australia's hottest and driest year on record which was a major contributor to the worst wildfires ever recorded along the forested east coast over the 2019/20 southern summer.

With 18.5 million acres of forests burned in south-east mainland Australia alone, the effects of the fires have been horrendous from loss of human life to the loss of native Australian plants and animals to the devastation on communities and habitat.

More than one billion land mammals, birds, and reptiles are estimated to have been killed, along with countless bats, fish, frogs, and insects. Many endangered species have lost the majority of their habitat—up to 95 percent—jeopardizing their futures.

“To respond to this unprecedented crisis, we’re bringing together experts from agriculture, conservation, indigenous land management, forestry, business, science and philanthropy, to agree on a plan to protect the future of Australian nature,” said Rich Gilmore, director of The Nature Conservancy Australia. “Together, we’re developing a market-based approach to deliver funding from private investors and government to restore private and public lands.”

Protecting Water for Australia's Future

Recently, generous New Yorkers supported the first water markets fund in Australia. Through NatureVest, this project realizes a financial return for investors, while providing water to important wetlands supporting water dependent wildlife within the southern Murray-Darling Basin. As a result some wetlands have seen water for the first time in years, with emus, swans, and kangaroos returning to areas that hadn't seen such wildlife in a decade.

Curbing the Loss of Nature and Wildlife through Climate Policy



To tackle climate change locally and around the world, and to protect nature from collapse, The Nature Conservancy is redoubling our efforts, including advocating for stronger policies to accelerate the pace and scale of climate action.

The decisions we make today will determine whether we achieve the world's sustainability goals for 2030—a longstanding milestone that is just 10 years away. We'll work to chart a brighter future for people and nature by urging global policymakers, the private sector, and interested individuals to drive change during this crucial year for environmental policy.



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CONNECT WITH NATURE, CONNECT WITH US

The Nature Conservancy was born right here in New York with the purchase of Mianus River Gorge Preserve in 1955. Since then, we have conserved more than 815,000 acres across the state. To learn more, check out nature.org/newyork