

Lauren Knose

# Student Corner

## NALMS Supports Students!

Five years ago, I was attending the first scientific conference of my graduate career (Global Lake Ecological Observatory Network, or GLEON), where I met Lisa Borre, whom I call the unofficial ambassador for NALMS. For those few of you yet to meet Lisa, she is an incredibly welcoming individual, with an accomplished career, and an incredible commitment to engaging and supporting students. After hearing about my interests, Lisa was quick to recommend that I join NALMS and attend the annual Symposium held that upcoming year in Cincinnati, Ohio. Since 2018, I have attended every Symposium and have

served as the Student Director for two years. My persistence with this organization should be telling enough how valuable NALMS is, and I cannot express how much NALMS has empowered me as a student and as a professional.

Although my participation in NALMS has been very rewarding, it is my understanding that the full scale of benefits available to student members is not well-known. Some opportunities have been around for many years, whereas others are brand new. I would like to raise awareness of the many ways NALMS supports students, through recognition,

funding, engagement, and mentoring. Further, I submit a call to action for students to capitalize on these opportunities and further engage in NALMS and thank NALMS members and leadership for their continued support of students.

### Gaining a better understanding of student membership through the Student Story Map

In April 2022, Student Programs launched the Student Story Map webpage (Figure 1) to highlight the students of NALMS. The goals of the Story Map were to increase visibility of students to

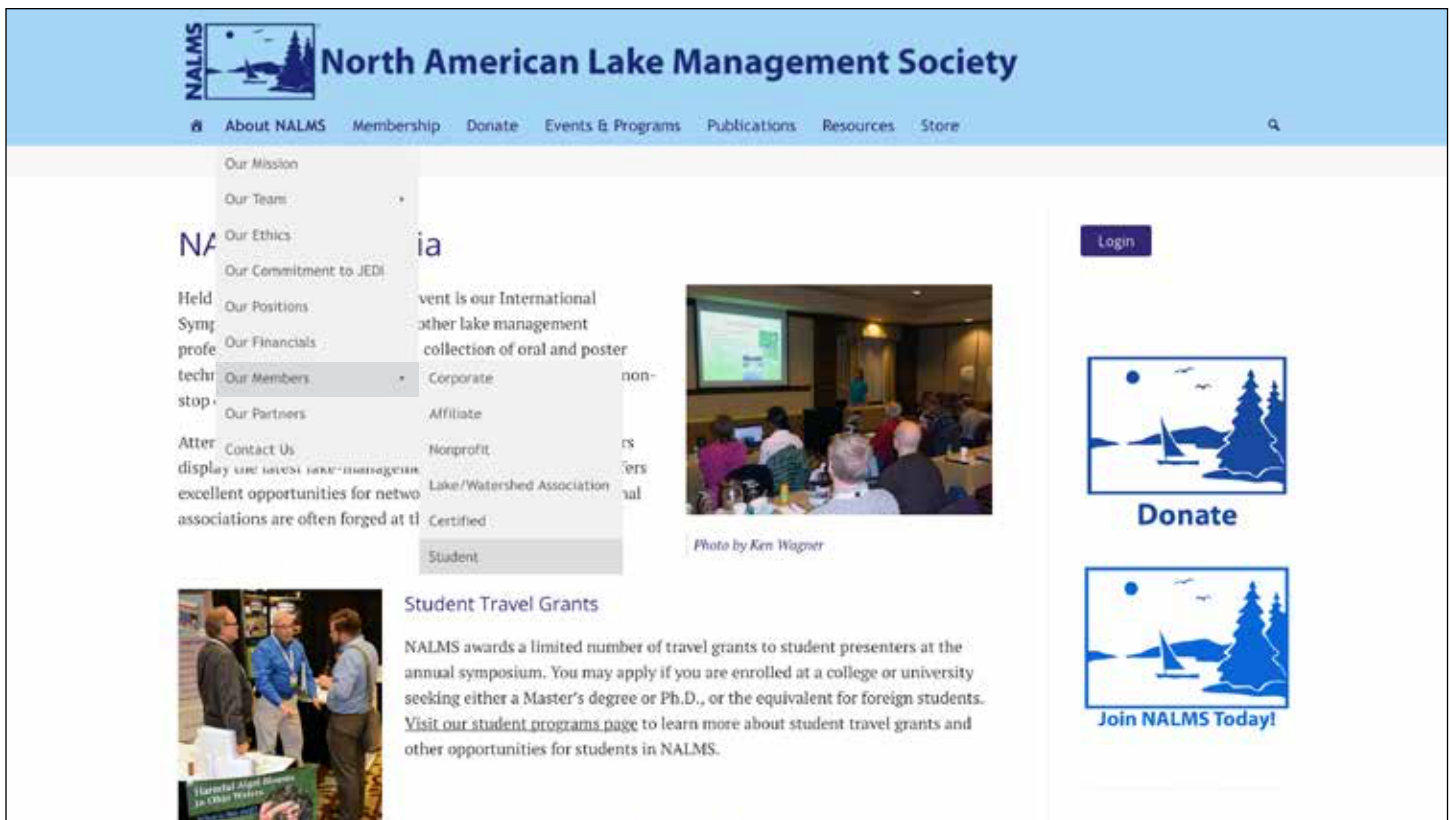


Figure 1. Screenshot of navigating to the NALMS Student Member webpage. The Student Member webpage can be located through the NALMS website ([nalms.org](http://nalms.org)) by selecting the "About NALMS," "Our Members," and "Student" tabs.

potential graduate programs and/or employers, increase the awareness of programs across the United States (U.S.) where students are studying lake science and management, and to improve equity in recruitment and representation. The Story Map includes an interactive heat map (Figure 2) showcasing where students are studying lake science and management, updates on Student Programs activities, a slideshow showcasing the latest accomplishments of NALMS students, and links to the Student Survey, membership, and donation pages. Users can zoom through the interactive map to specific regions and select the data points to see the academic institution highlighted. The Story Map was developed using the ESRI Story Maps platform and is updated quarterly by the Student Director. If you would like to nominate a student or yourself to be highlighted, send an email to the student director ([student@nalms.org](mailto:student@nalms.org)).

Student members come from all over the world, with greater representation in the U.S. and Canada. NALMS students are spearheading the effort to improve diversity and inclusion among members and to ensure NALMS is a welcoming

and safe environment through the Justice, Equity, Diversity, and Inclusion (JEDI) Program. You can view a summary of the JEDI efforts in NALMS presented at JASM 2022 by students Sarah Burnett and Keiko Wilkins. Of the 101 historically black colleges and universities (HBCUs) in the U.S., 100 are located within five miles of a lake or reservoir (spatial analysis performed in ArcGIS Pro 2.9.0 using Environmental Protection Agency (EPA) NHDPlus waterbody data and IES National Center for Educational Statistics, HBCU data). Thirty-four HBCUs are located within walking distance (0.5 miles) to a lake or reservoir, which means those students, who are generally under-represented in NALMS membership, are more likely to be influenced and affected by lakes. Student Programs uses the map to determine where students are less represented and where outreach and support may improve student engagement.

### Working to better serve student members through the Student Survey and Dashboard

In April 2022, Student Programs launched the Student Survey (Figure 3) aimed at better serving student members,



Figure 3. QR code to access the NALMS Student Survey. Students (members and non-members) are encouraged to scan the QR code (or visit the webpage) with a mobile device or computer and fill out the survey.

by identifying students who have yet to receive funding support, connecting students with potential mentors, and providing greater opportunities for placement with future graduate programs, internships, and employment. Students can answer questions related to their focus of interest/research, academic level,

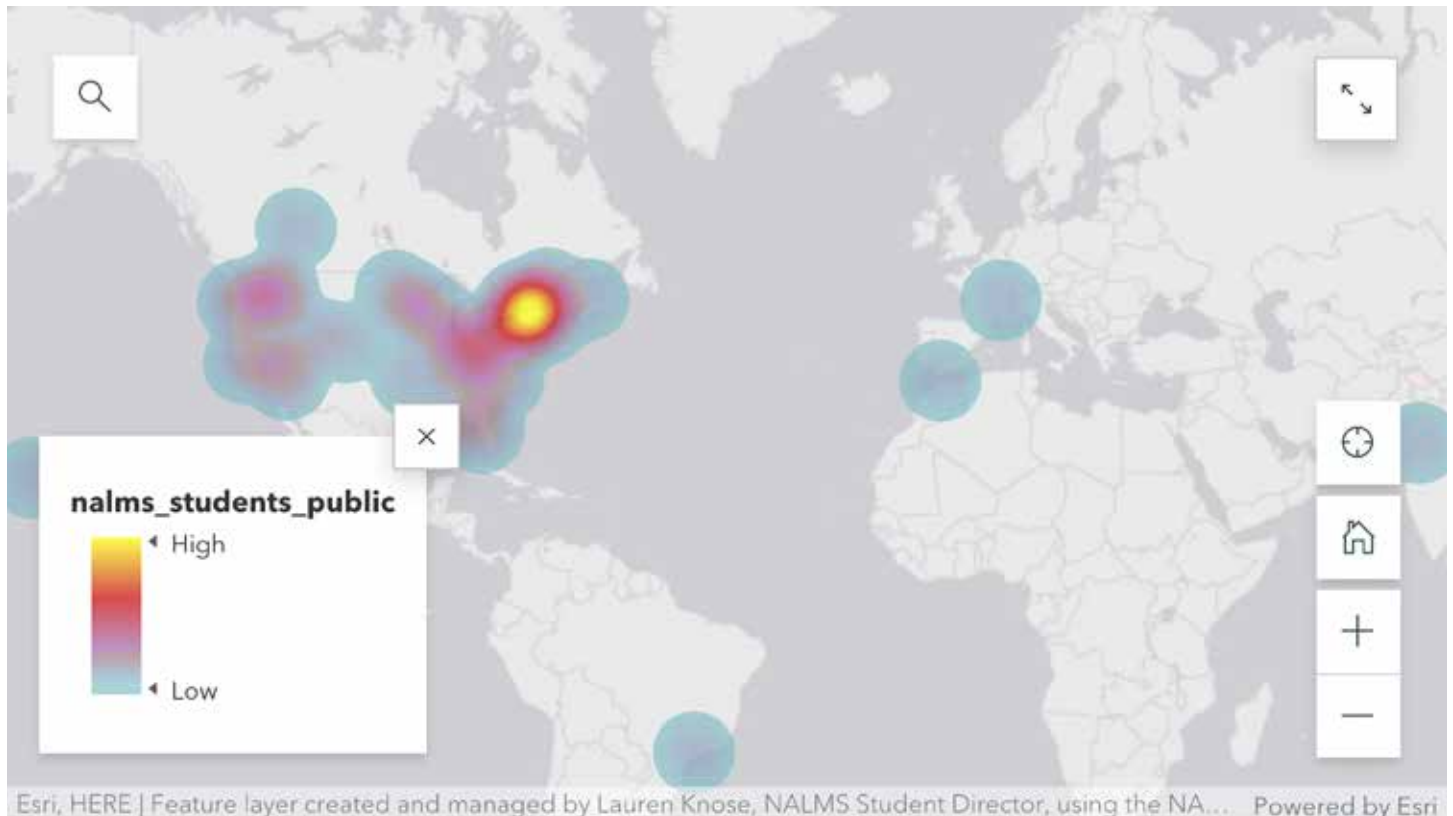


Figure 2. Heat map displaying the relative number of NALMS student members, located by academic institution. The density of student members in a region are displayed across a color scale of blue (low) to yellow (high).

membership status, anticipated graduation date, and any previous support received. The data collected by the survey are displayed through an interactive Dashboard (Figure 4), which is available only to NALMS members.

Each section of the Dashboard can act as a filter, simply by clicking on the information of interest. For example, if you are an employer and looking for a Masters-level student, who studies invasive species, and will be graduating soon, you can filter the list of students within a specific NALMS region, academic level, type of employment wanted, or by topic of interest, and the list of student members who fit those criteria will auto-populate. Likewise, if you are a student looking for a peer-mentor in a program related to a topic of interest, you can query the dashboard to find potential graduate programs and students to contact. The dashboard is auto populated by the data entered into the Student Survey. The survey and dashboard were developed using the ESRI survey123 and Dashboard platforms and is updated quarterly by the Student Director.

### Opportunities for student engagement and benefit

NALMS supports students in many ways and through several programs, in addition to providing reduced rates for membership and conference registration.

The following list includes the many opportunities for student members to participate and receive support from NALMS.

#### NALMS Programs and Committees

There are many [programs and committees](#) that are welcoming to student participation and engagement. For example, the Student Programs Planning Team, which meets quarterly to discuss and plan activities and support for students, is actively seeking current students to participate. The Planning Team generally consists of the Student Director, past student directors, current student members, and student mentors. If you are interested in serving on the Planning Team for Student Programs, please reach out to the student Director at [student@nalms.org](mailto:student@nalms.org).

#### Student Video Series contests

Last year, NALMS offered three video competitions with prizes for first-, second-, and third-place winners. Participants were asked to make either an eight-minute video or short clip (140 sec) related to a lake management initiative. The guidelines for the video were posted on the [student video series](#) webpage. The winners of the video contest were Ben Cuppett and Jess Casey, students at SUNY Oneonta Lake Management Program. They received a \$500 gift card to support their research and a free membership to

NALMS. You can watch [the winning video](#) on YouTube, titled “Clean Lake Initiative 314.”

#### Jody Connor Student Awards

Each year select NALMS members review poster and oral presentations given by students at the annual Symposium. The winner(s) receive awards and special recognition by the NALMS Awards Committee.

#### Kenneth H. Reckhow Scholarship Fund

Every year, a graduate student is randomly selected to receive \$500 to use toward education and research, provided through a generous donation from life-time member Kenneth H. Reckhow. To qualify for this scholarship, graduate students must register and participate in the Clean Lakes Classic 5K Run/Walk (held during Symposium), be enrolled in a lake management-related graduate program, and be a current member of NALMS.

#### Student Internships

This year, NALMS is hosting two paid internships, through the Clean Water Act (CWA) 314 Working Group and JEDI program. Sky Embry is an undergraduate student at Trinity College Public Policy and Law program and is serving as the intern for the CWA 314 Working Group. Alexis Johnston is an undergraduate

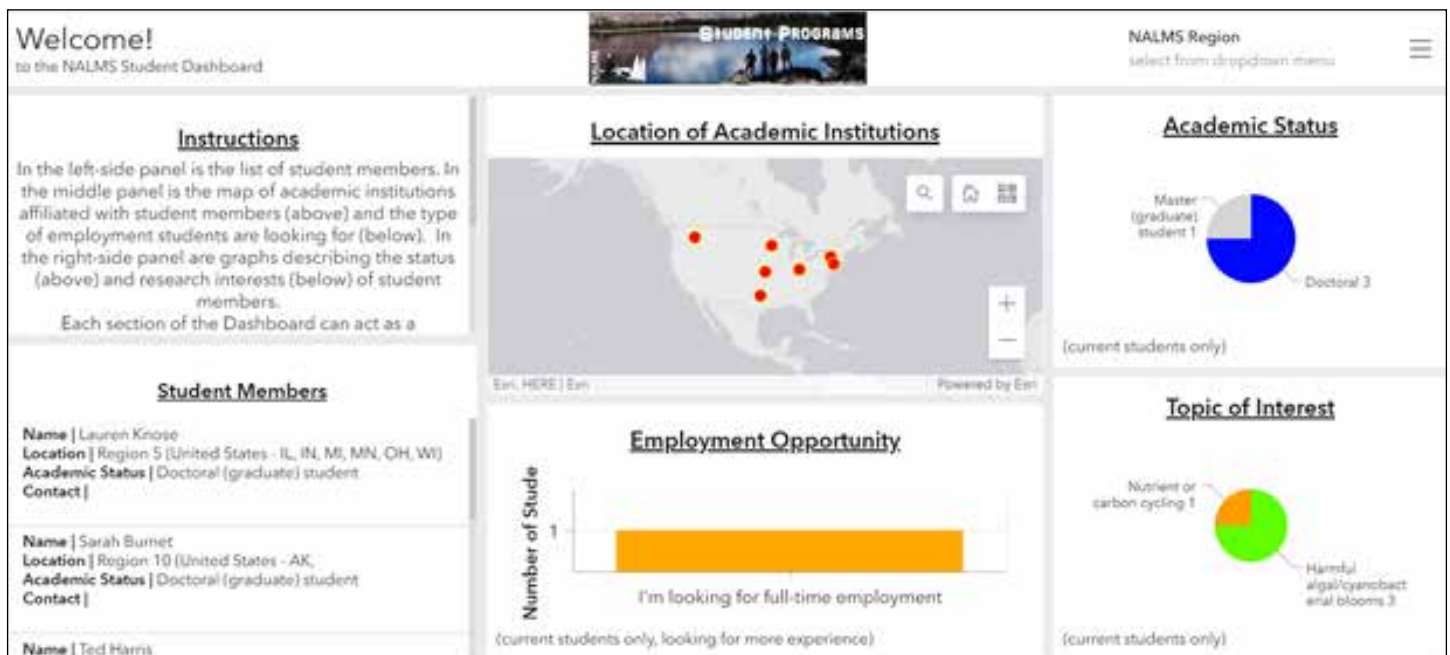


Figure 4. Screenshot of the NALMS Student Dashboard beta version (not showing current membership data).

student at the University of Cincinnati Law and Society program and is serving as the intern for the Justice, Equity, Diversity, and Inclusion (JEDI) program. Welcome to these amazing undergrads!

#### *Student Travel Grants*

NALMS offers grants to help cover the cost to travel (hotel, air, or auto transport) and attend the annual Symposium for students who are presenting. Students can apply through the [application portal](#) on the Student Travel Grant Application webpage.

#### *Student Mentorship Program*

NALMS is a unique community where researchers, practitioners, and industry leaders come together to collaborate, discuss ideas, and share experiences. Students can benefit from a diverse field of mentors, with over half (58.2 percent) of the membership employed in the private sector, 15.1 percent in academia, 13.4 percent in non-profits, 10.8 percent in government, and 2.6 percent in utilities. Student Programs pairs students with experienced mentors willing to help guide students towards greater success in different fields and sectors.

#### *Sponsored Student Program*

A portion of NALMS member donations go towards providing free memberships to students. Students can apply through a simple GoogleForm on the [Sponsored Student Program webpage](#).

#### *Resume and Interview Workshop/Session at Symposium*

In 2021, Student Programs offered a résumé and interview workshop at the virtual Symposium. The workshop, led by Ryan O'Hanlon (Stonefly Aquatic Nursery), provided a panel of experts from different fields to offer guidance on developing resumes and interviewing skills. During the activity portions of the workshop, students were paired with mentors and received valuable feedback on their résumés and mock interviews. At the 2022 Symposium in Minneapolis, MN, the résumé and interview workshop will be held as a session after the student lunch on Tuesday.

#### *Student Lunch and Home Room at Symposium*

At in-person meetings, NALMS hosts a lunch for student members, where they get to meet members of the Board of Directors and leadership for the various programs and committees. Participants can talk about the many ways to participate in NALMS, find mentors, and share ideas and experiences. At the 2022 Symposium in Minneapolis, MN, there will be a Home Room for students to meet, work, or rest.

#### *Student Silent Auction*

Every year during the annual Symposium Student Programs holds a silent auction, from which 100 percent of the proceeds go toward supporting student programs, including, but not limited to,

student memberships, travel grants, and awards.

#### **Opportunities for supporting students**

The students of NALMS are diverse, driven, and devoted to the advocacy, monitoring, and management of lakes and their watersheds. NALMS is devoted to supporting students. If you would like to contribute to supporting students of NALMS, please visit [www.nalms.org/donate-to-nalms](http://www.nalms.org/donate-to-nalms). If you would like to sponsor a student or donate to the Student Silent Auction, please contact the Student Director ([student@nalms.org](mailto:student@nalms.org)). If you are a student and not yet a member of NALMS, please visit [www.nalms.org/nalms-memberships](http://www.nalms.org/nalms-memberships) and sign up!

**Lauren Knose** is a Ph.D. candidate in ecology, evolution, and environmental biology (EEEB) from Miami University (Oxford, OH). She serves as the NALMS Student Director, Chair of Student Programs, and participates in the Inland HABs Program and Clean Water Act (CWA) 314 Working Group. She was recently awarded a fellowship through the Oak Ridge Institute of Science and Education (ORISE) at the U.S. Environmental Protection Agency (EPA) Office of Research and Development, in the Environmental Decision and Analytics Branch. 🌱



## “Get to Know a NALMS Intern”

### My Experience as a NALMS JEDI Intern

Alexis Johnston

Hello, my name is Alexis Johnston, and I am an undergraduate student at the University of Cincinnati, studying political science and law and society. My field of study primarily focuses on political thought, behavior, and outcomes, especially as they pertain to the law.

My background in political and legal studies was extremely useful for the work I did with the North American Lake Management Society's JEDI Program.

This is because political ideologies usually directly coincide with how people view marginalized communities and what they are entitled to, as well as how people react to change in general.

Over the summer, and into this fall I had the pleasure of working directly with the NALMS “JEDI” committee as their intern. “JEDI,” is an acronym for Justice, Equity, Diversity, and Inclusion. Coming into the internship, I was under the

impression that assistance was needed with general outreach to underrepresented communities and with amplifying underrepresented voices. While this much was accurate, there were many other things that needed to be done, and still need to be done to make NALMS a better environment for everyone.

The JEDI committee for my internship was made up of four incredible co-chairs who are all experts in their

respective fields of lake management or aquatic science. Aside from this, the committee was made up of individuals who saw that NALMS was in desperate need of diversity, education, and outreach initiatives directed at underprivileged individuals and communities. I quickly realized that while a lot of people saw the lack of diversity in many categories as an issue, many people didn't and still don't. I realized that I had my work cut out for me very quickly, before I even began my work for the internship.

My first task during my internship was analyzing voluntary survey data that focused on the demographic representation of the NALMS membership. (I'll display the data from this survey during my talk on divisive concepts during the November 2022 NALMS Symposium). I was immediately overwhelmed with the findings, but not particularly surprised. I was mainly overwhelmed with the level of ignorance that I simply did not anticipate. With the understanding that "ignorance" entails the lack of knowledge or education, I knew that my focus should be on diversity, equity, and inclusion education.

After establishing a foundation of education, the next step would be to work on both sympathizing for and attempting to empathize with the groups of people who are underrepresented and mistreated. I was also confused on why people in this professional sphere didn't know the difference between race, ethnicity, and nationality. Or the difference between sex and gender. While my assumptions are based on survey results, and there may very well have been people that responded in a questionable way on purpose, I truly think there are a lot of individuals who just need to become more knowledgeable on the topics.

I also had an interesting realization that most of the people responding to these questions fall into majority categories. They most likely felt uncomfortable answering these questions. Even though there was nothing at stake based on how people answered the demographic questions in the survey, there was a certain level of defensiveness in some of the written responses, for most of which a written response was not required for the question. I would challenge those people to imagine how people who have identities that are outside

of what is respected and rewarded feel about potentially not getting a job based on the information they do or don't include in their application or resume. The work I did with this survey data set the tone for my internship and further ignited my interest in bettering this organization for marginalized and underrepresented communities.

In my role, I also did research to supplement diversity education, analyzed data that outline the existing society demographics and opinions about diversity, and created a presentation that breaks down conflating and confusing terminology that exists within JEDI efforts (which will be shown at the NALMS Symposium).

Most of my intern projects were research projects, data analysis, and or initiating outreach. My favorite part of working as a JEDI intern is being able to use my passion for advocating for marginalized communities in my projects. Aside from the work I did with the survey data, I think the most important thing I have done with this internship and my projects is provide a good foundation for future JEDI interns. This will in turn lead to a better and more inclusive environment in the NALMS community.

*My favorite part of working as a JEDI intern is being able to use my passion for advocating for marginalized communities in my projects.*

I chose to focus on confusing terminology or divisive terms for my symposium presentation because they often lead to opposition from individuals who do not fit into a marginalized category. This is generally because individuals who experience privilege in an unwavering fashion begin to view equality for others as oppression toward them. This type of research is important because plainly there is an obvious lack of diversity and representation within NALMS. I feel that it is imperative that all members are educated on what "divisive" terms mean and why they matter. This type of education is incredibly important so that NALMS as an organization is accessible to everyone,

especially people from marginalized and disadvantaged backgrounds.

To be successful in JEDI efforts, there needs to be a society-wide effort to learn and accept the changes that foster an environment that is conducive to more groups of people. Such changes help to ensure more contribution and advancement in fields such as lake management and aquatic science.

The most important thing I've had reaffirmed for me during this internship is that it's incredibly important to have perspective. The ability to view things from a lens unlike your own is absolutely essential in today's society. Empathy has far-reaching impacts on so many groups of people and everyone can benefit from it. In all honesty, at the heart of my talk for the NALMS symposium is a lesson in empathy and compassion. Overall, the inability to fully empathize with someone isn't a reason to invalidate or ignore their experiences. Therefore, the amplification of marginalized and minority voices is at the heart of JEDI efforts. I have gained so much insight from my JEDI experience and I cannot express how excited I am to present at the North American Lake Management Society Symposium this November.

My name is **Alexis Johnston**, and I am an undergraduate student at the University of Cincinnati studying political science and law. I had the pleasure of working directly with the NALMS "JEDI"



committee as an intern – "JEDI," being an acronym for Justice, Equity, Diversity, and Inclusion. In my role, I researched supplemental diversity education, analyzed data that outline the existing society demographics and opinions about diversity, and created a presentation that breaks down conflating and confusing terminology that exists within JEDI efforts. I also engaged with several other research projects, data analysis, and outreach opportunities. My favorite part of working as a JEDI intern was being able to use my passion for advocating for marginalized communities in my projects. 🌊