

HEADWATERS

A core publication of the Lilly Center for Lakes & Streams | Summer 2024

The surprising impact of
water quality
page 2-3

Adding Silver and
Waubee lakes to our
research
page 4

The doctor is in!
page 5

Student-empowered
research
page 5



LILLY CENTER FOR
**LAKES
& STREAMS**



IMAGINE A WARM SUMMER'S EVENING

After months of playing on the lake, it is time to slow down and celebrate all the joy the lakes provide by **giving back** at Dinner in Cherry Creek fundraiser on **August 10th**.

Now in its second year, Creek Dinner is a **one-of-a-kind event** that aids in making Kosciusko County's lakes and streams clean, healthy, safe, and beautiful.

Creek Dinner is no ordinary fundraiser! While supporting your lake, place your feet in the cooling water of Cherry Creek and invite and inspire friends who may not know about the Lilly Center to **advocate for their own lake**, too!

Settle into a magical evening with dinner, music, and signature drinks as you take in the beauty of Cherry Creek.

Only seven tables are left, so **sponsor your table today!** •

Visit lakes.grace.edu/creekdinner for the tentative agenda, FAQs, and how to host a table!

CONTENTS

- 2-3 The surprising impact of water quality
- 4 Adding Silver and Waubee lakes to our research
- 5 The doctor is in!
- 5 Student-empowered research

Cover: Duckweed, an aquatic plant, surrounded by microcystis, a toxin-producing blue-green algae.

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THE SURPRISING IMPACT OF WATER CLAIRTY ON YOUR HOME VALUE

A 2024 study reports that Kosciusko County could experience a total increase in housing values of almost

\$122 MILLION

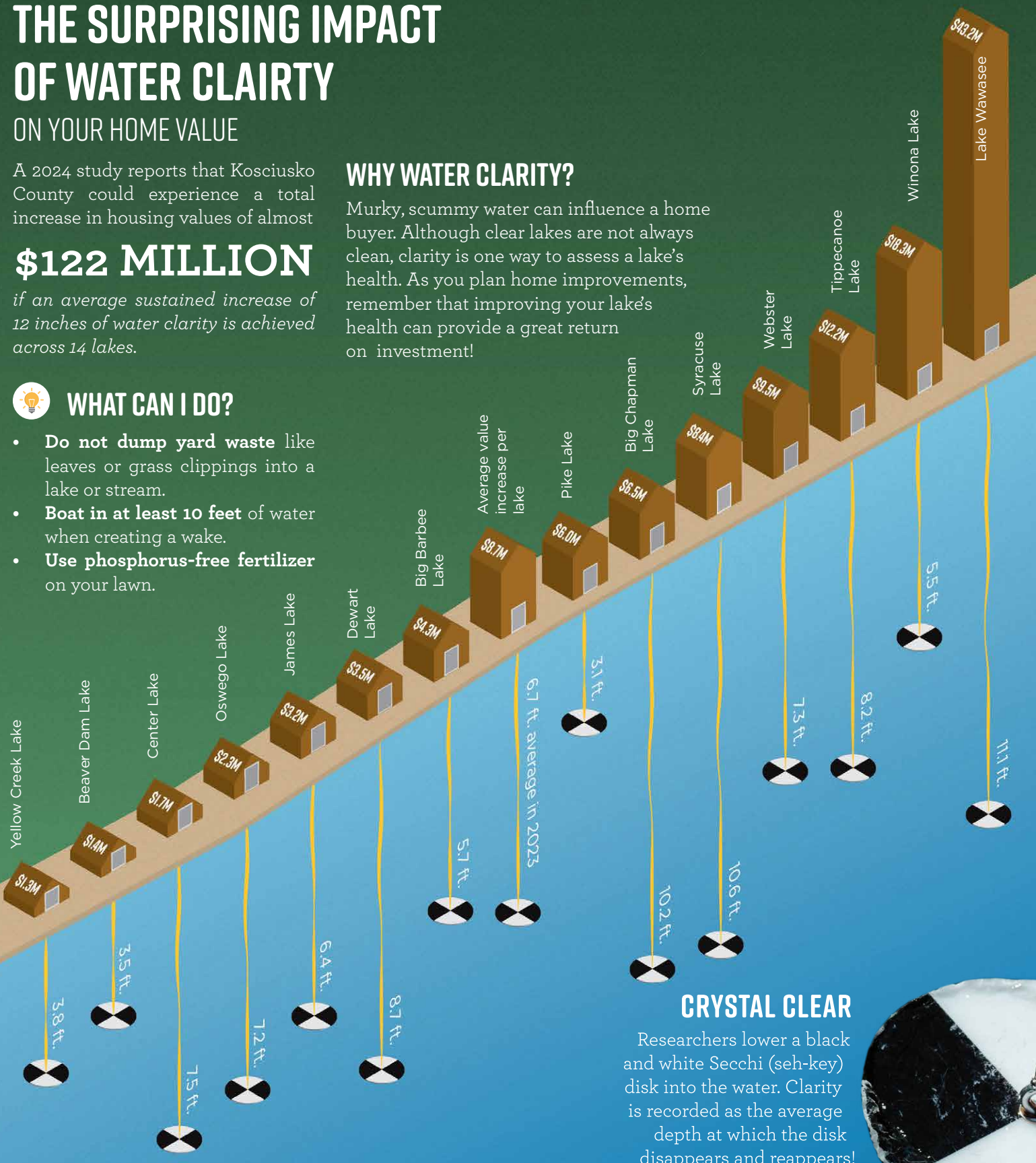
if an average sustained increase of 12 inches of water clarity is achieved across 14 lakes.

WHY WATER CLAIRTY?

Murky, scummy water can influence a home buyer. Although clear lakes are not always clean, clarity is one way to assess a lake's health. As you plan home improvements, remember that improving your lake's health can provide a great return on investment!

WHAT CAN I DO?

- **Do not dump yard waste** like leaves or grass clippings into a lake or stream.
- **Boat in at least 10 feet** of water when creating a wake.
- **Use phosphorus-free fertilizer** on your lawn.



CRYSTAL CLEAR

Researchers lower a black and white Secchi (seh-key) disk into the water. Clarity is recorded as the average depth at which the disk disappears and reappears!



Dive into the full study and learn about the **positive impact** you can have on your lake (and your wallet). Scan the QR code or visit lakes.grace.edu.

BEYOND THE VIEW

Increasing your lakefront home value is a priority – it is an investment, after all!

Although traditional ways of increasing home values, like remodeling, adding square footage, or a new roof, are proven, there is one feature that can have a surprising effect on your home value: **lake water clarity**.

A 2024 collaborative study by the Environmental Protection Agency (EPA) and the Lilly Center used benefit transfer math models to analyze and predict the connection between the water clarity of a lake and the value of homes near a lake. Researchers predict that Kosciusko County **could see a total increase in home values of almost \$122 million** if water clarity improved by an average of 12 inches across the 14 major lakes.

Even homes not considered to be “lakefront” could benefit from increased clarity. Properties within 500 meters of the lake shore could also receive a value boost, although it is more modest compared to lakefront homes. The increase in value is

approximately 30-50% of that of a lakefront property.

What is water clarity?

Imagine going for a plunge in your lake. When you look down, you can see your toes several feet below – that’s water clarity! While water clarity is a desirable trait in our lakes, it can also reflect the health of a lake. Factors like sediment runoff, algae growth fueled by nutrients, and rainfall influence water clarity. When sediment and

nutrients are kept low, the water remains clear, offering a **pleasant experience** all can enjoy.

Lilly Center scientists measure clarity by lowering a black and white disk, called a Secchi Disk, into the water. They record the average depth at which the disk disappears and reappears as clarity. In 2013, the average clarity of the

14 major lakes was 5.7 feet; in 2023, the average clarity was 12 inches higher. You can read more about your lake’s historical water clarity by reading the Lilly Center’s annual publication, *Beneath the Surface*.

Although a 12-inch increase in water clarity seems daunting, research suggests **it is possible**. Lakes in Minnesota and Washington improved their clarity by up to 10 feet thanks to various nutrient reduction projects.

Murky, scummy water is not appealing to home buyers. Although a clear lake is not always a clean lake, clarity

Improving your lake’s health can provide a great return on investment.

is one way to assess a lake’s health. As you plan home improvements in the coming years, remember that improving your lake’s health can provide a **great return on investment!**

The Lilly Center will continue to study, monitor, and respond to make our lakes clean, healthy, safe, and beautiful. Learn more at lakes.grace.edu/research. •

DRAW TWO, COLLECT SAMPLES

No, we're not playing Monopoly® or Uno™. But we did add two lakes to our yearly research studies.

In addition to the 12 all-sport lakes in Kosciusko County plus Center and Pike lakes, this summer the Lilly Center added **Silver Lake** and **Waubee Lake** to its weekly research schedule.

Results from last year's Decade Lake Study indicated that both lakes consistently had **microcystin toxin levels** above the pet safety threshold. Elevated toxin levels affect the visual appeal and financial values of nearby properties.

Now, rather than "passing GO" and jumping straight into the lake, residents around Waubee and Silver lakes can also sign up for toxin notifications. These weekly notifications help lake residents **make the best choice** for their family and pets.

Signing up for email toxin notifications is the best way to safely play in the water all summer long. Add your email today at lakes.grace.edu/microcystin.

SILVER LAKE

ASSESSED VALUE: \$10,088,200

Lake Size	102 acres
Max Depth	31 ft.
Watershed Size	3,300 acres
Max. Toxin lvl.	3.0 ppb
Avg. Toxin lvl.	2.5 ppb
Fishing	bluegill, bass

BOAT CAPTAINS:

Brett Burch, Rick Elliott,
Lori Dotson, Jay Cole

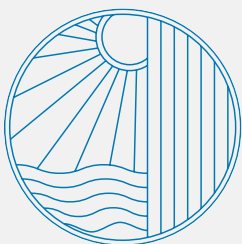
WAUBEE LAKE

ASSESSED VALUE: \$26,913,000

Lake Size	187 acres
Max Depth	51 ft.
Watershed Size	9,370 acres
Max. Toxin lvl.	0.8 ppb
Avg. Toxin lvl.	0.4 ppb
Fishing	crappie, pike

BOAT CAPTAIN:

Scott Smith



Ensure your lake legacy.

Join the Lilly Center Legacy Society by making a gift through several estate options with tax advantages. Talk to Dr. Nate Bosch about how you can join the Founders Circle and become part of an initial group of 20 members today:

574.372.5282 | boschns@grace.edu



L-R: Morgan Sass, Jessica Shannon, Cordelia Grandon, Joel Petrie, Emily Anderson, Connor Frentzel, Janet McIlroy, Tess Price, Hallie Arnold, Blake Clement, Sky Dudley, Erik Robinson, Melia Schalow, Eli Bridegroom, Anna Crawford, Madison Herstad, Julia Glogovsky



STUDENT EMPOWERED RESEARCH

Janet (pictured, inset) is a field team research lead. Now in her third year at the Lilly Center, Janet is developing as a **leader and scientist**. As an environmental science student at Grace College, she studies hard for good grades, but also because she loves sharing what she learns with her team and the volun-

teer boat captains she works with. After just a few minutes in conversation with Janet, she'll eagerly share about the amount of dissolved oxygen fish prefer and Indiana's carnivorous aquatic plant.

By working at the Lilly Center, undergraduate students earn **real-world experience** that has a **local impact today**

and prepares them for their **future careers**.

This summer, 17 college interns on six different teams are collecting data, counting algae, testing for toxins, cleaning aquariums, leading field trips, and writing press releases.

The Lilly Center is truly powered by students! •



THE DOCTOR IS IN

Is my lake clean? What are the threats facing my lake? Who's caring for my lake? **The Lake Doctor Podcast** dives into questions like these and is your leading authority for locally-sourced science and news about Kosciusko County's lakes & streams. •

Listen today: lakes.grace.edu/podcast.

