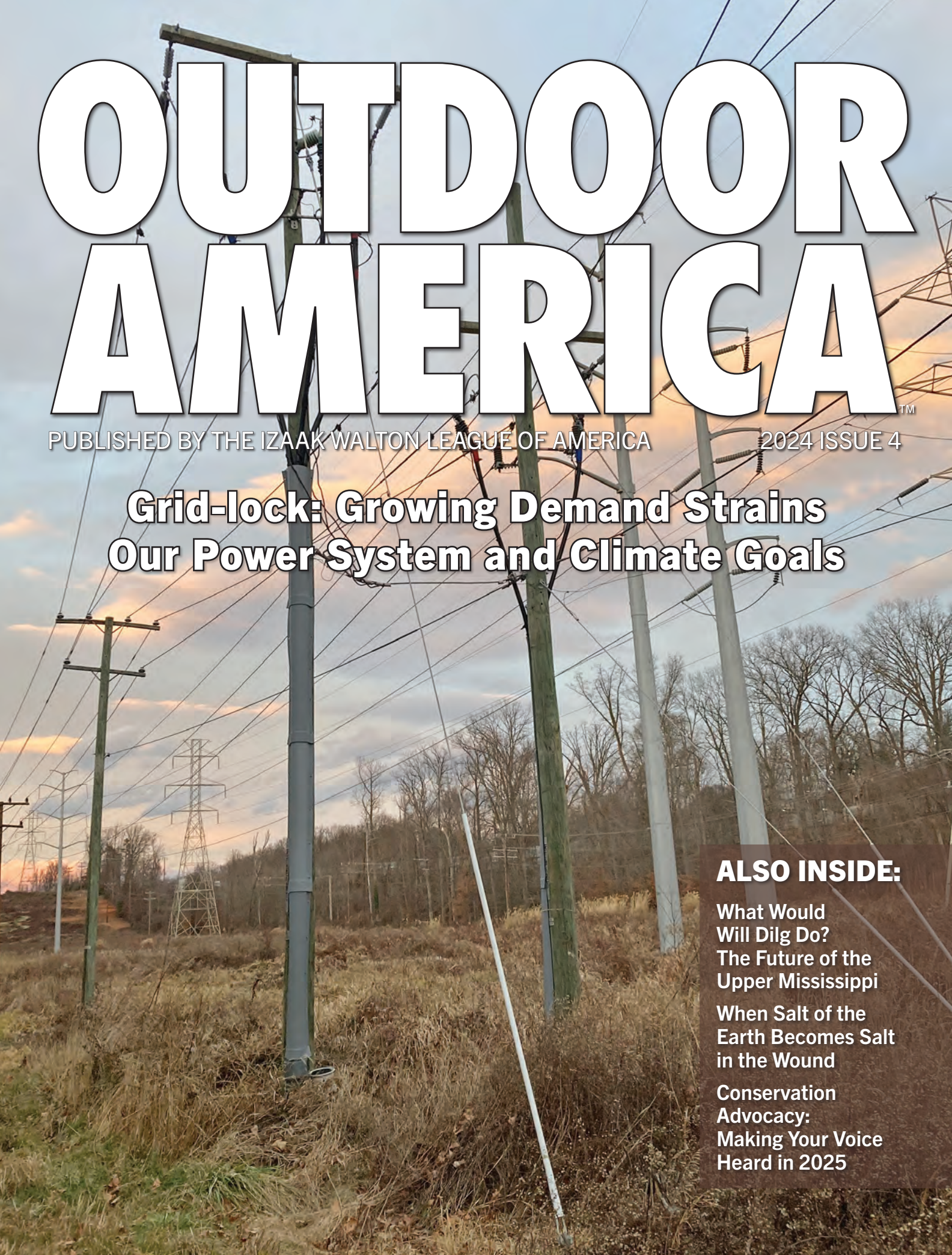

OUTDOOR AMERICA™

PUBLISHED BY THE IZAAK WALTON LEAGUE OF AMERICA 2024 ISSUE 4

Grid-lock: Growing Demand Strains Our Power System and Climate Goals

ALSO INSIDE:

Creation of the Upper Mississippi River Refuge in 1924 Kicked Off the Modern Conservation Movement

The Upper Mississippi River National Wildlife and Fish Refuge is an enduring example of how we can and must take action to save the nation's waterways and ensure a future with clean water. We will need bold steps and new generations of stewardship to address a range of problems—polluted runoff, habitat degradation and invasive species to name a few.

Visit iwla.org/upperMiss for details about the history and events celebrating the refuge centennial.

During 2024, Americans celebrated the 100th anniversary of the creation of the Upper Mississippi refuge. In events, exhibits and publications during the year, the refuge was recognized for its value as wildlife habitat and a resource for outdoor recreation while also acknowledging that the river faces a host of environmental challenges today.

Establishing the refuge in 1924 was a monumental achievement due almost wholly to the efforts of the Izaak Walton League of America. In response to plans to drain and fill wetland habitat from Lake Pepin, Minnesota south to Rock Island, Illinois, the League leveraged its 100,000 members to urge Congress, the White House and four states to protect these vital resources within a new national wildlife and fish refuge.

The campaign didn't just establish the largest wildlife refuge of its time, it created the template for the modern conservation movement that helped produce a wave of grassroots actions that would ultimately drive dozens of major conservation achievements in the decades that followed.

Describing the League's work to save the Upper Mississippi wetlands, historian Stephen Fox wrote, "It was a phenomenon—the first conservation group with a mass membership… It brought new pressures on Congress through its sheer size and because it spoke for a different area of the country."

In his book, *The Great River,* historian Phillip Scarpino called the League's grassroots effort to save the Upper Mississippi in the 1920s, "the first modern environmental campaign."

Today, this refuge protects 250,000 acres of the Mississippi floodplain and wetlands along 261 miles of the river. The refuge continues to provide essential habitat for fish and wildlife species in the region including 57 mammals, 260 fish, 37 freshwater mussels and 45 amphibians and reptiles. The Upper Mississippi is a globally important flyway for more than 300 bird species and 40 percent of all North American waterfowl.

The bluffs, vistas and trails found in the refuge host about 3.7 million visits each year for hiking, boating, wildlife observations, fishing, hunting and other recreation, which support $125 million in outdoor recreation and tourism.

OUTDOOR AMERICA™

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ABOUT THE IZAAK WALTON LEAGUE OF AMERICA▶
Founded in 1922, the Izaak Walton League of America is a national conservation organization headquartered in Gaithersburg, MD. Our more than 40,000 members protect and enjoy America's soil, air, woods, waters and wildlife. For membership information, call (800) IKE-LINE (453-5463) or visit our website at www.iwla.org.

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Let's Roll Up Our Sleeves!

JODI LABS | National President

As we head into 2025, it is good to reflect back on the previous year in order to set goals and identify opportunities for the new year. During 2024, we saw many events that remind us of the importance of the work Ikes take on every day, as well as several things that will present us with challenges and opportunities over the next few years.

First, the world saw its warmest year on record (for the second year running), accompanied by frequent severe storms, tornadoes, hurricanes and floods that were super-charged by the warming of our planet.

Second, the U.S. Supreme Court issued a landmark decision that overruled the 40-year-old Chevron doctrine with its decision in *Loper Bright Enterprises v. Raimondo.* The *Loper Bright* decision will impact how federal courts review agency interpretations of statutes, not only making courts the arbiter of environmental regulations but also likely to result in inconsistent interpretations across the country.

Third, we had an election that is likely to result in substantial changes and challenges to environmental regulations and policy across the nation.

Extreme weather

As for the extreme weather events, we saw a significant increase in tornado activity across the Midwest and southern United States. We witnessed two powerful hurricanes, Helene and Milton, over a period of only a couple weeks and major wildfires in the West. The U.S. also saw widespread flooding due to more intense rainfall events, severe coastal erosion from rising sea levels and extreme heatwaves. Each of these extreme weather events had significant impacts on human life, including the tragic loss of hundreds of lives in flooding caused by Hurricane Helene, infrastructure and ecosystems. In fact, some of our own Ike chapters experienced these impacts directly.

We must buckle down and continue the work we have been doing for the last 100-plus years.

Experts attribute each of these extreme weather events to a warming climate. We don't need to agree on what is causing climate change but we should be able to agree that we are

experiencing the impacts in each of our communities, including the effects on the outdoor recreational activities that many of us enjoy. For example, we had higher than normal temperatures this fall in Wisconsin and Upper Michigan, temperatures that were too warm for my husband to take our German shorthaired pointers hunting grouse and woodcock during September and October—something they live for each year.

Environmental policies

Despite the increasing unpredictability of extreme weather events, the recent election will have a direct impact on climate policies and environmental regulations. The U.S. is once again likely to withdraw from the Paris climate agreement. A host of

EPA clean water and drinking water regulations stand to be re-evaluated over the coming years with wetlands and PFAS regulations among the most likely to get a closer look. We may even see a repeal of the Biden administration's waters of the U.S., or WOTUS, rule, an issue that the League has been working hard on for years.

I hope you are ready to join us as we continue to defend our soil, air, woods, water and wildlife.

What does all of this mean for us as conservationists and people who enjoy the outdoors? It means that we must buckle down and continue the work we have been doing for the last 100-plus years. And we don't have to do it alone. It is fair to say that nature has a unique ability to bring people together. Support for natural climate solutions, such as conserving wetlands and grasslands and storing more carbon in healthy soil, is strong, growing and crosses party lines.

We all agree that clean air, clean water, protected wildlife habitat and time outside is neither a red issue nor a blue issue. It's a green issue. Just look at the climate and conservation initiatives that fared well on ballots across the country. Voters across the country approved close to two dozen initiatives that generated in excess of $16 billion in public funding for parks, climate resilience projects and land conservation in 11 states.

The League's role

League members are well situated to defend our natural resources and ensure Americans have clean water and clean air. However, in order to maximize our impact, we will need to come together and partner with like-minded organizations, not only non-profit organizations but also local land and water conservation departments, state and federal agencies, businesses and other community groups working on conservation and sustainability issues.

As I reflect back on 2024, it's clear to me that we can and must do more to help ensure a cleaner, healthier future for all, while strengthening the economy and making communities safer. We need to roll up our sleeves, step up to the challenges and build off the strong momentum for action at the local and state level.

We also need to define and seize the strategic opportunities that will be present across the country, and ultimately get things done. The League and its chapters will have opportunities to work with the incoming administration on a range of issues, including ensuring clean air and water and restoring wildlife habitat.

If we seize the opportunity, the League can play a crucial role in addressing climate change and conservation challenges by educating the public, advocating for policy change, supporting community-based initiatives, implementing conservation projects on the ground, mobilizing grassroots action and raising awareness about environmental issues—essentially acting as a bridge between scientific knowledge, community needs and political action to drive systemic change toward sustainability.

I am ready to roll up my sleeves and I hope you are ready to join us as we continue to defend our soil, air, woods, water and wildlife.

Another Milestone Year for the Izaak Walton League

SCOTT KOVAROVICS | Executive Director

2024 was another milestone year for the Izaak Walton League of America.

Working together, League members, volunteers, staff and partners achieved so much more than summarized here.

The anniversary of the Upper Mississippi River Refuge focused on more than a victory from the League's early days. We celebrated the conservation outcomes that followed creation of the Refuge. Challenges loom, however. See historian John Anfinson's article about the Mississippi on page 18.

The League's Salt Watch program is the only nationwide volunteer science initiative focused on reducing chloride pollution. See our feature on the downside of excessive use of salt on page 40.

Educating people about how they can curb chloride pollution starts by meeting people where they are. This year, League staff engaged key audiences by going door-to-door to talk with commercial property owners, tabling at farmers markets and coordinating road salt applicator trainings. Our team reached thousands of people at 70 events like these.

The League launched Nitrate Watch in 2023 to test, track and help reduce nitrate pollution that contaminates our drinking water, damages our economy and directly contributes to an increase in thyroid disease, colon cancer and birth defects among people who consume water with even low levels of nitrate.

We reflect with pride on the year just past and renew our commitment to achieving the League's mission going forward.

In 2024, Nitrate Watch continued to boom. Volunteers from 44 states submitted more than 2,400 nitrate test results to our Clean Water Hub website.

Our staff, chapter leaders and volunteers advocated for many conservation priorities, including:

Boosting conservation impact through the Farm Bill. The League pressed Congress to amplify the conservation impact of the Farm Bill -- which is really a clean water, public health and climate-resiliency bill. Our team and chapter leaders made the case directly to members of Congress and their staff in more than 60 in-person meetings.

Restoring habitat along the Mississippi River. From the Great Lakes and Chesapeake Bay to the Everglades, the League

has continually advocated for federal investment to restore the health of entire landscapes. We advocated for new legislation that would make similar investments to restore habitat, clean up pollution and improve outdoor recreation along the entirety of the Mississippi River.

Restoring Clean Water Act protections to streams and wetlands. The Supreme Court decision in *Sackett v. EPA* erased Clean Water Act protection for streams that flow to drinking water supplies for one in every three Americans and for millions of acres of wetlands. The League urged Congress to restore those protections.

As a new year begins, we reflect with pride on the year just past and renew our commitment to achieving the League's mission going forward.

OUTDOOR AMERICA

THE IZAAK WALTON LEAGUE OF AMERICA

MEMBERS WITH QUESTIONS OR CONCERNS ABOUT LEAGUE POLICIES CAN REACH OUT TO THEIR NATIONAL DIRECTOR. FOR CONTACT INFORMATION, CALL THE LEAGUE'S HEADQUARTERS AT (800) IKE-LINE.

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To conserve, restore and promote the sustainable use and enjoyment of our natural resources, including soil, air, woods, waters and wildlife.

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Youth from local high schools gather to get assignments for a trail restoration project. Hundreds of youth from the community attend Chapter programs to perform conservation service and learn environmental ethics and water science.

MINNESOTA VALLEY CHAPTER (2)

Growing Our Chapter: A Community-Based Approach to Membership Growth

By CAMILLE MORTON, SURYASH RAWAT, GRIFFITH PUGH

Building membership in an Izaak Walton League Chapter isn't just about numbers—it's about people, purpose and participation from day one. Our success lies in putting tools in the hands of every new member who walks through our doors, making them active contributors from their first day.

Whether it's a shovel or a snack, we make sure everyone's equipped for action—or at least well-fed. At the **Minnesota Valley Chapter,** we've embraced a community-centered approach where every initiative, event and program is focused on making connections that last. Membership growth is the natural outcome of creating meaningful, hands-on opportunities for people of all ages to engage with conservation and leadership.

Introducing our primary programs

The Minnesota Valley Chapter's membership growth strategy includes several primary programs that each bring unique value to the community:

- **Green Crew:** Our youth leadership development and conservation service program, where members gain hands-on experience in environmental leadership.
- **Green Summer:** Delivered in partnership with local public and private schools, Green Summer is a summer program for youth ages 10-17 that includes outdoor ethics training, water science, and conservation service.
- **Kouba Gallery:** An art gallery with a rotating monthly show that explores themes of nature and

conservation, with open houses on the second Sunday of each month.

These programs invite individuals to engage with conservation in diverse ways, making it easier to transition from participant to member—and, when it's time to enjoy the experience, perhaps put away phones for a bit and enjoy nature.

1. Making membership growth a priority through meaningful engagement

Our priority is fostering a space where people feel welcomed, valued and immediately engaged. At events like the Kouba Gallery open houses and Green Crew workdays, newcomers are welcomed and given a role, whether it's wielding a tool, guiding visitors, or just holding a snack tray. With the Gallery's mission of exploring our relationship with nature, we connect with people from the local art community and beyond in a setting where conservation meets creativity. The monthly gallery shows, complete with fellowship and food, provide a low-pressure way for community members to connect with us and each other.

Youth Program Coordinator Joseph Barisonzi provides adult support to the Chapter's Green Summer program.

Similarly, at Green Crew workdays, we welcome everyone with warmth and a purpose. For those hiking the nearby Bloomington Wildlife Refuge, our Chapter House is open for tea, water, or a bathroom break. Volunteers engage visitors in conversation, inviting them into our community. This open-door policy makes the Chapter accessible to all, regardless of background or prior experience with the Ikes.

To ensure these welcoming events support our growth goals, each program's committee—whether for the Green Crew, Green Summer, or Kouba Gallery—sets and tracks specific participation and membership goals. Different projects have different engagement goals, allowing us to tailor our approach and ensure accountability.

2. Developing an accountable, actionable plan

Behind the scenes, we've created a structured plan for meeting our membership goals. For each program, we establish clear recruitment goals. For instance, we aim for three to five new members per Kouba Gallery show and similar numbers from each Green Crew workday.

We track our event attendees in a database that helps us follow their journey with us, allowing us to reach out personally and share why membership could be a great next step. The Membership Director, who is a board member, oversees these metrics, ensuring we meet our goals and adjust our strategy as needed.

3. Building programs that matter locally

The Kouba Gallery, Green Crew, and Green Summer programs are examples of our Chapter's community-responsive approach. The Kouba Gallery connects people to conservation through art, exploring themes like the human relationship with nature. Our May show, "Fabulous Flowers," brought together photographers, printmakers, painters, beaders, quilters and more. These events have allowed us to build strong relationships with the local Indigenous community, which now has active representation in our programs and leadership.

Our Green Crew and Green Summer programs respond to community demand. The Green Summer initiative began as a pilot program in response to a request from a local school partner and expanded based on parent advocacy. Green Summer also partners with schools, two of which exclusively serve BIPOC (Black, Indigenous, people of color) communities, ensuring youth from underserved communities have equal access to conservation opportunities, including the joy of battling mosquitoes.

Green Crew members regularly recruit other youth by visiting high schools, youth groups and community spaces. During these visits, we might play "Environmental Jeopardy" or share stories

about the impact of our work. These recruitment efforts have brought in many new members from BIPOC communities, further diversifying our Chapter. And once youth join the Green Crew, they complete a Youth Leadership Training Curriculum, where experienced members teach environmental leadership in the context of the Ikes' mission. This training helps new members go from observers to leaders, continuing the cycle of engagement.

4. Developing a membership pipeline model

Through our programs, we've created a "membership pipeline" that encourages ongoing involvement. A membership pipeline provides clear paths for participants to move from new members to active, engaged members through increasing levels of involvement. Our events act as open doors, inviting people to return and connect at their own pace. This welcoming approach has nurtured lasting relationships, making it easy for participants to transition into membership over time.

Green Crew members might start by participating in workdays, where they're immediately given a tool or task, and then are invited to help plan events. Youth who join often bring their families along, extending the reach of our mission. Adult advisors are encouraged to join formally to support the program, while youth can join as student members.

Our pipeline model is built on the principle that involvement is immediate and active—no one sits on the sidelines. Every participant plays a part in our mission from the start, which strengthens their connection to our community. This clear yet gradual path fosters emotional connections, creating meaningful bonds before participants become formal members.

5. Creating a welcoming, inclusive culture

Intentional inclusivity is essential to our Chapter, and it begins with operating in alignment with our core values. Our Chapter House and operations reflect these values, from solar power and a heat-pump furnace to reusable plates, cups, utensils, and hand towels. Our volunteers and board members even wear reusable name tags, making it easy for new visitors to connect with us.

Rather than focusing on exclusive "membership benefits," we invite all to participate actively from their first day. Everyone feels valued and engaged as a true part of our mission, and feedback shows this approach works—people appreciate that they can come, engage, and learn without pressure to join. This openness has built a community where people keep coming back and often bring friends along.

6. Celebrating and valuing diversity

Diversity is core to our approach. We emphasize representation and inclusion. Our Green Crew launched a "Tree Equity" initiative with local urban neighborhoods to address tree coverage disparities, serving immigrant populations in one of the poorest communities in our metropolitan area. This program not only plants trees but engages underrepresented groups directly, showing that conservation is for everyone. Green Summer partners with school programs, two of which exclusively serve BIPOC communities, to ensure equitable access for youth.

7. Leveraging digital tools and social media

Our Chapter uses digital tools to grow and engage our community. We reach different populations by using specific social media platforms: while our adult advisors are primarily on Facebook, we've found Instagram is the best way to connect with younger members. Offering hybrid meetings ensures accessibility, even for board members who are away at college. Social media, newsletters, and websites share our mission and promote events.

One successful campaign was for the Kouba Gallery's "Magical

Mycology" exhibit, where we promoted conservation-focused content on mycology, an art exhibit and a volunteer day. This outreach brought over 150 attendees, several new members and a new Green Crew leader to head our FunGIS program.

8. Building connections through education and outreach

Education is central to our work, and we integrate learning into our actions. While many see education as people sitting in chairs, we prefer an active approach. After all, why sit when you could get out there and learn by doing? We focus on "why" we do things, whether we're teaching environmental ethics through Leave No Trace games, reviewing water science in-depth during water quality testing or planning a 2025 gallery show celebrating the biodiversity of fens, a type of marshy ecosystem. These experiences provide meaningful education that's engaging and purpose-driven.

9. Recognizing member contributions

We celebrate contributions across all our programs. Green Crew hosts biannual award ceremonies, where youth earn awards specifically for their achievements in Scout-based programs. The Chapter hosts the annual winter party, recognizing volunteers with awards like the Tobin Award and the Presidential Volunteer Service Award. These recognitions show our appreciation and reinforce the value of community participation, encouraging members to stay active.

10. Empowering members to recruit others

Our members are our best advocates because they are engaged from day one, becoming active participants in our mission. At every gallery show, workday, and event, newcomers are immediately given a role—whether it's handling tools, assisting with a project, or guiding visitors—which makes them feel like valuable contributors from the start. This hands-on approach builds strong connections and a sense of belonging, inspiring members to share their experiences with others.

This active involvement has created a ripple effect: members who feel engaged are naturally motivated to bring in friends and family, proudly sharing their love for the Chapter and inviting others to join in. By putting tools in people's hands and making each person an integral part of our work, we create advocates who don't just talk about our mission—they live it, inspiring others to become part of our community through real, shared experiences.

Our community-based approach to membership growth has led to notable recognition: the Minnesota Valley Chapter won the Izaak Walton League's Membership Merit Award for the greatest numerical increase in the 51-250 member category in both 2022 and 2023.

About the Authors

Camille Morton *is a sophomore at Purdue University, Green Crew founding member, Minnesota Valley Board member, Minnesota Division Executive Committee Member and National Director representing Minnesota. She was the League's 2022 Outdoor America's Future Award recipient.*

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MINNESOTA VALLEY CHAPTER

The Chapter uses fun, age-appropriate activities and games to accelerate learning about environmental ethics.

Three New Chapters Join the League

By MICHAEL REINEMER, Editor

During 2024, three new Izaak Walton League chapters were established: Marlboro Watershed Conservation Chapter in Marlboro, New Jersey; Marshall County Chapter in Argos, Indiana; and Upper Mississippi River Chapter in La Crosse, Wisconsin.

"The creation of three new chapters underscores the enduring interest in community-based conservation and outdoor recreation." – Dale Braun

"The creation of three new chapters underscores the enduring interest in community-based conservation and outdoor recreation, which have been hallmarks of the Izaak Walton League for more than a century," said Dale Braun, chair of the League's Executive Board. "We appreciate the initiative and efforts from the chapter leaders and welcome the new members."

The historic chapter clubhouse in Marshall County, Indiana.

Marlboro Watershed Conservation Chapter Marlboro, New Jersey

The Marlboro Watershed Conservation Chapter has an ambitious set of goals aimed at preserving local forest, wetlands and other natural areas and biodiversity in the Marlboro area of western Monmouth County.

In their charter document, the Chapter organizers said they would be observing and commenting on applications to the local zoning and planning board to further the Chapter's conservation goals. That includes advocating for public involvement in municipal planning and preservation of lands through "open space acquisition and conservation easements."

The Chapter will also focus on local air and water quality, community outreach and youth programs.

The Chapter president is Leon Silver.

Marshall County Chapter, Argos, Indiana

This new chapter was formed by local residents with assistance from the Indiana Division of the Izaak Walton League. It will operate on the property once owned by the

WXOW

The creation of the new Upper Mississippi River Chapter in La Crosse, Wisconsin earned coverage in local media.

ARCHIVES

Now Online: *Outdoor America* Articles from the 1920s

Since August 1922, the Izaak Walton League has published a magazine to celebrate outdoor America, challenging readers to protect the nation's woods, waters and wildlife. Early contributors included Zane Grey, Theodore Dreiser, Gene Stratton Porter and many others who shared their passion and experiences.

These early volumes describe how the young Izaak Walton League kick-started the modern conservation movement, establishing the Upper Mississippi River National Wildlife and Fish Refuge in 1924 and laying the foundation that would forge the fundamental, bedrock laws that protect the nation's natural resources today.

Enjoy reading those early pages of history at iwla.org/historic-archives.

Argos Chapter of the League, which closed in 2023.

The Chapter aims to conserve, maintain and restore the natural resources of the U.S. and promote public awareness, enjoyment and wholesome use of those resources.

The Chapter property has a rich history. Founded in 1926, the Argos Chapter built a fish hatchery, in association with what was the U.S. Bureau of Fisheries. Recognized on the National Register of Historic Places, the Chapter plans to use the grounds to introduce youth to the outdoors, fishing and shooting sports and to work with local schools to offer on-site educational opportunities and field trips.

The president of Marshall County Chapter is Rob Hurford.

Upper Mississippi River Chapter, La Crosse, Wisconsin

Formed during the 100th anniversary of the Upper Mississippi River National Wildlife and Fish Refuge, the Upper Mississippi River Chapter is off to a good start in terms of activities and membership.

Barry Drazkowski, one of the Chapter's founders and officers, said, "We've created committees to address things like projects and activities, membership and communication." He said the Chapter approved a committee on the Upper Mississippi River to inform members on related issues and "to increase our voice with river managers."

The Chapter has attracted resource professionals in the fields of fisheries, water quality, forestry and waterfowl. Drazkowski said he was impressed by some of the members' expertise "but more significantly, their passion." The Chapter assisted the Fish and Wildlife Service with their fall Swan Watch and has scheduled the mayor of La Crosse to speak to members about the Mississippi Cities and Towns Initiative, which the mayor chairs.

The Chapter president is Fritz Funk.

The Chapter works to preserve lands that include fens, a type of wetland fed by groundwater that develops by a slow process, forming peat. Fens are often hotspots of biodiversity, hosting plants uniquely adapted to survive in waterlogged soils.

WESTERN RESERVE CHAPTER

Western Reserve Chapter Preserves Ohio's Biodiversity and Natural History

By JANETTE ROSENBAUM, Strategic Communications Manager

The **Western Reserve Chapter** owns no property and has only a handful of members. But it's making an outsized impact by partnering with other groups to protect biodiversity across an entire region.

Western Reserve draws members from across northeastern Ohio, an area characterized by rolling hills and fertile plains, all left behind by retreating glaciers 11,000 years ago. Much more recently, Dr. Jim Bissell, who works at the Cleveland Museum of Natural History, began forming a group to map the bioregions of the glacial plain. The new group named itself the Lake Erie Allegheny Partnership (LEAP) and set out to write a biodiversity plan.

An invitation to join LEAP went to Paul Novak, Western Reserve's vice president, who was working on the chapter's goal of managing and monitoring conservation easements. And he was interested in Bissell's proposal. At the time, Novak was working for the U.S. Environmental Protection Agency.

LEAP started out as "a group to help exchange ideas," Novak recalled, but quickly grew beyond Bissell's original vision. Part of the reason for that growth was the shifting nature of the challenges the partnership was aiming to solve, including global climate change.

"We're trying to preserve this piece of land, and we have certain types of plants," Novak explains. The land includes fens, which are a type of wetland fed by groundwater. With Ohio warming, Novak and his group wondered, "what's happening to those plants? Are they going to be able to survive there?"

A fen develops over thousands of years by forming peat, soil that is especially rich in organic matter. Because they form by very slow processes in very specific conditions and are easily damaged, fens are rare to begin with and very difficult to restore once lost.

On top of that, fens are often hotspots of biodiversity, hosting plants uniquely adapted to survive in waterlogged soils.

In partnership with LEAP, the Western Reserve Chapter is documenting the rare plants of Ohio's fens. They do this through bioblitzes— events in which people spread out across an area and document every living thing they can find, flora, fauna or fungi. During these events, Novak said, "maybe once every two or three years, somebody finds some plant that has been on the endangered list."

Though much of the fertile farmland of the glacial plain in Ohio has been lost to development, fragments of historic plant communities still remain. "You can go out to these preserves and see what the native plants used to look like," Novak says. "That's why it's important to have these places preserved."

As the partnership works to catalog what is living in the region today, they are also preserving the region's past and thinking of the future.

Chapter works to preserve its own past too

While partnering with other groups to protect biodiversity, the Western Reserve Chapter is working to preserve its own past and plan for its future as a successful conservation organization. The chapter, originally chartered in 1950, closed several decades later and then re-formed around 2003.

Jim Storer, now the president of the chapter and the secretary for the national Izaak Walton League, had been working with the Army Corps of Engineers on greenspace requirements for housing developments, and he had an idea that a League chapter could hold and manage conservation easements so that developers could meet those requirements.

When Storer started sharing that idea with people in the community, Novak saw that the plan "mirrored [his own] goals for preserving the outdoors," and he promptly joined what would become the new version of the Western Reserve Chapter. The vision apparently resonated with others as well.

"Once Jim got the chapter up and running," Novak remembered, "all of a sudden there were folks coming out of the woodwork."

Along with members, the idea attracted partner groups, who helped the chapter manage the easements. Volunteers must visit periodically to ensure those areas are being conserved in line with easement requirements.

This evolving collection of easements is the only land the chapter manages. Given that, Novak acknowledges that it's not easy to recruit new members but he encourages conservation-minded folks to get involved with the Izaak Walton League.

But looking at the big picture, Novak is grateful for the opportunity to partner with other groups. He says there are eight or 10 regional groups similar to LEAP that other League chapters could collaborate with.

As the survival of the preserves and the rebirth of the chapter show, it's never too late to take action for a conservation cause.

WHAT IS A CONSERVATION EASEMENT?

A conservation easement is an agreement between a property owner and another organization, like a land trust or a conservation society. The property owner gives up some of their rights related to property ownership and agrees to manage the land using conservation practices. In return, the organization provides a benefit to the property owner, usually a cash payment. The organization is said to "hold" the easement; the land is described as being "under" easement. The easement is usually only a part of the property. The organization that holds the easement will visit the land periodically to make sure the property owner is holding up their end of the agreement.

Renew your 2025 League membership and help us conserve outdoor America!

Leading community-based conservation of our natural resources

Informing and engaging the next generations

Conserving and expanding access to the great outdoors

Shaping conservation policy nationally and locally

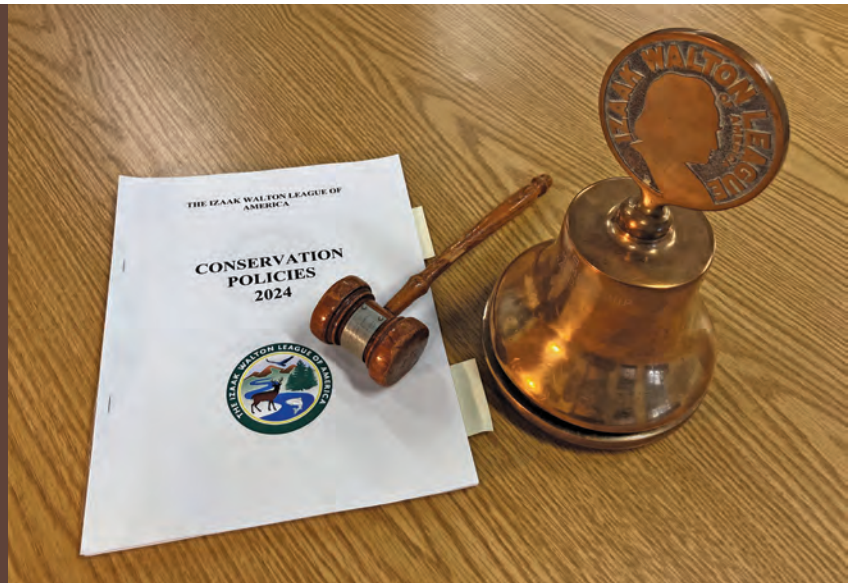
Help conserve our nation's woods, waters and wildlife. The Izaak Walton League depends on members to support the programs that connect people to the great outdoors.

Please return dues payments to your chapter today.

Members Establish Policies at the Izaak Walton League:

How the Resolutions Process Works

By JARED MOTT, Conservation Director



At the Izaak Walton League, members establish the organization's policies through resolutions, and those policies guide our work at the local, regional and national levels.

In July, Ikes from across the country will gather in Green Bay, Wisconsin, for our 2025 national convention. One of the most important items on the agenda will be consideration of resolutions about conservation policy.

Here is some background information and details about the process:

- **Resolutions must be submitted to the national office by February 8**—the date of the 2025 Midwinter meeting—for consideration at the 2025 convention.
- **The League's member-driven resource committees will meet virtually in March and early April to consider proposed resolutions.** Proposals approved by the relevant resource committee and the Resolutions Committee will be sent to all League chapters no later than May 5, 2025. This gives chapters time to debate the proposals and instruct their delegates on how to vote.
- **Final debate and voting on proposed resolutions will occur in-person at our national convention in Wisconsin in July.**
- **Please send resolutions and all background material to me** via email (jmott@iwla.org) or by U.S. Mail to: Izaak Walton League of America, 707 Conservation Lane, Gaithersburg, MD 20878-2983, Attn: Jared Mott.
- Over the past 100 years, the League has developed extensive policy on a wide range of issues. **As you consider potential resolution topics, please review the League's current Conservation Policies document to determine if the issues are already addressed or where gaps may exist.** You can access the complete and updated Conservation Policies on the national website at iwla.org/policybook.
- **It is important to provide sufficient background information about issues to allow resource committees to effectively evaluate resolutions.** It is also tremendously helpful to include contact information for one or more people from the division or chapter or the individual member proposing the resolution who can answer questions or provide additional supporting material about the resolution. With this information, resource committee chairs and staff can work to clarify issues before committees meet to consider resolutions.

I hope this information is useful to you. If you have any questions, please feel free to contact me at jmott@iwla.org. I hope to see you in July.

MICHAEL REINEMER

2024: What We Accomplished Together

Celebrated Our Role Creating Upper Mississippi River Refuge

2024 marked the 100th anniversary of the League's central role in establishing the Upper Mississippi River National Wildlife and Fish Refuge, which provided the template for conservation advocacy in the 20th century.

Celebrations included a special exhibit at the National Mississippi River Museum in the Quad Cities region of Iowa and Illinois, induction of League founder Will Dilg into the National Rivers Hall of Fame, a congressional resolution recognizing the anniversary and Steven Marking's theatrical performance about the Refuge in "A Visit from Will Dilg."

Worked to Protect Drinking Water

Through the League's Clean Water programs like Nitrate Watch and Salt Watch, the League introduced new advocacy and media tools, leveraging the power of volunteer scientists to gather water quality data and push locally for policies and practices that reduce pollution at the source.

These clean water champions returned more than 2,500 Nitrate Watch readings and 7,100 Salt Watch results. Also, 110 people across the country learned more about aquatic life by becoming certified Save Our Streams monitors.

Raised Awareness about the League

Dozens of media stories including coverage from National Public Radio and PBS appeared in 2024 explaining the League's work to create the Upper Mississippi Wildlife Refuge. Additional stories focused on the League's work to pass a better Farm Bill and restore Clean Water Act protections for the nation's streams and wetlands.

Advocated for America's Disappearing Grasslands

The League hosted a briefing for congressional staff about the importance of grassland conservation and helped draft the North American Grasslands Conservation Act which was introduced in the U.S. House of Representatives in October.

Pressed Congress for a Better Farm Bill

Staff visited congressional offices on Capitol Hill and in district offices and worked with partners to inform lawmakers, the public and the media about the need to scale up conservation, reduce polluted runoff and improve soil health across millions of acres of land through the Farm Bill.

Onboarded New Talent in the National Office

Maggie Dombroski joined our staff as Mid-Atlantic Save Our Streams Coordinator, we welcomed Erica Smith as Membership Manager and Kate Hansen stepped in as our new Agriculture Program Director.

Welcomed Three New Izaak Walton League Chapters

New chapters in New Jersey, Indiana and Wisconsin underscore the continuing value of the Izaak Walton League as a hub for conservation and a gateway to outdoor recreation in communities across the United States.

CONSERVATION CURRENTS

Enjoying *Outdoor America?*

If you look forward to the Izaak Walton League's magazine landing in your mailbox four times a year, you'll love opening *Conservation Currents* every month. Our flagship e-newsletter is packed with updates on the League's programs and activities, plus notable news you may have missed and opportunities to take action on conservation causes you care about.

Be the first to know about landmark victories, new offerings, upcoming events, and ways to make your voice heard on issues affecting natural resources and outdoor recreation. Get access to additional articles and videos, and hear more about what Ikes across the country are doing.

ALEX GRICHENKO

Don't miss another issue. Claim your subscription to *Conservation Currents.*

www.iwla.org/subscribe

Continuing Will Dilg's Dream for Another 100 Years

By JOHN O. ANFINSON

Upper Mississippi River Restoration Program partners work on backwater habitat rehabilitation in Pool 4 of the Mississippi.

NICOLE WARD, MINNESOTA DNR

For the past year, the Izaak Walton League has been celebrating the 100th anniversary of the first-born "Child of the League" – the Upper Mississippi River National Wildlife and Fish Refuge. Championed by Will Dilg, the League's first president, the Refuge saved 261 miles of the Mississippi River's floodplain wetlands between Wabasha, Minnesota and the Quad Cities of Illinois and Iowa. Today, the Refuge preserves more than 250,000 acres and attracts 3.7 million visitors annually.

The Izaak Walton League didn't simply create a refuge, however; they redefined what it meant to be one. All other refuges before it were considered inviolate sanctuaries, prohibiting most human uses. The new refuge welcomed outdoor recreation including camping, fishing and hunting.

So, what about the next 100 years? If Will Dilg were alive today, what would he be rallying people for and railing against? How would he redefine the world as we know it?

I have to begin with a premise. This landscape today is dramatically different from Dilg's era 100 years ago. Invasive plants and animals, locks and dams and agricultural runoff comprise the new "normal." A changing climate is accelerating and shaping the adverse effects of each. Those who manage the river—the U.S. Army Corps of Engineers and the federal and state agencies— have no intention of stepping back and letting this new and different nature loose and uninhibited.

We will have to tend this river as a garden, constantly and indefinitely. And we may be moving from gardeners to gods.

The test before us

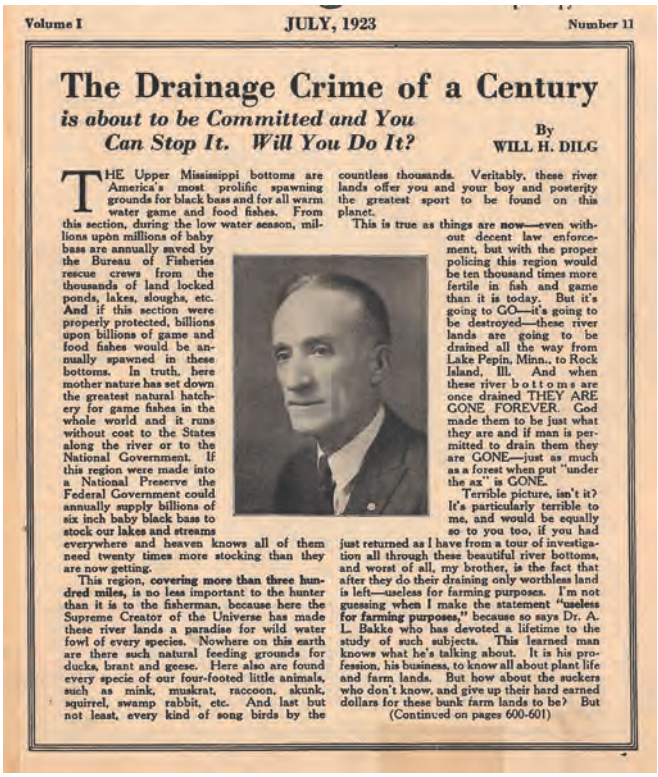
In 1986, Congress declared the upper Mississippi a nationally significant navigation system and a nationally significant ecosystem, and it directed federal agencies to manage the river "in recognition of its several purposes." Never mind that the purposes are, in many ways, at odds with each other.

In effect, Congress said divide the pie and serve every interest its piece.

In his book *The Organic Machine,* Richard White argues that for the Columbia River in the Pacific Northwest, dividing the pie "has not worked and will not work." He insists that successful salmon runs and hydroelectric dams cannot coexist. The Mississippi is not the Columbia, and engineers, biologists and planners are trying to successfully divide the pie. If they fail, some future generation will have to choose between navigation, agricultural levees, recreation and the environment.

Consequently, a test is looming before us. It is not a college exam or a field experiment. The test is about defining a sustainable future for the upper Mississippi economically, ecologically and socially. It is about building a resilient river.

When Dilg built his campaign to establish the Refuge in the early 20th century, he railed against the forces threatening the upper river's fish and wildlife. The threats included navigation projects, water pollution and the destruction of entire species. But he railed most against reclamation—building levees to narrow the river and draining the wetlands so the land could be used for agriculture. Those wetlands were essential, nurturing the fish and wildlife on which his love of hunting and fishing depended.



Volume I JULY, 1923 Number 11

The Drainage Crime of a Century

is about to be Committed and You Can Stop It. Will You Do It?

By WILL H. DILG

THE Upper Mississippi bottoms are America's most prolific spawning grounds for black bass and for all warm water game and food fishes. From this section, during the low water season, millions upon millions of baby bass are annually saved by the Bureau of Fisheries rescue crews from the thousands of land locked ponds, lakes, sloughs, etc. And if this section were properly protected, billions upon billions of game and food fishes would be annually spawned in these bottoms. In truth, here mother nature has set down the greatest natural hatchery for game fishes in the whole world and it runs without cost to the States along the river or to the National Government. If this region were made into a National Preserve the Federal Government could annually supply billions of six inch baby black bass to stock our lakes and streams everywhere and heaven knows all of them need twenty times more stocking than they are now getting.

This region, **covering more than three hundred miles,** is no less important to the hunter than it is to the fisherman, because here the Supreme Creator of the Universe has made these river lands a paradise for wild water fowl of every species. Nowhere on this earth are there such natural feeding grounds for ducks, brant and geese. Here also are found every specie of our four-footed little animals, such as mink, muskrat, raccoon, skunk, squirrel, swamp rabbit, etc. And last but not least, every kind of song birds by the countless thousands. Veritably, these river lands offer you and your boy and posterity the greatest sport to be found on this planet.

This is true as things are **now**—even without decent law enforcement, but with the proper policing this region would be ten thousand times more fertile in fish and game than it is today. But it's going to GO—it's going to be destroyed—these river lands are going to be drained all the way from Lake Pepin, Minn., to Rock Island, Ill. And when these river bottoms are once drained THEY ARE GONE FOREVER. God made them to be just what they are and if man is permitted to drain them they are GONE—just as much as a forest when put "under the ax" is GONE.

Terrible picture, isn't it? It's particularly terrible to me, and would be equally so to you too, if you had just returned as I have from a tour of investigation all through these beautiful river bottoms, and worst of all, my brother, is the fact that after they do their draining only worthless land is left—useless for farming purposes. I'm not guessing when I make the statement **"useless for farming purposes,"** because so says Dr. A. L. Bakke who has devoted a lifetime to the study of such subjects. This learned man knows what he's talking about. It is his profession, his business, to know all about plant life and farm lands. But how about the suckers who don't know, and give up their hard earned dollars for these bunk farm lands to be? But

(Continued on pages 600-601)

We have addressed many of the problems Dilg attacked. The Refuge has protected the floodplain habitat between Wabasha and the Quad Cities from being drained and farmed. The Clean Water Act and wastewater treatment systems have improved water quality. The Endangered Species Act helps save threatened and endangered plants and animals.

But today, 29 locks and dams constructed by the Corps of Engineers define the river between the Twin Cities and St. Louis. Most came after 1924 when Congress established the Refuge. The locks and dams transformed the free-flowing river into a series of reservoirs or pools, taking away the river's natural pulse of annually rising and falling.

Wind-driven waves running across the open reservoirs have eaten away many forested islands in the river. The waves stir up sediment in the water that blocks the sunlight needed for aquatic plant growth. Combined with channel constriction projects, the reservoirs eliminated the once vast sandbars and their expansive mussel beds. The pulse of the river flow and its islands, forests and sandbars comprised the Mississippi's natural ecosystem that had evolved there over eons.

To meet the 1986 mandate declaring the upper Mississippi a nationally significant ecosystem, the Corps has been working with state and federal partners to offset the negative impacts. Under the Upper Mississippi River Restoration Program, the Corps has been building islands and creating side-channel habitat, restoring geomorphic processes and hydrologic connections.

The projects include dredging sediment from backwaters and restoring the floodplain forest. Federal and state partners are coordinating to temporarily draw down some reservoirs by a few feet to mimic the natural pulse. All these efforts are aimed at passing the test.

Report cards for resiliency

In 2022, the Long Term Resource Management (LTRM) office, which is part of the Upper Mississippi River Restoration Program and run by the U.S. Geological Survey, released its report covering the years 1993 to 2019. Titled *Ecological Status and Trends of the Upper Mississippi and Illinois*

IWLA

Rivers, the update provides hope and concern for the upper Mississippi River and the Refuge. Consider it our mid-term grade.

The report covers Pools 4, 8, and 13 (all in the Refuge), Pool 26 above Alton, Illinois, and the undammed river between St. Louis and the mouth of the Ohio River. The LTRM staff have been collecting and analyzing data on water quality, fish and aquatic vegetation in these reaches as indicators of what is happening systemwide.

The most widespread change they found is that the volume of water flowing down the river has increased, with the greatest surges coming in May, June and July when the river should be falling. Maximum, mean and minimum flows have all risen. The number of days the river stays high is growing in most locations. This is due in part to urban development, climate change and agricultural drain tiling, which quickly draws rainwater off of crop lands.

Consider the 2019 flood. While not the record flood in terms of water volume, it destroyed previous records for duration. The Quad Cities remained above major flood stage for 51 days, exceeding the previous record of 31 days. At Dubuque, Iowa, the Mississippi River stayed above flood stage for 85 days, beating the record of 34. The prolonged flooding denied tree roots the oxygen they need to grow, killing thousands of trees in the floodplain forest.

In 2023, the Upper Mississippi River Basin Association issued *A 30-year Study of Water Quality in the Upper Mississippi River System.* It found that farmers, using best management practices, have lowered the amount of soil and phosphorus running off farm fields. This has led to a decrease in total suspended solids in the water in Pools 4 and 8 and some other pools downstream. Benefitting from increased water clarity, the number and diversity of aquatic plants, including wild rice, has increased in Pools 4 and 8, but, according to the LTRM report, they are scarce below the Refuge, where little floodplain remains.

Phosphorus and nitrogen levels are still above recommended standards. These fertilizers can cause harmful algal blooms in fresh water and the dead zone in the Gulf of Mexico. Phosphorus is decreasing, thanks to better wastewater treatment and modern farming practices, but nitrogen is increasing in Pools 4 and 13 and other reaches downstream. Granted, legacy stores of sediment and nitrogen throughout the watershed are contributing to the volume of each.

Agriculture is the key arena for action today, and that action could address climate change.

Recreational fish abundance is holding steady in Pool 4 and has increased in Pools 8 and 13 but is decreasing in Pool 26 due to invasive silver and bighead carp. Outcompeting our native species, these fish now comprise up to 50 percent of the biomass of Pool 26. And the LTRM report shows that sediment is filling backwater lakes and sloughs in Pools 4 and 8. This means fish are losing spawning areas and deep water habitat in areas away from the main channel.

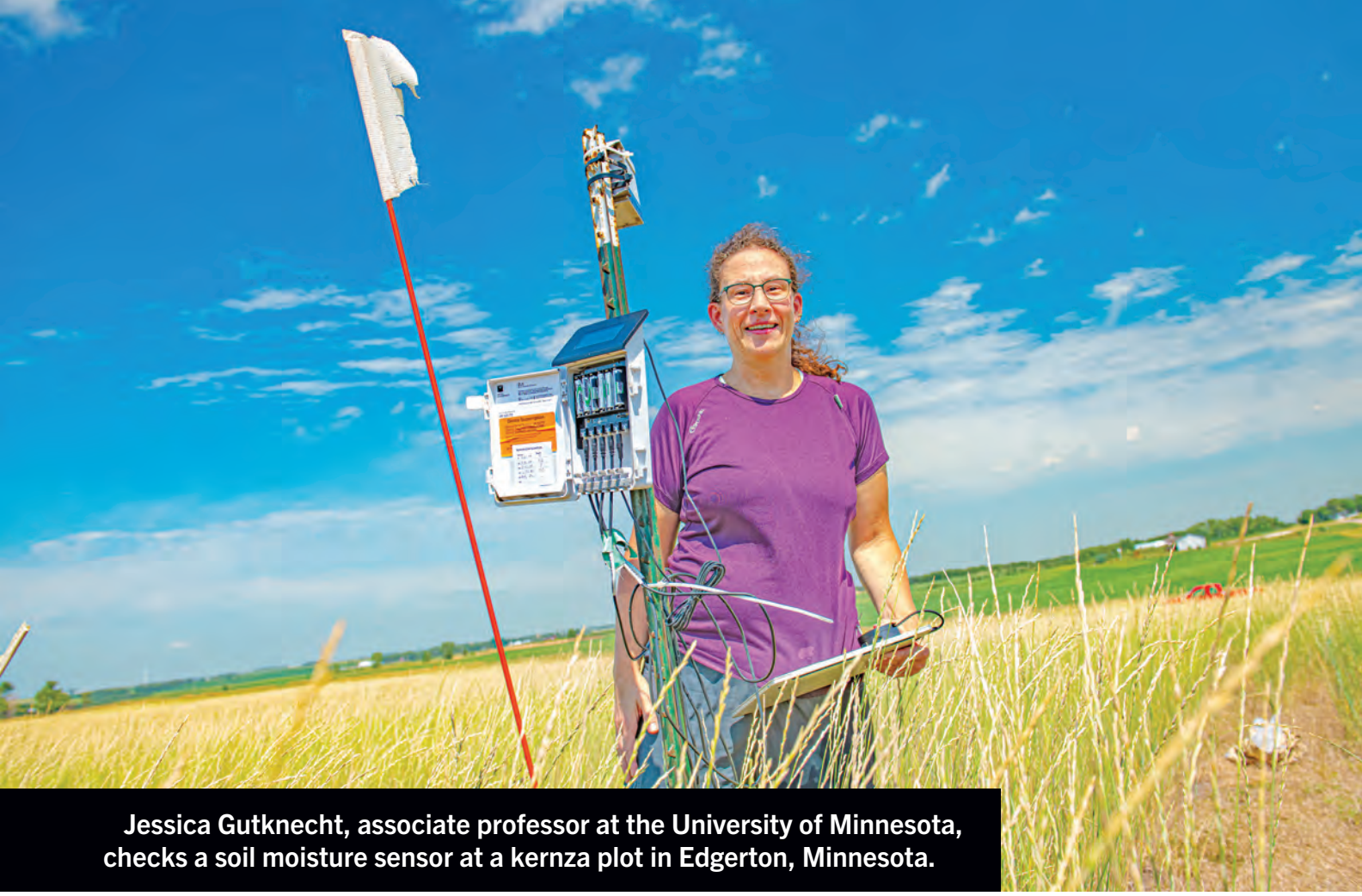
What would Dilg do?

If alive today, Dilg would have focused, in part, on improving the Mississippi's water quality and reducing the volume of sediment filling its backwaters. He would have worked to lower the levels of farm fertilizers and chemicals running into the river. So, as he recognized in the 1920s, agriculture is the key arena for action today, and that action could address climate change.

Preventing farm field runoff starts with corn and soybeans. While a variety of practices could help, a year-round land cover with perennial crops would be best. For example, kernza and hazelnuts provide a continuous living cover, greatly reducing erosion and fertilizer runoff.

In the upper Midwest, universities are working with farmers to develop and grow hybrid hazelnuts in hedgerows rather than on trees. Farmers can sow a variety of cover plants between hazelnut hedgerows or trees, such as grasses and nitrogen-fixing clover. While the demand for hazelnuts globally exceeds supply, hybrid hazelnuts are still in the development stage and the processing costs are high.

Kernza is the first commercially available perennial grain crop. Its seed is similar to wheat, but it grows deep roots and can hold otherwise bare soil against heavy rains, and it takes up excess nitrogen. If the



Jessica Gutknecht, associate professor at the University of Minnesota, checks a soil moisture sensor at a kernza plot in Edgerton, Minnesota.

wheat-growing states in the upper Midwest shifted some of their land to kernza, they could reduce agricultural runoff.

Another solution is planting crops in with, rather than replacing, corn and soybeans. Called relay cropping or double cropping, implementing this system would let farmers harvest two crops and keep the ground covered throughout the year.

Two leading candidates for relay cropping are winter camelina and domesticated pennycress. As Twin Cities-based Friends of the Mississippi River points out, "These plants are oil-rich and relatively easy to convert to high-demand fuels like renewable diesel and sustainable aviation fuel." Farmers can sow both in the fall, usually following a small grain like wheat or oats and reap them in the late spring. They could then harvest the soybeans in the fall. Since winter oil seed crops begin growing in the early spring, they protect the soil and take up nitrogen and phosphorus well before corn or soybeans.

In a 2023 report titled "Putting Down Roots," Friends of the Mississippi River and Ecotone Analytics projected that by 2050, in a moderate adoption scenario, market demand for continual living cover crops "could effectively cut nitrate pollution and soil loss by 23 and 35 percent, respectively" in Minnesota, and could reduce our carbon footprint.

But we have to develop the markets for these crops. Farmers won't switch until they are profitable. The Minnesota Sustainable Aviation Fuel Hub, led by the Minneapolis Saint Paul Regional Economic Development Partnership, together with Delta Airlines, Ecolab and others, is working to create the needed supply chain markets.

This is becoming especially important with the demand to reduce carbon emissions from the aviation industry. The industry has pledged to achieve net-zero carbon emissions by 2050, largely through sustainable aviation fuels. That means producing three billion gallons in 2030 and 35 billion gallons by 2050.

The shift has already begun. On September 25, 2024, the Minneapolis/St. Paul International

DODD DEMAS FOR FMR

In September 2024, an airplane flew out of Minneapolis/St. Paul using jet fuel mixed with a biofuel, winter camelina. Here Karen Torjesen grows camelina on her farm in Kenyon, Minn.

DODD DEMAS FOR FMR; USGS

Airport saw the first airplane take off using jet fuel mixed with winter camelina-based biofuel grown in Minnesota and North Dakota.

Clearly, federal actions influence what farmers grow. In 2006, federal energy policy mandated the production of ethanol. Since then, corn acreage in Minnesota and North Dakota has doubled. If corn becomes the primary source of aviation biofuel, that acreage will expand, along with soil erosion, nutrient runoff and greenhouse gas emissions.

In contrast, winter oil seeds like camelina and pennycress can lower greenhouse gas emissions "by more than 60 percent compared to petroleum-based jet fuel and is substantially more climate-friendly than other biofuel feedstocks," according to Friends of the Mississippi River. They would also reduce agricultural runoff.

The Farm Bill offers tools and barriers for the future of agricultural land conservation. Making continuous living cover crops eligible for crop insurance and conservation cost-share programs would help reduce the risks and spur the research. Testing and development are needed to ensure their profitability in the marketplace.

Agriculture, then, can make matters worse or better for the Mississippi River, the Refuge and our climate, depending on which path we choose.

Invasive carp

Given his passion for fishing, Will Dilg would have been railing against the four species of invasive carp advancing up the Mississippi River.

Adult grass carp consume massive amounts of aquatic vegetation, eliminating habitat needed by native fish and waterfowl. They can reach 100 pounds and excrete up to half of what they eat undigested, which degrades water quality. Black carp eat mussels and snails, further eroding the river's ecosystem. They are still below Lock and Dam 19 at Keokuk, in southeastern Iowa, but they are moving upriver.

Silver and bighead carp are filter feeders that rely on plankton, as do our native filter feeders and most native fish larvae. Adult silver carp can weigh 40 to 70 pounds and gather in schools. When disturbed, they can jump out of the water as high as 10 feet, injuring boaters and damaging boats.

We will have to tend this river as a garden, constantly and indefinitely.

To stop the spread of invasive carp, the Minnesota legislature recently approved a bioaccoustical fish fence or deterrent for Lock and Dam 5 above Winona, Minnesota, and the U.S. Geological Survey and Corps are partnering on a fish deterrent at Lock and Dam 19. These measures, along with targeted removal of invasive carp, could limit their spread until better solutions emerge.

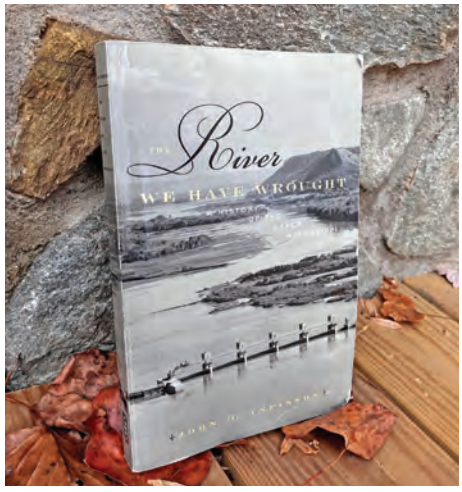
But grass, silver and bighead carp are above Lock and Dam 19 in large numbers. The same three species are at Lock and Dam 5 in growing numbers, and it could take five

The silver and other invasive carp threaten the health of the Mississippi and Great Lakes ecosystems.

years to install the new deterrent. So the entire Refuge is in peril unless we act fast.

As I noted earlier, we must tend this river as a garden but are moving from gardeners to gods. Scientists have already decoded the genome of invasive species like the zebra mussel. They can alter the genetic makeup of invasive carp to produce only females. If approved, these tools could eliminate invasive species.

Who will make the decisions about how to employ this technology and where? The hurdles may be more political than scientific.



More than a passing grade

Passing the test of creating a resilient and sustainable Mississippi River is more complicated than in 1924 but no less important. When we reach the 125th Refuge anniversary, what will people be celebrating? Will they be celebrating at all?

Will Dilg and the Izaak Walton League created a movement that burst across the nation in only two years. He emphasized a different use, a different value for the land and water at risk. The objective was clear and the geography defined.

Our efforts to ensure people are celebrating future Refuge anniversaries will take more sustained and persistent efforts, and the problems largely lie outside the river's mainstem. Still, there are clear targets to aim for in the fields of agriculture and fish management. We have the opportunity to redefine how we conduct both.

John Anfinson is author of The River We Have Wrought, *a history of the Upper Mississippi. He is a founding board member of Friends of the Mississippi River. He spent the first half of his 40-year federal career with the St. Paul District, Corps of Engineers, and the second half with the Mississippi National River and Recreation Area, a unit of the National Park Service, from which he retired as Superintendent.*

Please help sustain our momentum for c

2024 was another milestone year for the Izaak Walton League of America as we celebrated the 100th anniversary of the Upper Mississippi River National Wildlife and Fish Refuge. An unprecedented grassroots campaign led by the League convinced Congress to establish the Refuge, which today protects 250,000 acres of wetlands and forest and supports world-class hunting, fishing and other outdoor recreation.

Yet, this anniversary is also a sobering reminder that so many of the conservation challenges that spurred early League members to act have not been solved, with wetland drainage, water pollution, soil erosion and loss of wildlife habitat threatening our environment nationwide.

It's clear the Izaak Walton League has more work to do to conserve natural resources important to every American. **To help us meet these challenges head-on, please make a tax-deductible gift of $50, $75 or more today.**

And your support will build on the progress we have already made this year. Progress . . .

Expanding community-based conservation

Through Salt Watch, Nitrate Watch and Save Our Streams, League volunteers tested thousands of local waters for pollution, shared their results with the public and led local campaigns designed to reduce pollution at the source.

Advocating for conservation policy

The League made the case for conservation policy across a range of issues—from scaling up conservation through the Farm Bill to protecting grasslands and investing to stem the rapid decline of once common fish, wildlife and birds.

Thank you for your generous support!

conservation with a generous gift today!

Defending bedrock protections for a clean environment

The Supreme Court decision in *Sackett v. EPA* reminds us that our conservation work is never done. The Court erased Clean Water Act protection for streams that flow into drinking water supplies for one in every three Americans and for millions of acres of wetlands. The League pressed Congress to restore those protections and mobilized volunteers to monitor wetland drainage and report spikes in pollution in streams, lakes and other waters.

Your gift of $50, $75 or more today will help us respond to serious environmental challenges and maximize our impact in 2025 and beyond.

With your support, the League will:

- Expand the reach and impact of volunteer science
- Lead community-based initiatives to reduce water pollution
- Defend bedrock conservation policies that protect natural resources and human health
- Strengthen Farm Bill conservation programs that can check the loss of wetlands and improve soil health
- Advocate to restore Clean Water Act protections for streams, wetlands and drinking water.

This work builds on the League's enduring commitment to conservation—one that you can reinforce—**when you help launch the next year of conservation success with a donation today.**

To donate by mail, send check payable to "IWLA" to: Izaak Walton League of America, 707 Conservation Lane, Gaithersburg, MD 20878. To donate online, visit www.iwla.org/donate.

Your Endowment in Action

2024 National Conservation Scholarships Awards

Each year, the Izaak Walton League awards two $2,500 national scholarships to complement scholarships offered by League chapters and divisions. The national scholarships help pay for the education of future conservation leaders, supporting college students pursuing degrees in natural resources and related studies. They are made possible and are fully funded through a generous annual grant from the Izaak Walton League of America Endowment.

The scholarship review committee selected the following students to receive the League's National Conservation Scholarships for the 2024-2025 school year. Their thoughts about conservation follow.

Sarah E. Baughman

Major: Biology – Conservation and Ecology
Minor: First Nations Studies
University of Wisconsin – Green Bay

Conservation Philosophy:

"As I applied for college to pursue a degree in biology, my goals, dreams and aspirations revolved mostly around the human responsibility to care for nature. I have learned that I find such a deep purpose in work that bridges community education, climate justice, environmental restoration, and building strong connections with people. The key piece of my conservation philosophy is that regional and global conservation goals can only happen when the local communities are healed and thriving."

Critical Conservation Issues:

"Conservation issues that I find most important are climate justice, Tribal sovereignty and restorative land management. Each of these critical issues encompasses conservation topics such as water and air quality, food security and the health of natural systems like rivers, lakes, watersheds and soil. Most of my work focuses on migratory and resident bird use of habitat throughout the Great Lakes region. During my time as a research assistant, I've learned about the ecosystem services birds rely on and the need for high-quality habitats like grasslands, wetlands and forests."

"As I build my understanding of what role I might hold as a conservationist, I have learned that strengthening the bonds between Tribal communities and non-Native conservation professionals is crucial in taking on critical conservation issues. Prioritizing best management practices in collaboration with local Tribal governments and natural resource conservation agency partners is critical to our responsibility to protect the natural world."

More About Sarah Baughman:

Baughman intends to use her education and experience as a conduit to connect with people and communities in her future career in conservation. Through her experiences in biology, conservation and ecology, she has learned about the interconnections in natural systems and the importance of ensuring high-quality water systems, healthy soil and clean air.

National Conservation Scholarships

Andrew W. Woodard

Major: Forest Resource Management
Minor: Wildlife Biology
Clemson University

Conservation Philosophy:

"Natural resource management deals with managing the way people and natural environments interact to avoid depletion of resources. It brings together different facets of conservation such as land and water use planning, wildlife and fisheries management, forestry, agriculture, mining, pollution control and recreational areas.

"Another important aspect of natural resource management is controlling public outdoor recreation uses and industry impact. This wide scope of natural resource management means that many agencies are involved in the process of promoting conservation practices, and not all agencies and programs align with each other."

Critical Conservation Issues:

"There are many critical conservation issues that will continue in importance over the next decade and that will likely become essential to focus on in the conservation fields. I believe some of the most pressing issues facing natural resource and conservation efforts are public perception of common practices used in the industry and the decrease of native vegetation due to invasive species.

"Practices such as clearcutting and prescribed fire are very beneficial when effectively used, but public perception of these practices is mostly negative. When considering a natural resource plan to put into practice, the three things you must consider are the cost, effectiveness and the public perception. The most difficult factor to plan for is the public perception and feelings toward such natural resource management practices. Many of these opinions come from the view that all 'destruction' or 'removal' of natural resources is bad.

"Another issue facing natural resource managers is the increase in invasive species and their prevalence in ecosystems. Invasive species are easily spread and outcompete native vegetation, leading to a change in species composition in the ecosystem."

More About Andrew Woodard:

Woodard plans a career in the forestry industry, and with his wildlife biology minor, aims to bring a wide perspective on conservation and environmental issues to his future employers. He hopes to form his own forest consulting company that can become known for responsible resource management practices.

League Looks for Conservation Scholars for 2025 Awards

Know a conservation-minded college student who could use an extra $2,500 for tuition and expenses? Learn more about specific requirements and find the application form on the League's website at iwla.org/scholarship. The next application cycle begins January 1, 2025, with a deadline of May 15, 2025.

Every member of the Izaak Walton League of America is also a member of the League Endowment, which raises funds for grants to chapters and divisions. The Endowment holds its annual meeting at the League's national convention.

The Future Is Theirs!

The Izaak Walton League builds a brighter future through conservation and engaging Americans in outdoor traditions.

For generations, the League's tireless work and unprecedented success has protected our woods, waters and wildlife—and promoted outdoor recreation in every corner of the U.S.

Through your will, retirement plan, life insurance or trust, you can help continue this legacy.

Plan your gift to the Izaak Walton League and pass along a lifetime of benefits.

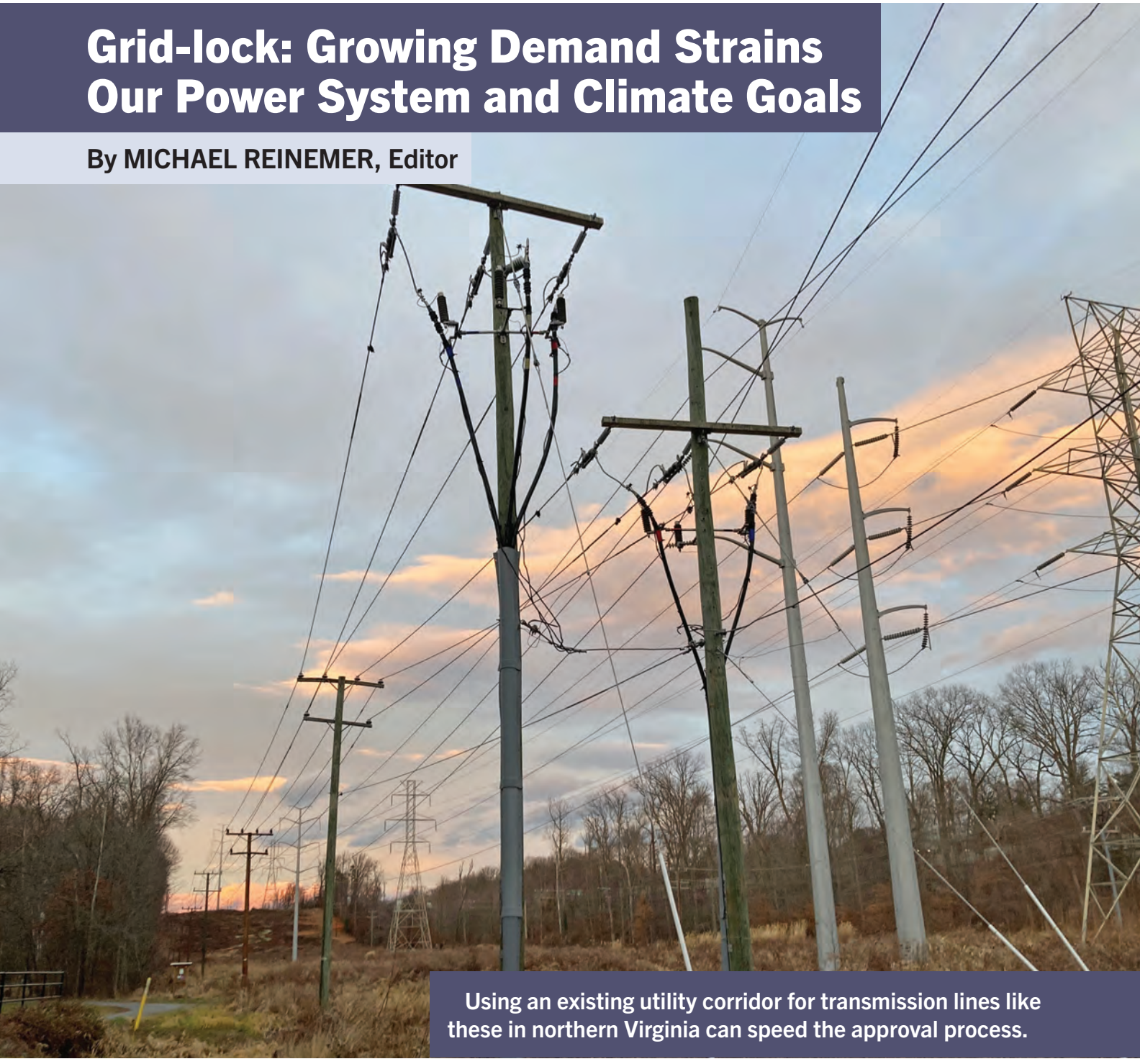
Email develop@iwla.org or visit www.iwla.org/support to get started.

Izaak Walton League of America
707 Conservation Lane
Gaithersburg, MD 20878

Contact us today for information about including the Izaak Walton League in your will or naming the League as the beneficiary for insurance or other investments.

Grid-lock: Growing Demand Strains Our Power System and Climate Goals

By MICHAEL REINEMER, Editor



Using an existing utility corridor for transmission lines like these in northern Virginia can speed the approval process.

MICHAEL REINEMER

As demand for electricity soars and suppliers of renewable sources seek connections to consumers, the transmission system—the grid—is in trouble. It's old and hasn't kept up with new technologies. Its vast network of power plants and transmission lines represents 100 years of building out the electrical infrastructure in the U.S. This grid connects generating capacity—traditionally large power plants, hydro-electric dams and heavily concentrated wind and solar development—with cities and towns.

Planning, siting, financing and building new transmission lines can take up to 10 years to complete and involves authorization from both state

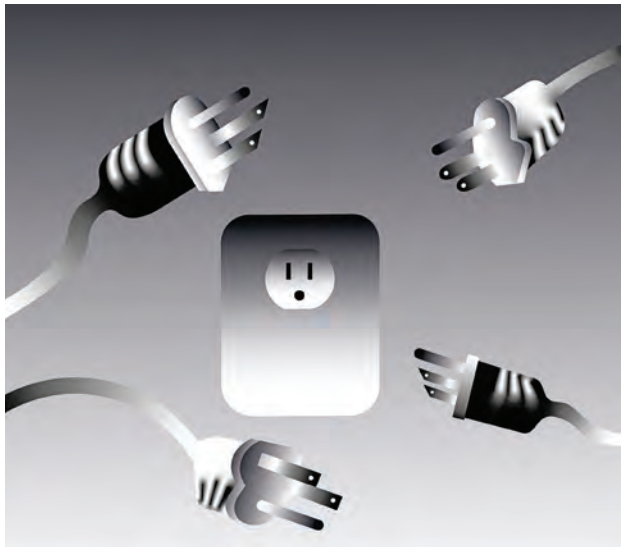
and federal regulatory authorities. So even as we develop new ways to generate and store electricity —including with utility scale battery systems—the network that moves this energy from the source to the consumer needs help.

"The grid is worn down, it's patched up, and every hoped for improvement is expensive and bureaucratically bemired," writes Gretchen Bakke in her book, *The Grid*.

We will need a combination of better transmission technology, grid capacity and energy storage to meet growing demand and integrate a greater share of renewable sources into a modern grid.

Limited transmission capacity in the existing system

The grid is actually a collection of several independent networks throughout the U.S. that operate transmission and interconnection—getting electricity onto a grid. There is a backlog of renewable energy projects—solar, wind and batteries—waiting to get on the grid. The abundance of renewable energy sources and the limited capacity for transmission slows the ability to get new and renewable energy to users.



Organizations that operate grids, called regional transmission operators, do not own electric generating plants or transmission lines and are independent of their members—the utilities that generate electricity. The largest grid management authority, PJM Interconnection, manages the grid in 14 states stretching from New Jersey to Illinois. Separate grids operate in the West. Texas has its own grid system, which suffered large power outages due to frigid weather in February 2021. At least 200 deaths were attributed to the loss of heat to millions of households for several days.

All of these systems are coping with the challenges of providing reliable electricity through their existing infrastructure. But throughout the industry, across the states and in Washington's own brand of power corridors, some solutions are creating sparks of optimism.

Demand skyrockets

Americans' dependence on abundant electricity is growing. For instance, the data centers that run artificial intelligence (AI) programs like ChatGPT and the AI applications popping up everywhere consume an enormous amount of electricity. That puts a strain on energy supply.

In Virginia, Dominion Energy estimates that demand for electricity will increase 100 percent over the next 15 years due in large part to energy-hogging data centers, which are abundant in the commonwealth.

PJM, the regional transmission operator, also expects increases in load growth related to data centers. The share of total load attributable to data centers, which is currently 4 percent, is expected to rise to 12 percent by 2030 and 16 percent by 2039. Further complicating the picture, PJM expects significant retirements of existing plants that use fossil fuel to generate electricity, which represent about 21 percent of PJM's current installed capacity.

There are no simple solutions to what will be expensive challenges for generating and transmitting enough electricity to meet demand. In addition to more electricity from renewable sources, it will likely require more power generated by natural-gas—even as companies, like Microsoft, aim to achieve "carbon negative" power sources by 2030.

In October, Google and Microsoft announced plans to build small modular nuclear reactors (SMRs) to provide electricity for data centers. Today, no commercial SMRs are operating, and as Amazon executive Matt Garman told *The Wall Street Journal,* SMRs won't solve anything during this decade. Nuclear power presents a host of vexing problems,

LEIF SIEGRIST

including storage of highly radioactive waste for thousands of years. But this proposal illustrates one of the long-term options data companies are considering.

At the same time, local resistance to data centers has emerged in many places, including Fort Worth, Texas, Fayette County, Georgia and Burns Harbor, Indiana. The centers bring tax revenue but also increase the cost of electricity and, as detailed in Issue 2, 2024 of *Outdoor America,* data centers consume an immense amount of clean water to cool the centers' computers.

Data centers often require upgrades to existing transmission lines to deliver electricity. Or they may require entirely new "greenfield" transmission lines across undeveloped land. Greenfield refers to construction on land that is undeveloped or natural. That contrasts with "brownfield," defined as development in places that have already been used for industrial or commercial purposes.

Existing brownfield corridors across land, or rights-of-way, already used for highways, railroads or pipelines could help smooth the approval of new transmission lines.

Promising technology

During the summer of 2024, the Biden administration announced a federal grant program to improve the grid using the existing transmission corridors. Called "Smart Wires," the program uses new technology to optimize the efficiency and flexibility of the existing grid.

The nation's competing goals of emission reduction and energy production are clearly at odds.

The Wall Street Journal reported improvements reaped from a pilot program at Great River Energy in Minnesota increased energy transmission capacity by about 40 percent by using sensors to track weather and other factors that affect the efficiency of power lines.

Another tactic is replacing existing transmission lines with high-performance wires, which is relatively easy and inexpensive. Adopted broadly, that could increase transmission capacity fourfold, say researchers at the University of California-Berkeley and the consulting firm GridLab.

Rethinking energy rules

During 2024, several attempts to improve the grid have been introduced. In April, the Energy Department introduced a plan to upgrade 100,000 miles of transmission lines over the next five years. The department proposed that it will take the lead in coordinating the process to fast-track improvements in transmission infrastructure. The regulatory process historically has required approvals from several agencies. And aiming for better long-term

Energy-hogging data centers increase demand for electricity from fossil fuels as well as renewable energy sources, both shown operating near Casper, Wyoming.

MICHAEL REINEMER

planning for the grid, the Federal Energy Regulatory Commission (FERC) announced a rule in May that requires energy companies to plan for and consider supply and demand for electricity at least two decades into the future, and also focus on places where transmission infrastructure is lacking.

In Congress, members have also been looking at ways to speed up the approval process for energy projects. One process energy projects go through is a review required by the National Environmental Policy Act (NEPA), one of the nation's vital, bedrock laws that requires environmental assessments of projects proposed by the federal government.

A setback for climate goals?

While governments that recently gathered at the U.N. Climate Conference discussed the urgent need to reduce greenhouse gas emissions, the reality is energy demand will make carbon reduction goals harder to reach.

In the U.S., the new, extra energy needed by data centers alone, according to a report from Bloomberg Intelligence, is the equivalent of 10 to 30 percent of the current demand for electricity derived from natural gas-fired plants. More than 200 new natural gas power plants are now under development. Although burning natural gas emits less carbon pollution compared to burning coal or oil, the scale of new development will only add more carbon to the atmosphere when scientists overwhelmingly agree net emissions need to be reduced immediately.

So, the nation's competing goals of emission reduction and energy production are clearly at odds.

Neil Chatterjee, who chaired FERC during President Trump's first term in office, recently told the *Washington Post,* "There are real moral questions that will be brought to bear. Is the benefit society is deriving from AI worth the energy intensity needed to power it and the carbon emissions associated with that energy intensity?"

UTILITY-SCALE BATTERIES BOOST STORAGE CAPACITY

Utility-scale battery systems offer important, growing capacity for storing electricity. These systems help to balance supply and demand and store electricity from renewable sources until needed.

In the first half of 2024, energy operators added five gigawatts of storage capacity to the nation's grid, according to the U.S. Energy Information Administration. One gigawatt equals 1,000 megawatts, which is enough to power a medium-sized city. New York City typically uses about 5.5 gigawatts of electricity annually.

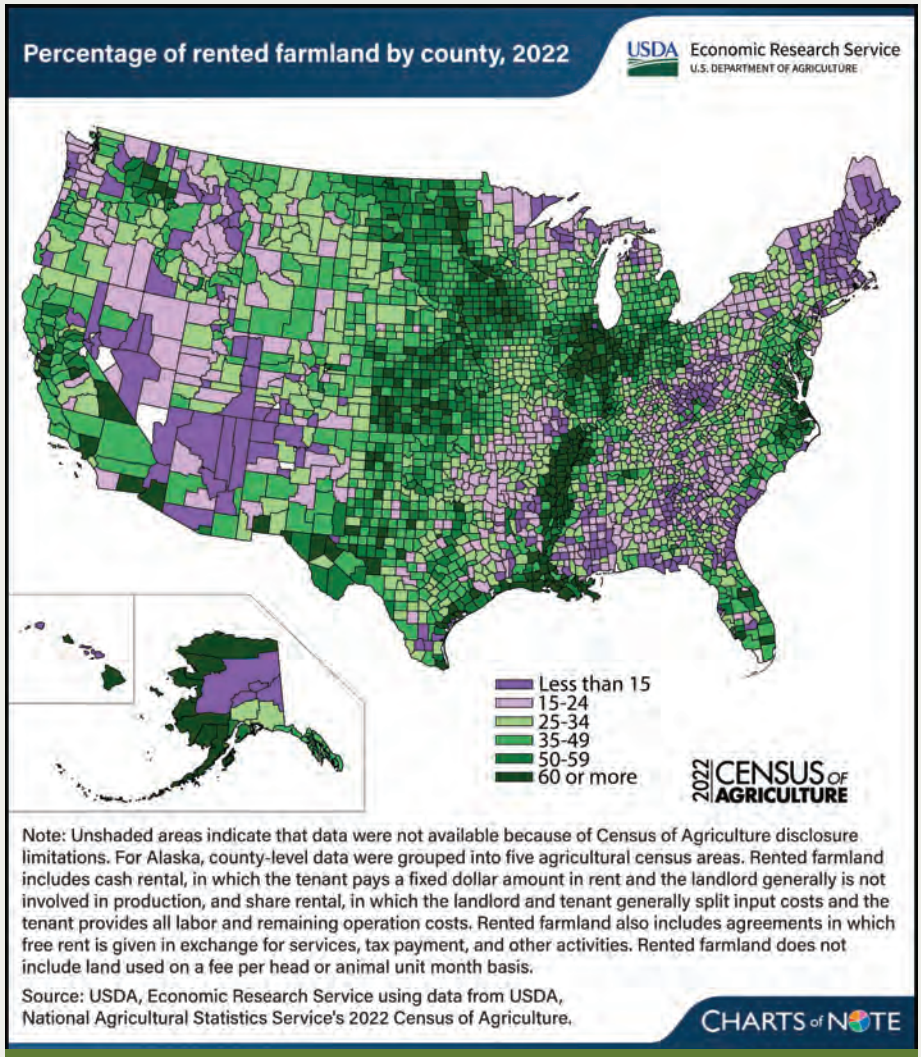
SOIL MATTERS

League Engages Farmland Owners in Conservation Topics

By KATE HANSEN, Agriculture Program Director

Imagine you are driving and see a farmer out in a field. Perhaps they are planting in the spring or harvesting in the fall. In 39 percent of cases nationwide, you see a farmer who is renting the land, not the landowner. Now let's say you're in the mid-Atlantic or the corn belt (which includes Illinois, Indiana and Iowa among other states). The chances could be more than 60 percent that the farmer is renting the land from someone else, known as a non-operator landowner.

The exact dynamics of renting farmland can vary. In some cases, a farmer will "cash rent" land based on a handshake or lease. In others, the farmer and landowner will enter into a crop share arrangement that includes shared costs and returns between both parties. Similarly, the reasons someone might own farmland, but not farm it, are diverse. Some landowners may have inherited a farm from a family member. Others may have purchased it as an investment.



In many regions of the country, significant portions of farmland are rented. The League is engaging these landowners in discussions about conservation.

USDA

Against this background of different owner-renter relationships, there is an urgent need to deploy more agricultural conservation practices across the landscape. Our soils are eroding and degrading at a rate that puts us on track for another Dust Bowl. More widespread conservation practices on farms could meaningfully reduce water pollution stemming from agricultural runoff that jeopardizes human health. Habitat loss threatens the future of many types of wildlife and birds.

In this context, non-operator landowners are an important group to engage. They may know less about the day-to-day farming operations. But they have a vested interest in the vitality of their land—and by extension, their soil's health, resource

Participants in the landowner conservation program hear about soil health from Jim Isermann of the Illinois SustainableAgriculture Partnership at the series kickoff in Decatur, Illinois.

conservation and other factors. Action by the landowner, in coordination with the person farming, has real potential to spur change.

League program engages non-operator landowners

With these dynamics in mind, this fall the Izaak Walton League launched a new pilot project to share information with non-operator landowners about conservation, soil health and opportunities to implement beneficial practices on their land. Others in the League have also prioritized outreach to these landowners because they can play critical roles in scaling up conservation on the ground.

The project was titled the *Illinois Landowner Conservation Series* and our target area included five counties in east-central Illinois: Christian, Macon, Moultrie, Piatt and Shelby. In this part of the country, more than 70 percent of farmland is rented, and local agriculture is dominated by corn, soybeans and some livestock.

Around 30 landowners were involved in the series. Together, they own and have decision-making power on more than 7,300 acres. Through a series of six workshops and events, we helped participants learn more about:

- the array of conservation practices they might consider
- the basics of soil health
- water quality and the Illinois Nutrient Loss Reduction Strategy
- incentives available to help them start beneficial practices
- how to work with their farmers to prioritize conservation

Throughout the series, we brought in numerous experts and partner organizations including University of Illinois Extension, American Farmland Trust, the Illinois Sustainable Agriculture Partnership, the U.S. Department of Agriculture's Natural Resources Conservation Service (USDA-NRCS) and the City of Decatur, Illinois.

We also hosted a panel of landowners who are farther along in their conservation journeys to tell their stories and answer questions from participants.

Program sparks interest in conservation options

Upon the project's conclusion, the landowners who participated were interested in next steps. Some of them plan to seek

KATE HANSEN (2)

Illinois Division Treasurer Luann Noll joins a tour of the cover crop demonstration plot at the Farm Progress Show grounds in Decatur, Illinois.

more information about USDA programs that will help them deploy conservation practices.

Others shared they will be scheduling a time to visit with their tenant farmer to discuss potential next steps. In a follow-up survey, 86 percent told us they were interested in additional information and programming on conservation.

The League's national staff was encouraged by these efforts in Illinois. For many years, our Agriculture Program has largely been focused on federal policy advocacy. That work is critical to maintain, as we are a leading voice on farm policy and we can help to shape the system as a whole. When we secure a win in the federal policy realm, it is often a win that will impact all 50 states and territories.

Still, we also know the value of driving conservation adoption closer to the ground, closer to the soil. We designed the *Illinois Landowner Conservation Series* as a proof of concept. Now, with an encouraging first run under our belt, we can analyze how it went and potential next steps for similar work.

How to learn more

Reaching our nation's farmland owners is exciting and complex. If you are interested in learning more about our work with landowners, or have ideas as we move forward, please sign up for our *Soil Matters* newsletter at iwla.org/soils-agriculture/agriculture-newsletters or reach out to me at khansen@iwla.org.

NATIONAL
★AWARDS★
2025

A good Ike is easy to find.

But only you can help us find the best of the best.

Make sure your fellow Ikes get the recognition they deserve, for:

- Defending clean water
- Organizing a conservation project
- Engaging youth in the outdoors
- Advancing the shooting sports, or
- Writing informative newsletters about the League's work

Nominate an outstanding member, chapter, division or ally for an Izaak Walton League national award.

Nominations are due June 1, 2025.

Visit www.iwla.org/awards

ISTOCK

POLICY PULSE

Conservation Advocacy: Many Ways to Speak Up in 2025

By JESSICA GORDON, Grassroots Advocacy Manager

As we wait to see how the new administration, Congress and state governments prioritize conservation issues for 2025, the League encourages members and supporters to speak up and participate in the advocacy process. There are abundant opportunities available to everyone.

You can select from a wide range of ways to get involved with issues you care about—from writing a letter to your local newspaper to making an appointment and meeting with your U.S. Senator in one of their state offices.

Your advocacy may focus on national issues like the need to pass a better Farm Bill or restore Clean Water Act protections for streams and wetlands. Or you may prefer local topics like water quality in your community or decide to attend a lawmaker's town hall meeting.

Tailor your outreach to your specific interests and the issues you are passionate about.

Advocacy is not one-size-fits-all. Tailor outreach to your specific interests and the issues you are passionate about. Here are a few opportunities to consider.

Follow us and share our posts on social media

By connecting with the League through social media, you can let your friends and family in on the things you care about, and you can help bring concerned people into this advocacy community.

Complete our action alerts

Periodically, we send out action alerts via email for members and followers to complete. These alerts only require a couple minutes of your time and your communication goes directly to your member of Congress. Current action alerts are found on our website. Visit iwla.org/actionalert.

Write a letter to the editor

Sharing your views and concerns with a local newspaper can raise awareness among elected officials as well as readers and will more likely get published than letters sent to national newspapers. As a first step, check to see if your local paper has a word limit or specific instructions on how to submit a letter.

Talking to lawmakers about conservation issues is an essential part of the Izaak Walton League's history and central role in protecting the nation's woods, waters and wildlife.

Join the conservation committee in your chapter

This committee connects you with other Ikes who are motivated to create change in your community. If your chapter doesn't have a conservation committee, talk to your leadership about establishing one. Perhaps you could lead that group.

Join community organizations that prioritize conservation

Connecting with other conservation-minded groups and neighbors for advocacy can create momentum toward our goals. Organizing and following through on a specific action, like an email campaign or attending an event, can lead to real change.

Become a water monitor

By testing local waters and reporting your findings, you provide invaluable data that can be used to increase public awareness about water quality and spur advocacy. Salt Watch and Nitrate Watch are easy to understand. You only need a few supplies and can test local streams or tap water any time. Find more information at saltwatch.org and nitratewatch.org.

Make an appointment to visit with your legislators

Most state legislators and members of Congress have office hours when they will sit down and talk with you in person, over the phone or on Zoom. Check their website, email or call them to find out how they schedule meetings with constituents.

Current action alerts are found on our website. Visit iwla.org/actionalert.

So let's get started

Since 1922, the Izaak Walton League has been helping local lawmakers, members of Congress and U.S. presidents understand what's at stake when decisions are made that affect our soil, air, woods, waters and wildlife. This is what we do.

We have a rich history of working collaboratively with community members, elected officials, the press, schools and private companies to protect the great outdoors for future generations.

If you need suggestions on how to advocate for the things you care about, please email me at jgordon@iwla.org. I am always happy to provide guidance about getting started—or taking your advocacy to the next level.

ISTOCK

When Salt of the Earth Becomes Salt in the Wound

By ABBY HILEMAN, Salt Watch Coordinator

Through policy advocacy, volunteer science and community-based conservation, the Izaak Walton League works to stop pollution at the source and keep it out of America's waterways.

The mysteries of road salt pollution shouldn't be surprising. Salt, especially sodium chloride (NaCl), is cheap and prevents slips and falls on sidewalks and collisions on roadways during the winter.

Salt works by reducing the freezing temperature of water, which helps to keep our roadways and sidewalks free of ice in the winter. Keeping people and drivers safe during the winter is important. At the same time, we've all probably heard the saying "too much of a good thing." That definitely applies to use of road salt in America.

Excessive use of salt does more harm than good, damaging and corroding our infrastructure, polluting streams and lakes, hurting or killing wildlife, sickening pets and can even release lead and other dangerous metals into our drinking water.

A health threat

Elevated levels of chloride in drinking water threaten human health. The most serious threat is heavy metal contamination. We know salt corrodes the metal on our cars and infrastructure. It can also have the same corrosive effect on the estimated 10 million lead service lines that deliver drinking water to American homes, schools and businesses.

That corrosive effect was one of the factors behind lead (Pb) ending up in residents' drinking water during the prolonged, dangerous water crisis that began in Flint, Michigan in 2014. Now over 10 years after the Flint water crisis began, there is still lead in the tap water of many residents, although the concentration has decreased to 1 part per billion (ppb) this year (2024) as a result of lead line replacements

PEXELS

and corrosion control measures that have been enacted. Boiling water doesn't remove lead.

EPA, scientists and medical professionals all agree: there is no safe level of lead consumption for children, or people of any age. Also, people on restricted salt diets may not realize that they are getting additional salt from their drinking water.

Road salt cannot be removed by most water treatment facilities, and most home filtration systems cannot remove it either. Water would need to go through a reverse osmosis or desalination process for the salt to be removed from tap water.

Little goes a long way, costs appear down the road

Once salt enters the environment, there is no feasible way to remove it. Chloride in road salt and other de-icers persists as a long-term pollutant. When spread on roads or sidewalks where rain eventually washes it into the ground, it can stay in soils and groundwater for years. Even if we stopped using road salt today, many areas would be polluted for years to come.

To understand the impact, start with the fact that one teaspoon of salt can permanently pollute five gallons of water. Because road salt is normally sold in a 50-pound bag, that bag has the potential to pollute 10,000 gallons of water (about the amount in a residential swimming pool). Depending on the severity of our winter weather, we apply between 10 to 20 million tons of road salt annually in the U.S. And that number doesn't even factor in the millions of pounds of salt also entering waterways through other means—like water softener discharge, industrial and processing wastes, saltwater swimming pools and more.

Applying too much road salt harms infrastructure, vehicles, aquatic life and drinking water.

IWLA

The author demonstrates how to sweep up excess salt for reuse so it doesn't wash into local waterways.

The real cost of road salt

Salt is cheap, costing about $75 per ton. But the real cost that consumers, businesses and government bear is far higher. Bolton and Menk, Inc. (formerly Fortin Consulting) has estimated that the long term cost of each ton of road salt applied can be as high as $17,000 when we consider the impacts on roads, bridges, vehicles, vegetation, water supplies, human health and utilities.

A range between $1,740-17,086 per ton in damages, adjusted for inflation, originated from the following studies: Vitaliano 1991, low estimate and Murray and Ernst, 1996 and Murray and Brenner, 1977, high estimate.

Between a rock salt and a hard place

So why haven't we stopped using salt or found an alternative? The answer is as multi-faceted as the impacts salt has when released into the environment. Here are a few of the reasons:

- Salt helps to improve safety on roads and sidewalks
- Alternatives are costly and anything applied has some sort of impact
- Salt is cheap to buy (but the damages from road salt are expensive)
- Expectations have changed around how often we can travel in the winter
- People don't know that salt is a pollutant
- The labeling on salt bags is unregulated and is misleading
- "Ecofriendly" and "pet-safe" salt is usually neither!

Often, for-hire or contracted road salt applicators (such as landscape companies) overapply road salt because they don't have the training, background or updated (and in many cases expensive) equipment owned by state or local departments of transportation. Also, the financial incentive is inverted: these applicators are frequently paid according to the number of pounds or bags of road salt applied during a storm event instead of by performance-based practices (which require applicators to assess conditions and apply chemicals based on actual conditions rather than a contracted minimum number of bags or tons).

Departments of transportation can help to reduce the amount of salt used. They train plow drivers on salt application, calibrate equipment to minimize excessive use and have a powerful financial incentive not to waste taxpayer dollars by using more salt than is really needed.

The people who apply road salt don't have an easy job, which is to keep people safe in the winter. In most cases, applicators are pressured by public perception to use more road salt. Many people believe that more salt equals more melting and that you should see and feel salt underfoot during the winter. Both assumptions are incorrect. A little bit of salt goes a long way (both in melting ice and in polluting the environment).

A local road salt applicator recently told Salt Watch staff that his company intentionally oversalts in the winter. The reason for this is unfortunately simple—they don't want to be sued. A lawsuit would cost the company a lot of money if they were sued due to a slip and fall, much more money than spending more on salt because of oversalting practices. And many road salt applicators feel the same way.

Training and awareness: worth its salt!

What would happen if the threat of lawsuits became less likely? Applicators wouldn't have to base their applications on public perception, but instead would be able to lean on best practices.

Fortunately, more and more states across the country are offering training for private road salt applicators—not just for applicators in the public sector like departments of transportation.

Starting in Gaithersburg, Maryland, the Izaak Walton League has provided leadership in the effort to train applicators in smart salting.

These trainings cover a range of topics, including environmental impacts of road salt, cost savings when changing business practice to performance-based application and using road temperature and weather conditions (current and predicted) to determine road salt applications.

But public perception can still interfere. One of the current road salt best practices is to use brine (a salt/water mixture) that is sprayed on roadways and sidewalks in a wet-dry pattern. Sometimes when customers don't see or feel the salt, they still complain to property managers and business owners

IWLA

because they cannot see salt application in place. So, how can this be fixed? Education.

Educating road salt applicators, educating business owners and managers, and educating the public. And especially making sure that there are incentives in place to increase knowledge around road salt application.

State progress

In 2013, New Hampshire passed legislation to create a training program called the "Commercial Green SnowPro Certification." The program is run by the New Hampshire Department of Environmental Services.

Commercial road salt applicators who take and pass the training, maintain best practices learned in the training and keep records of their practices (including de-icing materials used, rate or quantity of de-icing materials used, dates of treatment and the weather conditions for each event requiring de-icing) are granted limited liability protection against damages arising from snow and ice conditions.

Property managers and owners who hire those certified applicators are also granted the same protection. This voluntary certification approach allows road salt applicators who are trained in best practices to use the knowledge they have learned to shift the scale back to center when balancing between safety and environmental protection without needing to worry about liability due to slips and falls. (Read more about the program at des.nh.gov/land/roads/road-salt-reduction/green-snowpro-certification.)

During the past few years, legislators in Minnesota and Wisconsin have unsuccessfully put forward bills to create programs similar to New Hampshire's Green SnowPro Certification. We expect that similar bills will be introduced again this upcoming legislative session in both states. Bills like this need our support.

Everything is a balance. It is time to tip the scales so that both safety and environmental protection are at the forefront when applying road salt in the winter.

Staying safe, not salty

The public needs more knowledge about the dangers of road salt pollution and how each of us can help to reduce our impact. Knowledge building and education need to happen at every level and we all have our parts to play in reducing the amount of road salt in the environment.

Simple actions like shoveling early and often to remove snow before it turns to ice, scattering or sprinkling salt instead of piling it on, and sweeping up spilled salt or salt remaining after a storm event are easy actions each of us can take to reduce the amount of road salt entering the environment.

Testing water using Salt Watch kits is also a way to learn more about what is happening in waterways we care about, including our tap water. Since winter is coming, this is the time to think about smart salting and what we can do to reduce the amount of road salt entering the environment. Visit Saltwatch.org.

ADVOCACY TIPS

As awareness around road salt pollution spreads, we expect that more and more states will strive to follow New Hampshire's example by incentivizing smart salting practices. You can also write to your state legislators to encourage them to support and even write bills focused on reducing road salt pollution and creating training programs and incentives for road salt applicators.

To keep up to date with bills related to road salt pollution reduction in your state, sign up for action alerts.

iwla.org/subscribe

JANUARY 27-31, 2025 IS WINTER SALT AWARENESS WEEK

Join us! Check out saltwatch.org to find resources which include flyers to distribute in your community, toolkits, advocacy guides and more. Find details about events happening near you during Winter Salt Awareness Week at wintersaltweek.org.

Did you know?

1 teaspoon of salt can permanently pollute **5 gallons of water.**

Road salt keeps us safe on roads and sidewalks, but it can also pose a threat to fish and wildlife as well as human health.

Salt Watch is helping volunteers and communities become smarter salters.

This national community science project...

- Provides ***free*** water testing kits to identify chloride pollution
- Compiles volunteer data from across the country
- Educates the public on responsible salt application
- Helps volunteers advocate for smart salting practices in their communities

Get involved! Join the Salt Watch.

Learn what it means to "salt smart" and request your free Salt Watch test kit at **www.saltwatch.org**

SALT WATCH™
IZAAK WALTON LEAGUE OF AMERICA

CLEAN WATER CORNER

The Evolution of Volunteer Science at the League

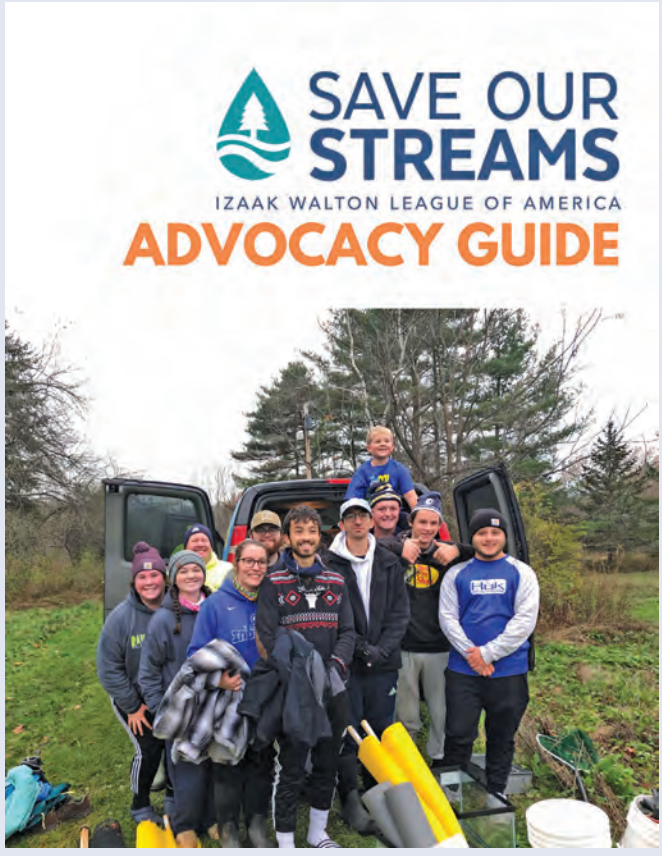
By SAM PUCKETT, Clean Water Program Director

When I first started at the League in 2016 as a Clean Water Fellow, I was greeted with a stack of old file folders on my desk… some dating back to the early '90s. Upon flipping through them, I realized what I had just inherited: dozens of data sheets, filled out by hand, from volunteers across the country—some in pencil and some in pen, from varying chapters, programs and streams.

This data, I was quick to notice, was not backed up anywhere. Each datasheet represented hours of work from an individual or group of volunteers, and was sent to Izaak Walton League headquarters, finding its way to the desk of an eager, unsuspecting Clean Water Fellow.

Since that first day on the job, I have overseen an evolution of the Clean Water Program with one key priority driving that change: we did not want to see a single volunteer effort go to waste when it comes to tracking water quality. That data deserved a platform for increased visibility. And those volunteers deserved not only a spotlight, but also the tools and confidence to use their data in their own communities to improve water quality.

From that stack of data sheets, we have evolved our programs to be easier to get involved with but also more visible than ever, even to people who may never cross paths with a volunteer monitor or a League chapter.



Here are some of the changes you may have noticed over the last 10 years:

Clean Water Hub:

Launched in 2017, the Clean Water Hub is a state-of-the-art database. It allows volunteers to store their data and share it widely, the public to find local water quality data, and likeminded organizations to submit and share their data.

Today, the Hub includes nearly 60,000 test results from more than 18,000 sites across the country. Learn more and see if waters near you are being monitored for pollution at www.cleanwaterhub.org.

Advocacy Guide:

Data gathering alone isn't enough to create the change required to improve water quality. Knowing this, the Clean Water team has been working to empower water quality monitors to advocate for change in their communities. Advocacy is a very different process than data gathering. So the team created an advocacy guide. The guide helps beginners and experienced advocates alike to leverage their local data, identify achievable goals and articulate

messages for policymakers and the media. The guide also provides advice about building partnerships. See iwla.org/water/resources-for-monitors.

Crowdsourced monitoring

Shortly after the launch of the Clean Water Hub, it became clear that to engage a wider audience of water quality monitors, we needed programs that require little or no specialized training and have minimal cost. Salt Watch (saltwatch.org) and Nitrate Watch (nitratewatch.org) were developed with these criteria in mind. They also equip monitors with the tools needed to advocate for reduced road salt and nitrate pollution.

Staff support

The growing Clean Water Program staff is another resource. Once a team of one or two staff flipping through paper data sheets, we now have Midwest and Mid-Atlantic Save Our Streams Coordinators, a Salt Watch Coordinator and a Chesapeake Monitoring Outreach Coordinator. They help with monitoring and engaging volunteers but also have the added responsibility of advocating for small- and large-scale solutions nationally.

Are you ready to get started monitoring or take the next step into advocacy? If so, we're here to help. Visit iwla.org/sos or reach out to sos@iwla.org and a Clean Water Program team member will follow up.

We are excited to continue this evolution to not only collect more data, but also use that data to create real change on the ground and protect water quality for future generations.

Chapter's Flood Response, PFAS in Deer and Turkeys, Paddlefish Restoration, Eastern Wildfire Risks

MICHAEL REINEMER | Editor

League's flood response in South Dakota mentioned in *Washington Post* article

The League's McCook Lake Chapter was highlighted in a front-page story in the *Washington Post* about the slow response by the state government to flooding in South Dakota.

"Renae Hansen, a local volunteer for the Izaak Walton League, a national conservation organization that oversees several hundred acres on McCook Lake, set up an impromptu recovery center at the League's lakeside clubhouse," the paper reported. "Hansen organized and distributed private donations of emergency supplies, including rubber boots, gloves, shovels, water and hot meals.

"Several days after the flood, a state official showed up, Hansen said, and told her the South Dakota Office of Emergency Management hoped to 'take this off your plate.' The agency did provide some supplies, Hansen said, although most continued to be furnished by private donors. As days turned to weeks, the reality of the situation set in." See more details about the Chapter's response to the flood in Issue 3, 2024 of *Outdoor America. [Washington Post, December 5, 2024]*

PFAS found in deer and turkeys prompt Maine officials to issue "do not eat" advisory

A chemical linked to human health problems, including cancer, has been found in deer and wild turkeys in parts of Maine. That prompted the Maine Department of Inland Fisheries and Wildlife to issue a "do not eat wildlife" advisory in October.

USFWS

Paddlefish have suffered from habitat loss and overfishing but efforts in Iowa and across the U.S. are restoring populations.

The advisory affected several communities in central Maine where industrial or municipal sludge containing PFAS had been spread. PFAS persist in the environment. Similar advisories have been issued in other states. *[Outdoor News, November 8, 2024]*

Paddlefish return to Iowa lake after more than 100-year absence

In October, nearly 2,000 American paddlefish were released into West Lake Okoboji near the town of Spirit Lake, Iowa. The fish, raised in an Iowa hatchery, boast "great wild genetics," says Mike Hawkins, fisheries biologist for Iowa DNR.

American paddlefish *(Polyodon spathula)* can grow as large as seven feet long and 200 pounds. They have suffered from habitat loss and overfishing but programs across the U.S. are restoring populations. *[Outdoor News, October 18, 2024]*

Wildfires in eastern U.S. pose higher risks compared to western communities

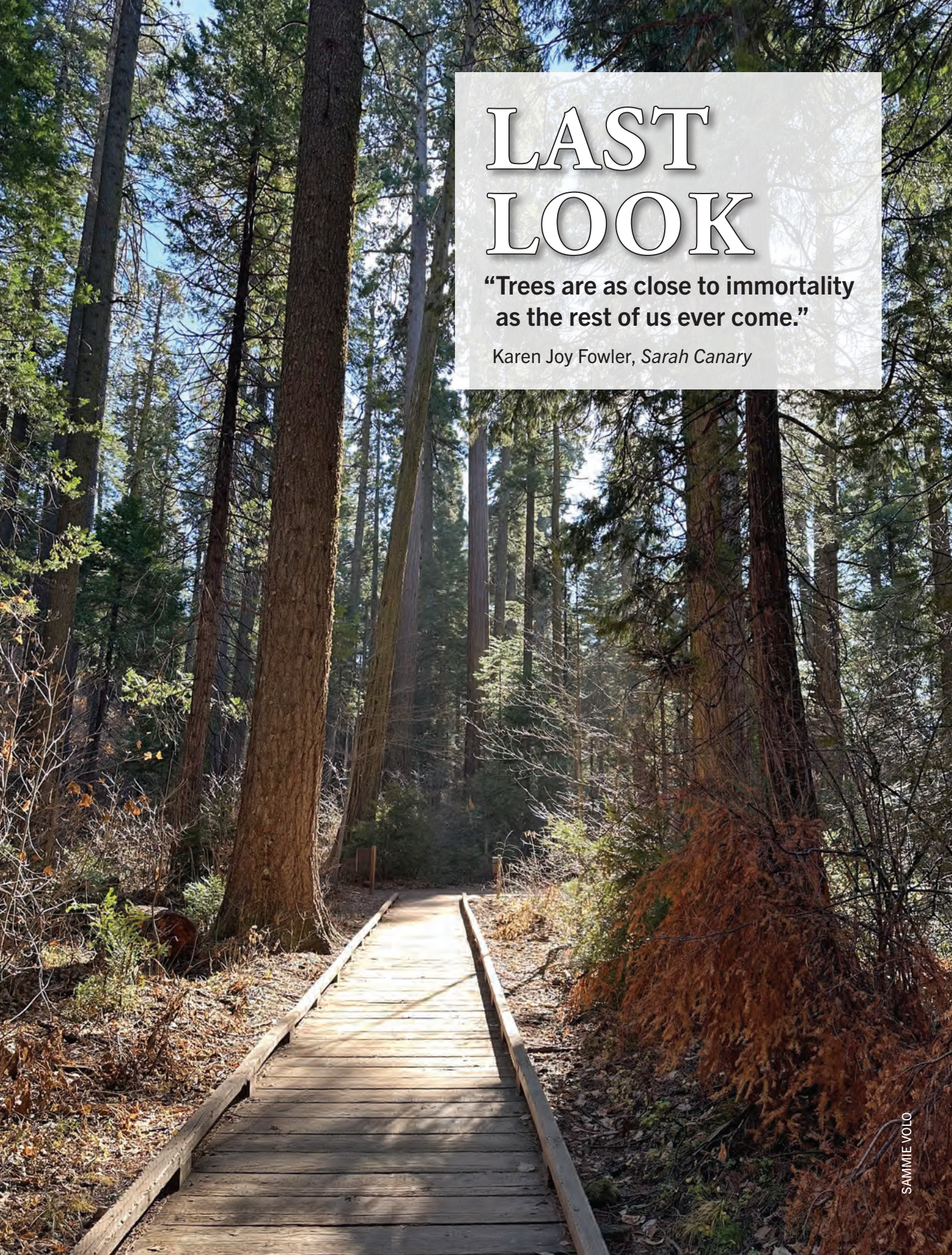
Due to higher temperatures, drought and high winds, about 11,000 wildfires burned 138,000 acres in the eastern U.S. this year, from the Great Lakes region to New England and the mid-Atlantic, says the National Interagency Fire Center.

These fires can pose greater risks compared to wildfires in the West because of the higher population density and lower public awareness about the need to reduce the destructive potential of wildfires by using fire-resistant landscaping and building practices. *[Washington Post, November 18, 2024]*

LAST LOOK

"Trees are as close to immortality as the rest of us ever come."

Karen Joy Fowler, *Sarah Canary*



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