
The Nature Conservancy
Our Lakes Depend on Us.
Together, we find a way
Olivia Green, Finger Lakes Water Quality Specialist


The Nature Conservancy
To conserve the lands and waters on which all life depends
• Tackle Climate Change
• Protect Land & Water
• Provide Food & Water Sustainably
• Build Healthy Cities

Change is for everyone

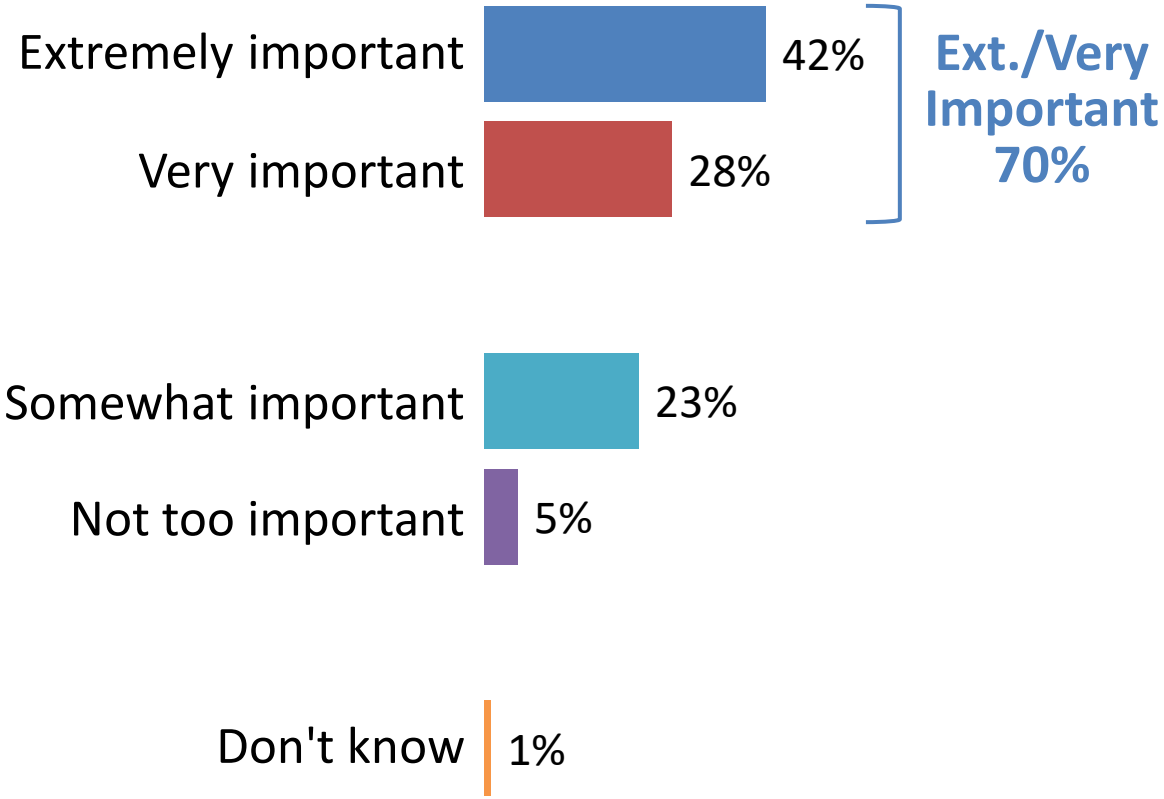
We all want change
social science research findings
We all have a role to play
directly: land protection & septics
indirectly: support change in others

Social Science Research

Baseline perceptions of lakes and water quality
800 voters, 400 from Eastern Finger Lakes

Seven in ten call the Finger Lakes “extremely” or “very important” to their quality of life.

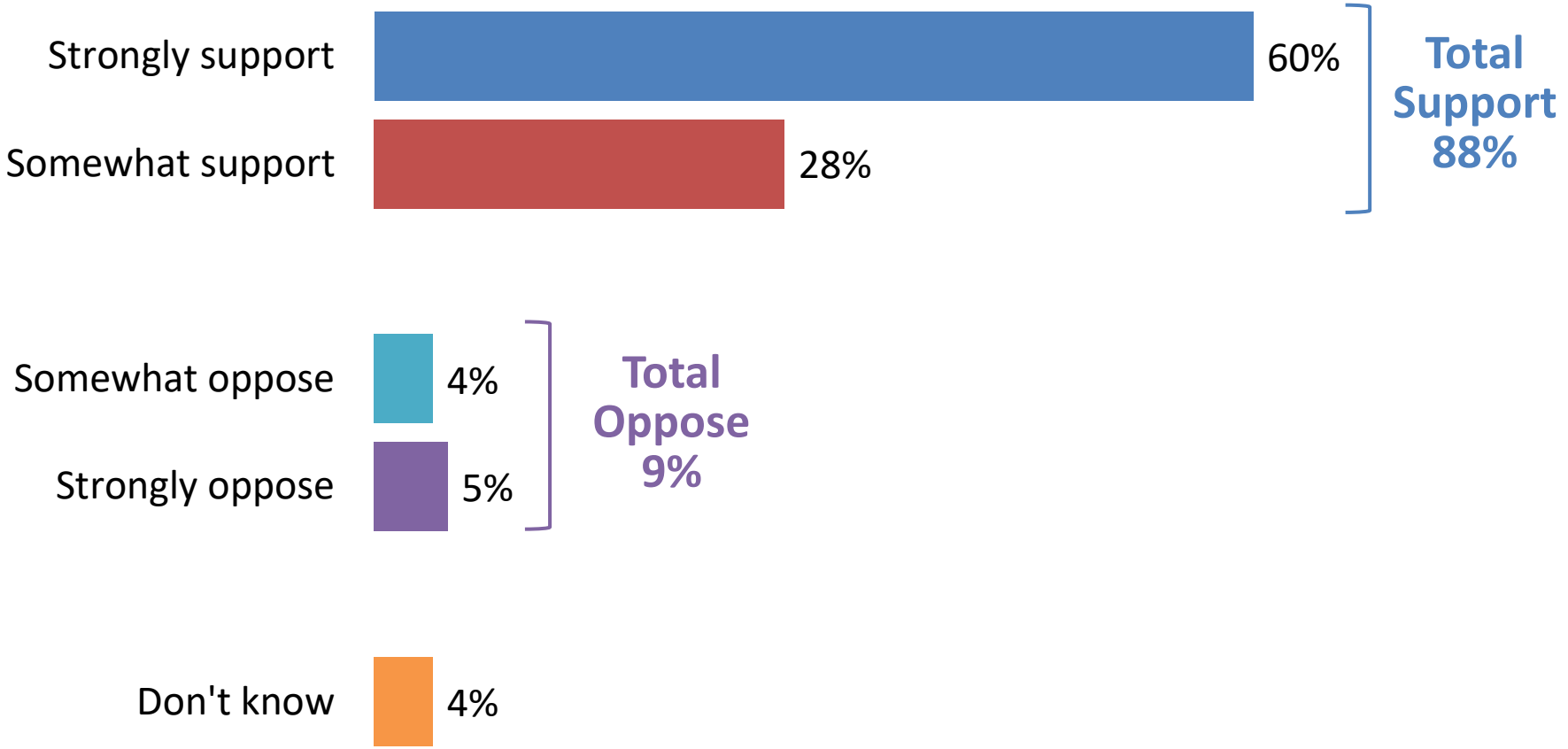
How important are the Finger Lakes to your quality of life: extremely important, very important, somewhat important, or not too important?

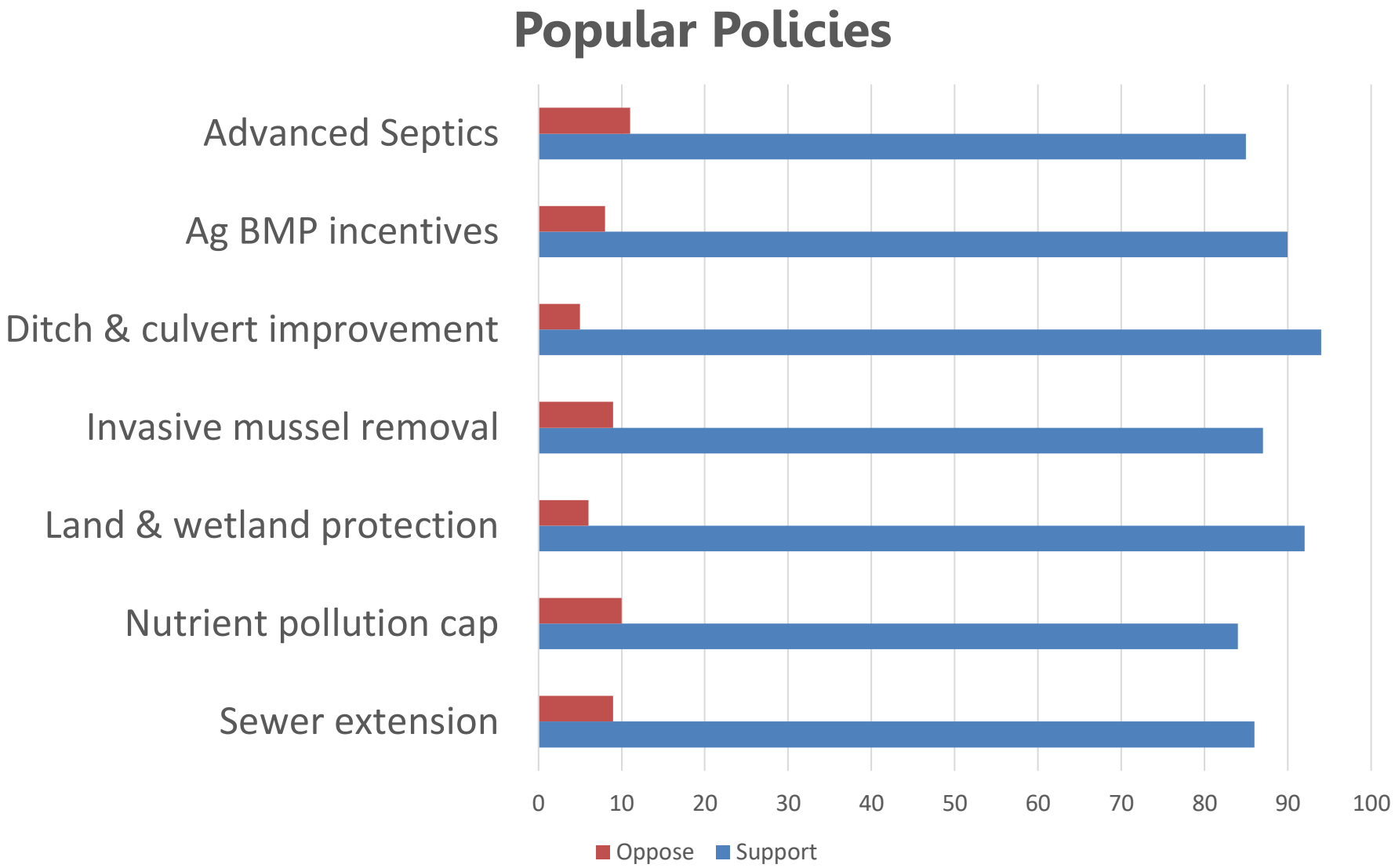


Q17.

Nearly nine in ten support increased funding for programs to address Finger Lakes water quality – three in five "strongly."

In general, would you support or oppose increased funding for programs that would help improve water quality and reduce algae blooms in the Finger Lakes?




Popular Policies
Advanced Septics
Ag BMP incentives
Ditch & culvert improvement
Invasive mussel removal
Land & wetland protection
Nutrient pollution cap
Sewer extension
0
10
20
30
40
50
60
70
80
90
100
Oppose
Support


We can change
• Science-based, watershed approach to land protection
• Nutrient treating septic demonstration
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Land Protection in the Owasco Lake Watershed

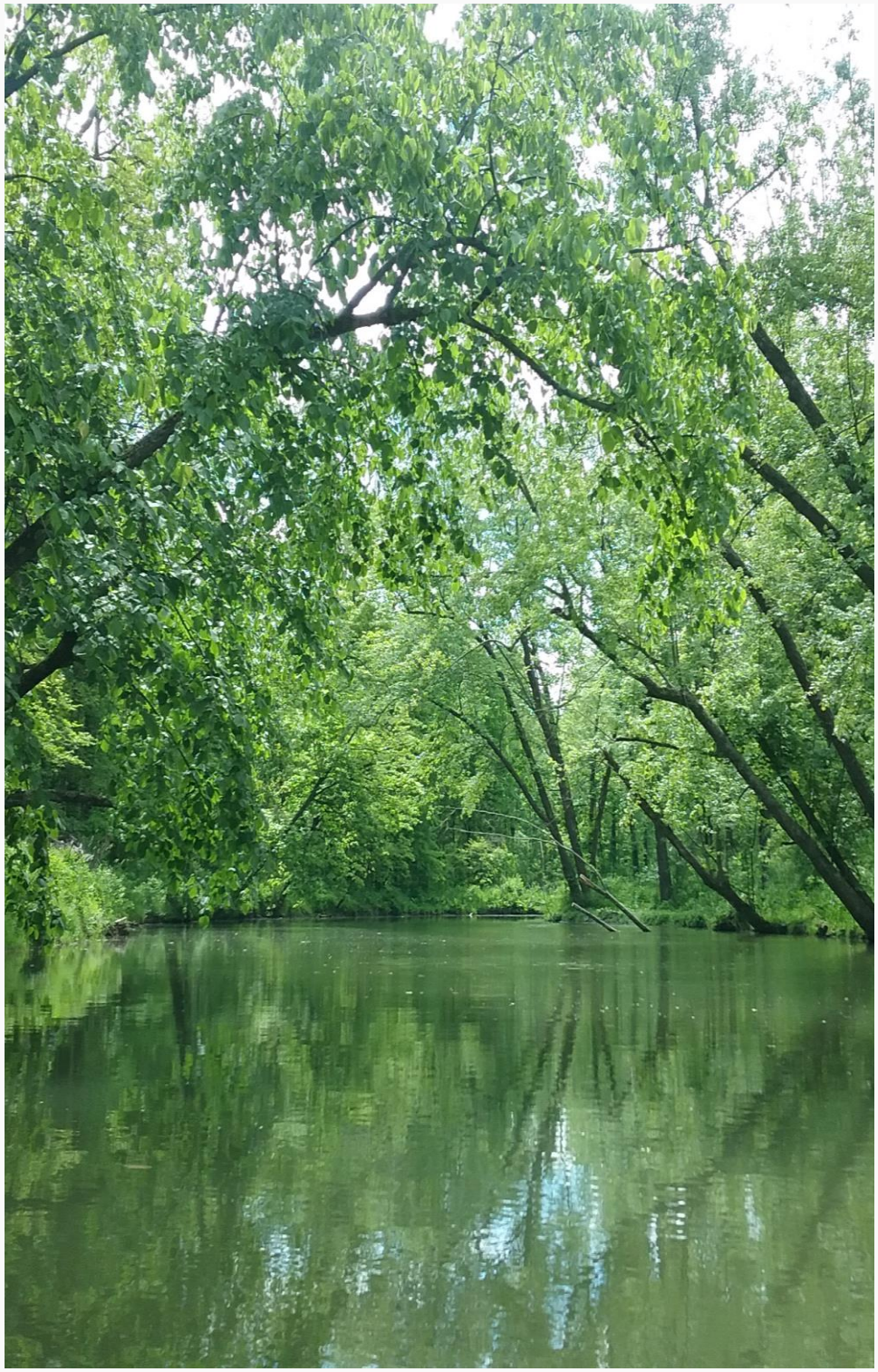
DEC Source Water Protection, Water Quality Improvement Program Grant

Project Goal:

Using best available **science**, we will identify and arrange for the **preservation of 3-6 parcels** of land that **currently have high function** riparian and wetland habitats that **protect water quality** for Owasco Lake.

Data-driven parcel prioritization

- The Nature Conservancy-NY developed the Strategy Assessment Tool (SAT) to aid in statewide systematic spatial planning.
- We are applying the SAT in the Owasco Lake project to identify parcels with high existing contribution to water quality.
- The SAT tells us the most important places to protect from future land use conversion.



Land functions that contribute to water quality

Non-Point Source Mitigation

Lands that have the potential to capture and mitigate pollutants from existing sources of non-point source pollution

- Land cover
- Opportunity to intercept flow
- Existing up-slope land cover

Surface Water Supply

Lands that support clean and dependable surface water supplies for public use

- NPS mitigation and prevention (average)
- % Contribution to water supply basin
- Distance from withdrawal and stream network position

Non-Point Source Prevention

Lands that, if converted, would contribute to increases in non-point source pollution in vulnerable waterbodies

- Land cover
- Existing land cover in receiving watershed
- Soil erodibility & slope

Surface Runoff Retention

Lands that slow and retain surface flow and allow sediment and associated pollutants to settle out

- Landcover
- Soil hydrography
- Opportunity to intercept flow
- Topographic position and slope

Source Water Protection

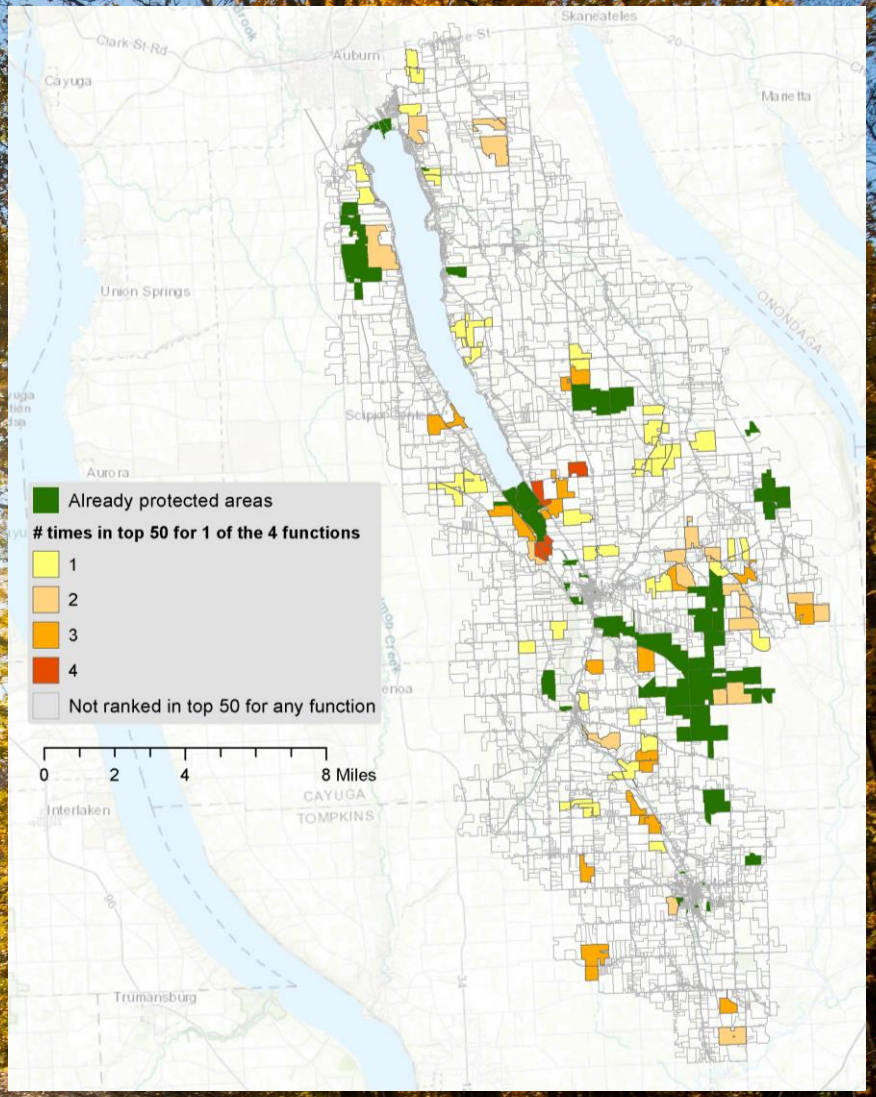
Sharing science of headwater stream protection, importance of keeping water on the landscape

Acquired 3 properties; 1 easement

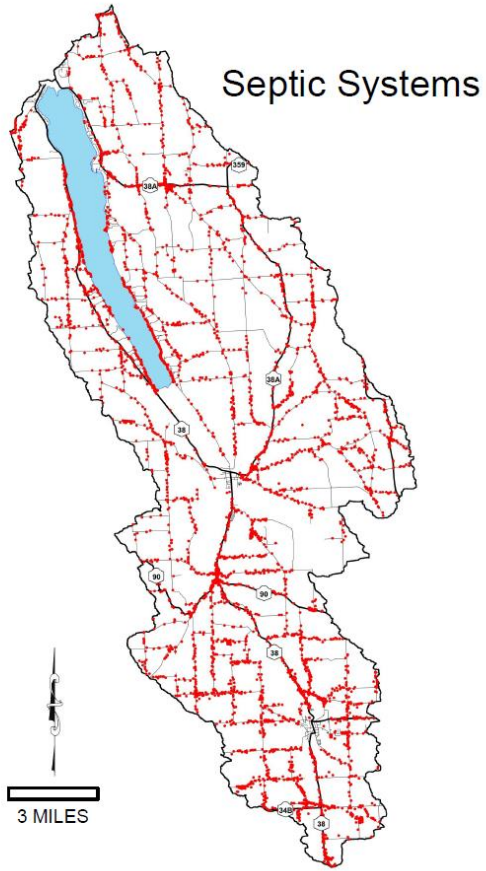
Outreach is ongoing

Building capacity of local stewards

-Owasco Lake Watershed Management Council



Nutrient-treating Septic Pilot



Cayuga County Health Department

the YMCA

Cayuga County Conservation District Est. 1944

Owasco Lake Watershed Management Council

We can influence change

Our Owasco- removing barriers to soil health implementation

- **Farmer peer network**
- **Sharing stories of conservation on farms**
- **Behavior science training for civic leaders**

Our Owasco- Soil Health

Farmer Panel & Barn Sessions

- Working with local SWCDs to engage farmers in soil health training and build capacity for peer-led change.
- Establishing a diverse peer network

The Nature Conservancy

Evidn.

Cayuga County Conservation District Est. 1944

Tompkins County Soil & Water Conservation District

Our Owasco- Sharing Stories

LAKE LIFE

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OUR OWASCO

Family land stewards

Owasco Lake Watershed farmer passing responsible farming on to next generation

OUR OWASCO
Special to The Citizen

Farmers across the Owasco watershed are helping to protect Owasco Lake by implementing soil health systems and other farming practices that prevent water pollution and reduce soil loss and runoff.

PJ Houston farms 700 acres on the southern side of Owasco Lake in Tompkins County. The oldest of two brothers, he carries on a tradition that began back in 1905 when his great grandfather purchased 64 acres of land with the intention of turning it into a dairy farm to support his young family.

48-year-old PJ was born and raised on the farmlands that his family has worked for over a century. Farming is all about mentorship, PJ said, and he has worked hard to ensure his 18-year-old son, Robert, will be able to take over the family business when he retires.

"We manage 280 cattle, 120 of those are milking cows and we also grow hay, soybeans, corn and grain," PJ said.

PJ has spent his life working with cattle, and truly cares for their health and happiness. "I don't think it is possible to treat my cows any better, we really baby them," he said, "When you have healthy and happy cows, they produce more milk."

For the fourth-generation producer, farming into the future means ensuring that his business is focused on more than just productivity. PJ believes that prioritizing the well-being of his animals and protecting the local environment are key to ensuring its long-term success for future generations.

"One day my son will rely on this land to make a living and I want to make sure I leave it to him in good condition," he said.

PJ farms in the Owasco Lake Watershed, an area that is sensitive to the surrounding land uses, and he knows how important it is to minimize his negative impact on the surrounding environment. Over the years PJ has worked closely with Tompkins County's local agricultural professionals to help achieve this goal.

By implementing a supplementary feeding program with rotational grazing improved his milk production, cattle weight gain and nutrient distribution across the farm. More recently, PJ modified his tillage methods to better suit his productivity and environmental values, switching from conventional moldboard plow to speed till using a disk on part of his farm.

By changing over to new tillage practices, PJ has saved fuel and time, and has helped to protect Owasco Lake by reducing soil erosion and nutrient runoff on his farm. Reduced tillage practices can help minimize disturbance to the soil, keeping the soil, and nutrients that it holds, where farmers want it — on the farm.

"We spend a lot of time fine tuning when we are trying a new practice on the farm," PJ said. "If we don't like the way it turns out the first time, we try it a few different ways until we like it."

PJ is also involved in the state's Agriculture Environmental Management program and Environmental Quality Incentives Program, which have improved his fencing, waterway management and manure storage. Both programs are voluntary and support local farmers to help them achieve their production and environmental goals while also achieving locale, state and federal environmental and water quality goals.

"We're lucky to have people like Tompkins Soil and Water Conservation District to help get us access to resources to do things better on the farm," he said.

Paul Gier is the natural resource program specialist at Tompkins County Soil and Water Conservation District. He works closely with PJ and other local farmers to help them implement different practices and get involved in programs through the watershed, including the AEM program.

"AEM supports local farmers to protect the quality of their farms' natural resources and demonstrate their stewardship of their land," Paul said. "We work one-on-one with farmers to develop individualized farm plans, this often includes a range of different conservation practices such as cover crops, no-till cropping and pasture rotation."

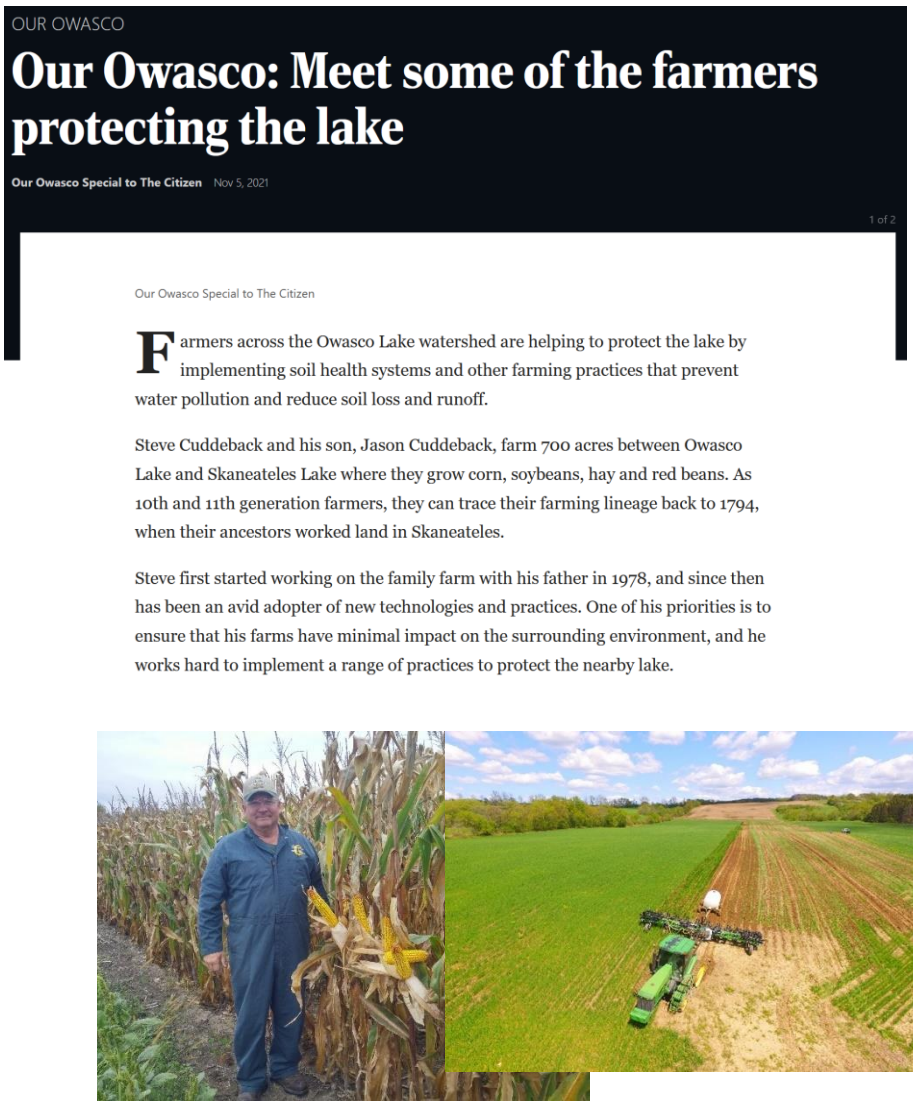
If you'd like more information about reduced tillage management, the AEM program or what your local farmers are doing to protect the watershed, head to tompkinscountyny.gov/swcd.

Our Owasco is a project to work with farmers in Cayuga and Tompkins counties to recognize and accelerate their efforts to adopt farming practices that protect Owasco Lake. The project is funded by the Nature Conservancy in partnership with the New York Department of Agriculture and Markets, the Cayuga and Tompkins county soil and water conservation districts, Cornell University and American Farmland Trust.

Tompkins County farmer PJ Houston, 48, prioritizes environmental protection as he farms land in the Owasco Lake watershed with his son Robert, 18.

PROVIDE

BRIEF



OUR OWASCO

Our Owasco: Meet some of the farmers protecting the lake

Our Owasco Special to The Citizen Nov 5, 2021

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Our Owasco Special to The Citizen

Farmers across the Owasco Lake watershed are helping to protect the lake by implementing soil health systems and other farming practices that prevent water pollution and reduce soil loss and runoff.

Steve Cuddeback and his son, Jason Cuddeback, farm 700 acres between Owasco Lake and Skaneateles Lake where they grow corn, soybeans, hay and red beans. As 10th and 11th generation farmers, they can trace their farming lineage back to 1794, when their ancestors worked land in Skaneateles.

Steve first started working on the family farm with his father in 1978, and since then has been an avid adopter of new technologies and practices. One of his priorities is to ensure that his farms have minimal impact on the surrounding environment, and he works hard to implement a range of practices to protect the nearby lake.

Our Owasco Capacity Building Training

Provide local community groups with behavioral science skills to drive positive, sustainable practice change in the Owasco Watershed.

Key outcomes -

- Learn how behavioral science can help drive change outcomes in the watershed
- Understand why change doesn't happen
- Develop a toolkit of behavioral science skills & strategies to drive change

*"We now recognize that fundamentally addressing non-point source pollution is not just a technical solution, it is a **people problem** with a **human solution** and learning from Evidn has fostered my sense of how to better engage [with agriculture groups] and **find common ground**"*

Local watershed leader

@SM Risser


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Together we find a way
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