

HEADWATERS

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LILLY CENTER FOR
LAKES & STREAMS



INTRODUCING STUDENTS TO THEIR BACKYARD

At the Lilly Center, we serve Kosciusko County in many ways; one of the most rewarding ways is through our education program, which brings students in kindergarten through sixth grade outdoors for hands-on field trips. This fall, the education team made more than 1,000 student connections through Lake Adventure Day, field trips, and other hands-on activities.

During our Lake Adventure Day, local fourth graders experienced our lakes up close. They **learned how to fish**, built mini watersheds, and learned about erosion. Our other field trips offered even more hands-on STEM learning, from nature hikes across Grace College campus to wetland exploration and building miniature ecosystems.

These experiences leave a lasting impression, helping students engage with and **understand their local environment**, often for the first time. As one third grade teacher from Claypool Elementary shared, "We will be talking about this experience for lessons to come!" •

In this winter issue of Headwaters, you will find several stories of how your support is creating the next generation of water-literate citizens from kindergarten to college!

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Cover: Forty nine college interns serve at the Lilly Center; most are pictured in this image!

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Above: 4th grade students learn about pollution using an EnviroScape.

HANDS-ON EDUCATION AT WINONA LAKE

REVISITING LAKE ADVENTURE DAY

In September, 285 fourth grade students gathered in Winona Lake Limitless Park to learn about erosion, watersheds, and how to fish. Lake Adventure Day is a partnership between the Lilly Center and the School of Education at Grace College.

Brooklyn Bosworth, a senior in Grace College's School of Education, was one of many seniors who led watershed and pollution stations, with help from freshman education students. Bosworth particularly appreciates that learning about science is not just textbooks and worksheets. Instead, thanks to Lake Adventure Day, students can learn at the lake.

"We talk to the students about what they can do today," Bosworth said. "They can talk to their parents about what they learned, clean up trash, and more. They also learned about things they can do in the future, like not driving their cars as much."

Senior college students from the School of Education receive training from Lilly Center staff. During their training day, they learn how to use environmental educational tools like stream tables, EnviroScapes, and fishing poles. During Lake Adventure Day, 25 senior students led their lessons with the help of more than 40 freshman college students.

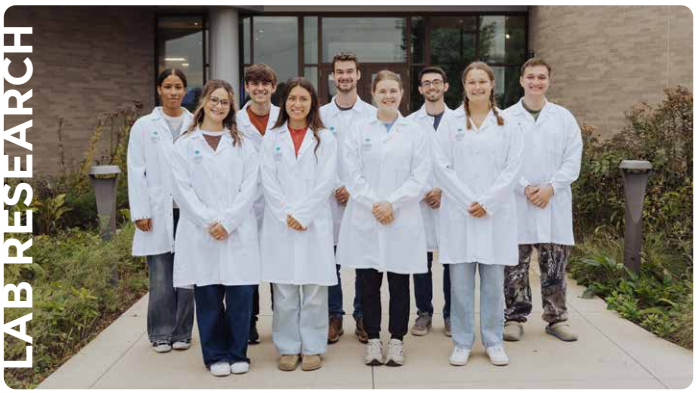
Elementary Education Chair, Dr. Rachael Hoffert, has been **preparing and mentoring** her students for just this kind of opportunity.

"Lake Adventure Day gives our students valuable hands-on experience by giving them opportunities to teach the same lesson multiple times throughout the day," Hoffert said. "Freshman students help facilitate lessons and get a taste of what they can look forward to in just a few short years!"

Equipping fourth grade students today is an **investment in the future** of our lakes – and the Kosciusko County community! Water literate students become future business owners, landowners, and leaders who are prepared to make positive choices for our lakes and streams. •

Lake Adventure Day is possible thanks to a collaboration with Warsaw Community Schools, Lakeland Christian Academy, and Sacred Heart. Education programs like Lake Adventure Day is sponsored by DePuy-Synthes, City of Warsaw Stormwater Utility, Warren and Augusta Hume Foundation, Zimmer-Biomet Foundation, and Runnings.











Aquarium Team: Zariah Auxier, Carter Heathco, Emily Jordan, Eden Moore, Lex Moser, Jerica Neir, Hayden Painter, Graham Rose, Avery Runge, Mallory Schrock, Joselyn Swank, Jaxon Yeager

Lab Research Team: Madison Burch, Josue Corbalan Martinez, Julianna Dadson, Lucas Grady, Grason Haney, Alessandro Miller, Hutch Moore, Mia Rodriguez, Ramiya Siewert, Laci Wetterlund

Education Team: Abigail Bechtel, Kaylie Biddle, Noah Butler, Tyla Davis, Morgan Galyen, Haley Jones, Faith Mauger, Mia Moore, Georgia Pogue, Kendra Shuler, Annika Simons, Brooklyn Tibbs, Charlotte Waldron

Field Research Team: Abigail Bechtel, Eli Bridegroom, Lydia Burch, Ashlyn Erwin, Melanie Kashon, George Mariacher, Noah Monson, Georgina Odero, Tess Price, Keren Santiago Suazo, Janessa Snethens, Claire Sprankle, Alana Tracz

Marketing Team: Ellie Beck-Aden, Emily White

ROOTED IN ***SERVICE*** TOGETHER

THE COLLEGE INTERNS SERVING OUR LAKES, SCHOOLS, AND COMMUNITY

By Emily White, marketing assistant

Every year, the Lilly Center hires Grace College students to help with scientific research on Kosciusko County lakes and streams, educate K-12 students on water literacy, and manage collaborative projects. This year, there are **49 college interns**!

Each intern has the opportunity to steward and make a difference in Kosciusko County's lakes and streams. **Abigail Bechtel** is a part of the Lilly Center's field research team and the education team. By bridging both roles, Bechtel brings her real-time research experience directly into classroom learning. Her days range from taking water samples on local lakes to teaching K-12 students during field trips.

"My favorite part about field research is being outdoors and hands-on with testing," Bechtel says. "On the education team, it's engaging with kids and seeing our classroom impact firsthand."

Every Lilly Center team shares a **common goal**: making our lakes and streams clean, healthy, safe, and beautiful. Building water literacy among students and adults is one of the many ways we work toward that goal — and our interns are at the heart of that effort. •

Flip to the last page of this issue for ways to support future environmental professionals in Indiana.

A FINANCIAL ***STEWARDSHIP*** UPDATE

By Jeremy Price, associate director

During fiscal year 2025-26, the Lilly Center received over $3.5 million in donations, grants, endowment interest, and other income. Total operational expenses for the year were about $1.3 million, creating a surplus of over $2 million (see paragraph five below).

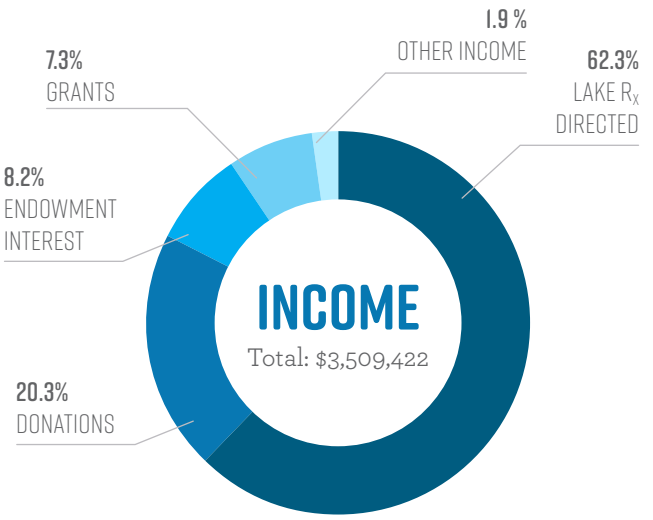
Staff wages and benefits comprised nearly half of total expenditures. College intern wages, program supplies, professional services, and capital expenses rounded out the remainder. Key capital purchases this year included new interactive sand tables and an upgraded virtual aquarium, both hallmarks for our in-house K-12 education field trips, as well as a new vehicle.

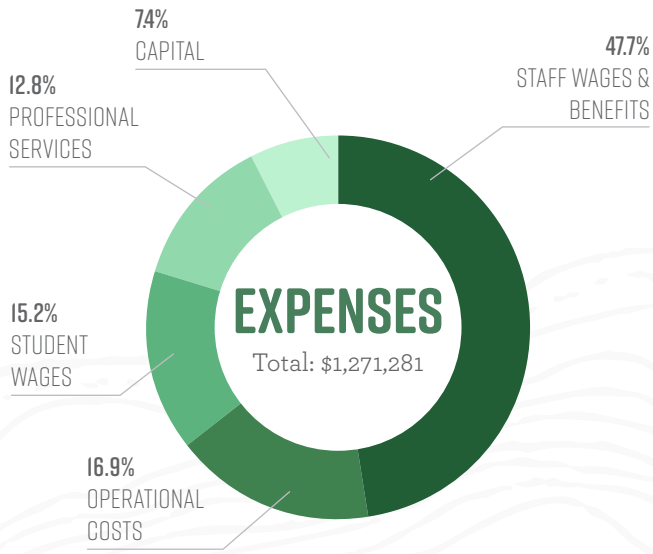
Our work is built on three pillars: research, education, collaboration. This year, 58% of expenses supported research, 31% supported education, and 11% supported collaboration.

The Lilly Center stands in a **strong financial position** with over $3.2 million in total assets, zero debt, and just under $48,000 in liabilities.

In 2025, we embarked on a game-changing effort for our lakes and our community: **Lake R_X**, a program to prescribe and activate solutions to the threats our lakes face. Thanks to Tom and Nancy Cottrell's visionary six-figure gift last year, momentum behind Lake R_X is increasing. Additional donations and grants are already being invested in the startup phase of Lake R_X. A generous $10 million gift from Lilly Endowment, Inc. provided $2 million in operational funds (reflected in this year's report) for the first five years of Lake R_X. The remaining $8 million is set aside in an endowment to support Lake R_X projects long into the future. We are honored by the confidence that our supporters and Lilly Endowment have in our vision to make significant advances in our work in the coming years.

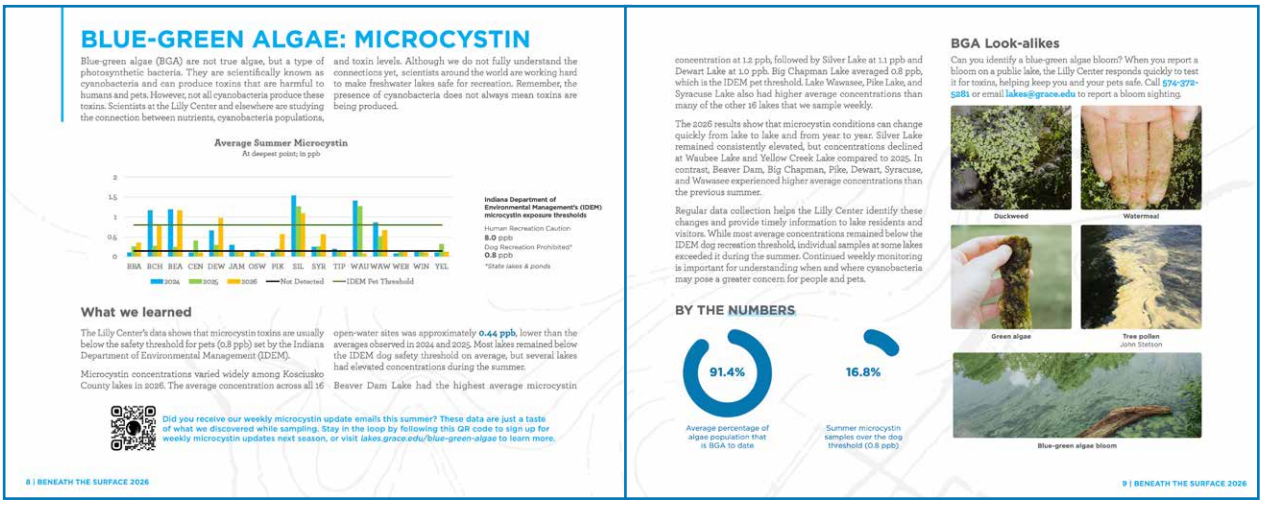
The center's endowments are critical to ensuring the **long-term sustainability** of our work. With a total endowment principal of now $14.9 million, interest from endowment funds will provide a stable source of funding to ensure mission-aligned programming will continue uninterrupted for generations to come. •





OPERATIONAL ASSETS:	
OPERATIONAL CASH & EQUIVALENTS	$2,933,954.25
PROPERTY & EQUIVALENT	$290,264.59
TOTAL ASSETS	**$3,224,218.84**
LIABILITIES:	
PAYABLES	$47,959.93
DEBT	$0
TOTAL LIABILITIES	**$47,959.93**
TOTAL NET ASSETS	**$3,176,258.91**

The information on this page reflects activity during the fiscal year, August 1, 2025 - July 31, 2026



BLUE-GREEN ALGAE: MICROCYSTIN

Blue-green algae (BGA) are not true algae, but a type of photosynthetic bacteria. They are scientifically known as cyanobacteria and can produce toxins that are harmful to humans and pets. However, not all cyanobacteria produce these toxins. Scientists at the Lilly Center and elsewhere are studying the connection between nutrients, cyanobacteria populations, and toxin levels. Although we do not fully understand the connections yet, scientists around the world are working hard to make freshwater lakes safe for recreation. Remember, the presence of cyanobacteria does not always mean toxins are being produced.

Average Summer Microcystin
At deepest point; in ppb

BRA BCH BEA CEN DEW JAM OSW PIK SIL SYR TIP WAU WAW WEB WIN YEL
2024 2025 2026 Not Detected IDEM Pet Threshold

Indiana Department of Environmental Management's (IDEM) microcystin exposure thresholds
Human Recreation Caution
8.0 ppb
Dog Recreation Prohibited*
0.8 ppb
*State lakes & ponds

What we learned

The Lilly Center's data shows that microcystin toxins are usually below the safety threshold for pets (0.8 ppb) set by the Indiana Department of Environmental Management (IDEM).

Microcystin concentrations varied widely among Kosciusko County lakes in 2026. The average concentration across all 16 open-water sites was approximately **0.44 ppb**, lower than the averages observed in 2024 and 2025. Most lakes remained below the IDEM dog safety threshold on average, but several lakes had elevated concentrations during the summer.

Beaver Dam Lake had the highest average microcystin concentration at 1.2 ppb, followed by Silver Lake at 1.1 ppb and Dewart Lake at 1.0 ppb. Big Chapman Lake averaged 0.8 ppb, which is the IDEM pet threshold. Lake Wawasee, Pike Lake, and Syracuse Lake also had higher average concentrations than many of the other 16 lakes that we sample weekly.

The 2026 results show that microcystin conditions can change quickly from lake to lake and from year to year. Silver Lake remained consistently elevated, but concentrations declined at Waubee Lake and Yellow Creek Lake compared to 2025. In contrast, Beaver Dam, Big Chapman, Pike, Dewart, Syracuse, and Wawasee experienced higher average concentrations than the previous summer.

Regular data collection helps the Lilly Center identify these changes and provide timely information to lake residents and visitors. While most average concentrations remained below the IDEM dog recreation threshold, individual samples at some lakes exceeded it during the summer. Continued weekly monitoring is important for understanding when and where cyanobacteria may pose a greater concern for people and pets.

Did you receive our weekly microcystin update emails this summer? These data are just a taste of what we discovered while sampling. Stay in the loop by following this QR code to sign up for weekly microcystin updates next season, or visit lakes.grace.edu/blue-green-algae to learn more.

8 | BENEATH THE SURFACE 2026

BGA Look-alikes

Can you identify a blue-green algae bloom? When you report a bloom on a public lake, the Lilly Center responds quickly to test it for toxins, helping keep you and your pets safe. Call 574-372-5281 or email lakes@grace.edu to report a bloom sighting.

Duckweed
Watermeal
Green algae
Tree pollen
John Stetson
Blue-green algae bloom

BY THE NUMBERS

91.4%
Average percentage of algae population that is BGA to date

16.8%
Summer microcystin samples over the dog threshold (0.8 ppb)

9 | BENEATH THE SURFACE 2026

Above: An exerpt from Beneath the Surface, 2026.

WHAT DOES THE *DATA* SAY ABOUT YOUR LAKE?

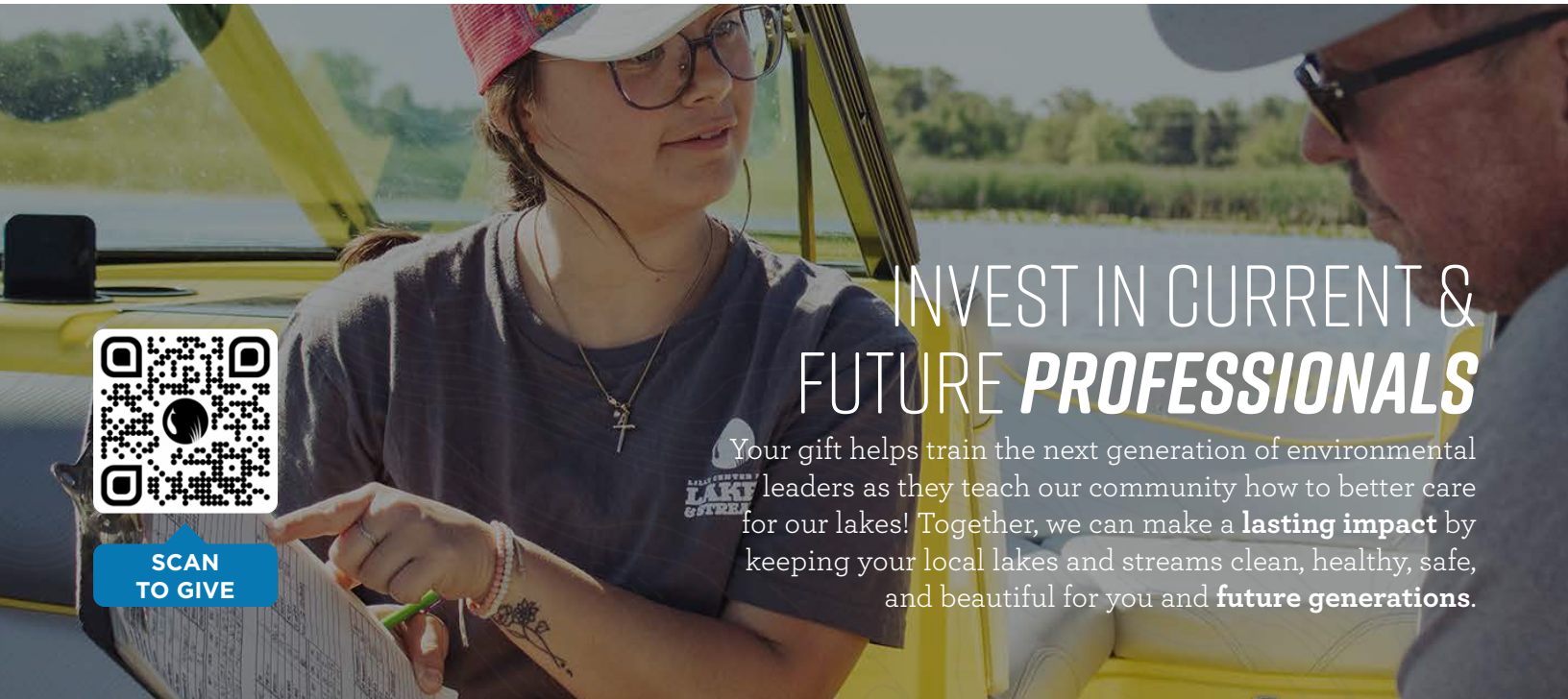
THE LILLY CENTER PUBLISHES ANNUAL *BENEATH THE SURFACE* REPORT

Research is the **foundation** of the Lilly Center. It helps us understand what goes on beneath the surface of our lakes and guides us toward solutions.

To guide real solutions, our research must be **strategic and reliable**. Through detailed scientific analysis and weekly data collection, our research teams gather high-quality data about the health of our lakes and streams. *Beneath the Surface* is a tool that you, your organization, or your agency can use to make informed decisions about these important resources.

This library of data shows how lakes change over time, which reveals specific management steps. After reading the data, we encourage you to **follow the action steps** to help fix the problems on your lake. •

We invite you to dive Beneath the Surface with us! View the digital version at **lakes.grace.edu/bts** *or pick up a physical copy from the Lilly Center.*



SCAN TO GIVE

INVEST IN CURRENT & FUTURE *PROFESSIONALS*

Your gift helps train the next generation of environmental leaders as they teach our community how to better care for our lakes! Together, we can make a **lasting impact** by keeping your local lakes and streams clean, healthy, safe, and beautiful for you and **future generations**.