



# CATALYST

SPRING 2026



## Rugg Pond Dam Removal Enters Design Stage

The Rugg Pond Dam Removal and River Restoration Project has officially entered the design phase, marking an important step toward restoring natural river flow, improving aquatic habitat, and strengthening the ecological health of the Rapid River system in Kalkaska County.

The project centers on the historic Rugg Pond Dam, originally constructed in 1904 to power local homes and businesses through the Kalkaska Power and Light Company. Ownership later transferred to Consumers Power in 1950 and then to Kalkaska County in 1953 when the dam was decommissioned. Since then, the aging structure has remained in place. Now more than 120 years old, the dam impounds a 20-acre reservoir that is over 80% filled with sediment. The structure continues to alter the river's natural flow and block aquatic organism passage, including cold-water game fish seeking access to upstream spawning habitat.

In early 2026, Kalkaska County and the Conservation Resource Alliance (CRA) partnered with the Inter-Fluve engineering team to lead the project's design phase. This work includes engineering design and permitting for the safe removal of the deteriorating dam infrastructure, replacement of an undersized culvert at the Hanson Road crossing on the Little Rapid River, and restoration of approximately one mile of river channel and connected floodplain along the Rapid and Little Rapid Rivers.

When complete, the project will reconnect nearly 22 miles of upstream river to more than 12 miles of the Rapid

River downstream, while also restoring connectivity to an additional 3.2 miles of the Torch River system.

Beyond ecological restoration, improving public access is also a priority for Kalkaska County, which manages the 102-acre Rugg Pond Natural Area. As the design phase progresses, partners are working to ensure the project supports both river restoration and continued opportunities for community access and recreation.

*CRA and its partners are working to secure the funding needed to bring the Rugg Pond Dam Removal and River Restoration Project into construction. You can help restore the Rapid River by making a donation to support this effort!*



**CRA's Tori Wolever examines the deteriorating Hanson Road crossing just upstream of the Rugg Pond Dam.**



For more details and a complete list of partners and funders, scan the QR code or visit: <https://www.rivercare.org/project/rapid-river/restoring-the-wild-flow-of-the-rapid-river/>

---

## About CRA

---

Founded in 1968, Conservation Resource Alliance (CRA) restores rivers and revitalizes habitats through collaborative, on-the-ground conservation across Northern Michigan. CRA is a private, not-for-profit 501(c)(3) organization. Through our River Care™ and Wild Roots™ programs, we restore and protect over 700 miles of rivers, 5,000 miles of tributaries, and 4 million acres of diverse forests throughout Northern Michigan.

We've been able to care for this region's natural resources because our partners and supporters continue to be the backbone of our organization. Thank you to all of our donors for supporting hands-on, feet-wet conservation. If you haven't donated, please join us. Your commitment is critical to keep this important work moving forward.

---

### Suzie Knoll

Executive Director

### Sue Antaya

Finance & Administration Director

### Jenny Eberlein

Office & Data Manager

### Kimberly Balke

Biologist/Program Director

### DJ Shook

Biologist/Senior Project Manager

### Nate Winkler

Biologist/Project Manager

### Michael Seefried

Project Manager

### Meredith Freeby

Project Manager

### Tom Vitale

Project Manager

### Keenan Cooper

Biologist / Project Manager

### Kat Hanson

Development Director

### Gavin MacDonald

Communications Manager

### Aubri Brown

Development Coordinator

### Tori Wolever

Engagement Specialist

---

## Restoring Fish Passage on North Cole Creek

Construction wrapped late last year on a long-standing barrier along North Cole Creek, a cold-water tributary to the Baldwin River in the Pere Marquette watershed. The project replaced three undersized and perched culverts with a channel-spanning timber bridge, restoring the creek's natural flow and reconnecting more than three miles of high-quality upstream habitat.

The former culverts restricted fish passage, increased water velocity, and trapped sediment upstream. As a result, juvenile trout and salmon—along with native species such as sculpin, white sucker, western blacknose dace, and pearl dace—were unable to reach important spawning and rearing habitat near the creek's headwaters.

Site conditions revealed deep organic muck soils, making a bridge the most effective and durable solution. By fully spanning the stream channel, the new structure allows water, sediment, nutrients, and aquatic organisms to move freely, restoring natural stream processes and fish passage.

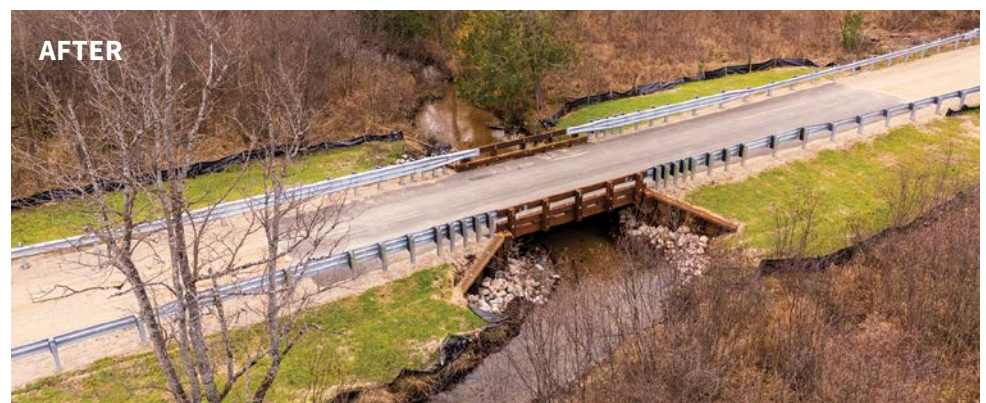
With the barrier removed, North Cole Creek once again functions as a fully connected cold-water stream. This project complements ongoing dam removal and restoration work on the Baldwin River mainstem and helps advance broader watershed efforts to restore full, bi-directional fish passage.

In addition to ecological benefits, the project provides lasting value to Lake County's recreation economy. The Baldwin and Pere Marquette rivers are nationally recognized fishing destinations, and improved access to high-quality habitat supports healthy wild fish populations and local businesses. The before-and-after transformation at North Cole Creek shows how well-designed infrastructure can strengthen rivers while supporting the communities that depend on them.

For more details and a complete list of partners and funders, scan the QR code or visit: <https://www.rivercare.org/north-cole-creek/>.



**BEFORE**  
The former culverts were elevated above the channel, restricting fish passage and causing sediment to accumulate upstream.



**AFTER**  
The new timber bridge restores natural flow and reconnects North Cole Creek.



Several trees and rootwads now line the eroding bank along this river section, providing habitat and stabilizing the streambank.

## Reviving the Little South Branch

The Little South Branch of the Pere Marquette River is known for its cold, clear water and exceptional fisheries. But like many Northern Michigan rivers, sections of the stream have lost the natural features that once supported healthy habitat for fish and wildlife. To help restore this important tributary to the Pere Marquette River mainstem, dedicated private donors and CRA launched the Little South Branch Pere Marquette River Habitat Improvement Project — a multi-year effort focused on strengthening river health through strategic in-stream habitat improvements.

Work began last summer and will continue over the next five years, with crews installing large woody debris along a five-mile stretch of river between Forman Road and James Road. These installations mimic natural log jams and fallen trees that historically shaped the river's flow, stabilized banks, and created critical habitat for fish and wildlife.

A 2024 evaluation found this section of river lacks in-stream large wood — an essential component of healthy stream ecosystems in forested landscapes. Without it, streambanks become unstable and excess sediment enters the channel. By carefully placing whole trees, including rootwads and tops, along eroding banks, the project will slow water velocity, reduce erosion, and restore natural river function. Beyond stabilizing banks, added wood provides cover and resting areas for trout, improves spawning habitat, enhances overwinter survival, and supports aquatic insects that form the foundation of the river's food web. The work also creates habitat for turtles, birds, and other wildlife that depend on healthy riparian ecosystems.

CRA works closely with local landowners and partners to design each installation, ensuring restoration efforts protect sensitive areas while maintaining recreational access. By using natural materials sourced on-site, the project strengthens long-term ecosystem resilience and supports a healthier, more dynamic river system for the region.

*This work is made possible through the support of funders including private landowners, the Pere Marquette Watershed Council, the Charles A. Fellows Chapter of Trout Unlimited, the Pere Marquette Chapter of Trout Unlimited, the Lake County Riverside Property Owners Association, the Lake County Sheriff's Department, Great Lakes Energy, and Restaurant 876 in Baldwin, along with project partners such as the Michigan Department of Natural Resources (MDNR), the Michigan Department of Environment, Great Lakes, and Energy (EGLE), Knoop Excavating, and private landowners.*



Project Manager and Biologist Nate Winkler surveys the site in March 2026.

# Reclaiming Buried Wetlands on the Maple River

Since 1999, CRA and dedicated partners have led long-term restoration efforts across the Maple River watershed. This work reached a major milestone in 2023 with the replacement of the last remaining undersized road-stream crossing on the mainstem and the East and West Branches of the river. Through the Free-Spanning the Maple River Initiative, 21 projects improved stream health through crossing replacements, in-stream habitat enhancements, and the removal of the Lake Kathleen Dam.

With mainstem connectivity restored for the first time in more than a century, restoration efforts shifted toward in-channel improvements and the recovery of wetlands revealed after Lake Kathleen was dewatered. These wetlands play a vital role in the river's long-term health by increasing groundwater storage, improving water quality, and providing essential wildlife habitat.

This large-scale effort restored more than eight acres of wetlands at the confluence of the Maple River's East and West Branches on the Holton family's Twin Branch property. Crews removed more than 2,400 cubic yards of sediment that had accumulated during decades of impoundment, uncovering groundwater seeps and organic soils long buried beneath sand deposits. After reshaping

the site and redistributing organic material, more than five acres of riparian habitat were seeded with a diverse mix of native trees, shrubs, and plants to support long-term ecological recovery. As spring unfolds, the site will begin to bloom, continuing to accelerate ecological recovery across the landscape. The next phase of restoration on the Maple River responds to the impacts of last spring's ice storm, which caused widespread damage across Northern Michigan. Downstream of the wetland site, CRA and partners plan to strategically place select downed trees within the river channel to stabilize eroding banks and enhance fish habitat. This large woody debris will help direct water flow away from vulnerable banks while creating essential cover, riffle, and pool habitat for trout and other native species—restoring natural river function while turning storm impacts into opportunity.

CRA and its partners are working to secure the funding needed to implement this next phase of restoration on the Maple River. Support the large woody debris work by making a donation to the project today!



Scan the QR code or visit the link below to learn more, view partners and funders, and follow updates: <https://www.rivercare.org/project/maple-river/reclaiming-buried-wetlands-at-the-maple-river-confluence/>



**The timber bridge at Woodland Road, just downstream of the former Lake Kathleen Dam site, was one of several projects completed as part of the Initiative.**



**CRA Project Manager Tom Vitale oversees wetland restoration work as crews shape the landscape behind him.**



**The Maple River flows freely through wetlands once submerged by the Lake Kathleen Dam impoundment.**

# Thank You for Your Support!

The following individuals and organizations made a contribution to CRA since the release of our last Newsletter.

## Contributors

Allen & Margo Ammons  
Edwin Anderson  
William & Paula Anderson  
Anglers' Club of Chicago  
Anonymous  
Sue Antaya  
Aon Foundation  
Steven & Brenda Arnoczky  
Bill & Sue Arnold  
Richard & Marilyn Augustine  
Backcountry North  
Louis Baldori  
Kimberly Balke  
Tom & Mary Barnes  
Chris & Mike Bates  
Blair & Sandra Bearinger  
Jim Bedford  
Clifford & Susan Behrens  
Tom Bell & Jenny Orton  
Jean Bjork Boquist  
Lawrence Bluth  
& Nancy Bechek Bluth  
Geoff & Julie Bonebrake  
James Bonebrake  
Ted & Sandy Borgeld  
Martha Bornak & Paul Tata  
James Bossenbroek  
Andrew & Alena Bowman  
Rich & Marty Brauer  
Wade & Mary Ellen Bridges  
Jeff Brown  
Leith & Gloria Butler  
Harry Calcutt III & Betsy Calcutt  
Stephen Calkins  
Michael & Nancy Call  
Spencer Carli  
Eric Carpenter  
David Catalan  
Diane & Harold Chaffin  
Keith & Carolyn Charters  
Sam Clark  
Thomas Clark  
Robert & Diane Collier  
Steve & Toni Collins  
Douglas & Cindy Conover  
Consumers Energy Foundation  
Current Works: Ted Kraimer  
Beverly Cuthbert  
Jonathan & Linda Damon  
Stacy & Carol Daniels  
Annette Dashiell  
Paul DeBaeke

Michael Delp  
Dennis S. Wisniewski Memorial  
Foundation: Trevor & Kim Wisniewski  
Rob & Anna Maria DeYoung  
James & Nancy Dorr  
Fred Dorsett  
Joe & Stacy Dostal  
Arno & Judith Driedger  
DTE Energy  
DTE Foundation  
Randall Dvorak  
Dye Family Charitable Fund of The  
Greater Cincinnati Foundation:  
John & Elizabeth Dye  
David Dykstra  
Jane Ecclestone  
eelo: Jen Vander Roest  
Philip Ellis  
Every Other Brother Club LLC:  
Matthew Phillips  
Fred & Sue Eyer  
Kurt Fausch & Deborah Eisenhauer  
Diane & Sam Federoff  
Gary Fedus  
Ross Field  
Fieldsport  
fishwandrods.com: Mike Willsey  
Michael Foley & Mary Ann  
Herrmann-Foley  
Lisa Franseen  
Doug Fuller & Martha Lancaster  
Kent & Margaret Gage  
Bob & Elizabeth Garner  
James & Molly Gillhespy  
Scott Givan  
Brandon & Jessica Glowacki  
Fred & Sue Goetz  
Brad Graft  
Jeff Graft  
Grand Traverse County  
Grand Traverse Regional Community  
Foundation  
Grand Traverse Regional Community  
Foundation: Pam Amundsen  
Michael & Christine Gravlín  
Matt & Candy Gray  
Great Lakes Energy People Fund  
Great Lakes Fishery Trust Habitat  
Protection and Restoration Program  
Great Northern Benefits  
Alan Halbeisen & Linda Lesage  
Michelle Handke  
Marv & Debra Hanna  
Kat & Tyler Hanson  
Frank & Mary Lou Hatfield

Susan Hayes Affholter  
Healing Our Waters - Great Lakes  
Coalition  
James Heffner & Donna Hagan  
Jerry Heiman  
Kryn Henderhan  
Jill Henemyer & Dotti Clune  
Henry E. & Consuelo S. Wenger  
Foundation Inc.: Charles &  
Kerry Wilson  
Mark Hepler & Kimberly Purdy  
Herrington-Fitch Family Foundation  
Hickey-Kiersey Family Philanthropic  
Foundation  
Richard & Delisa Hinterman  
Hans & Teresa Hintzen  
Dan & Patricia Holland  
James & Jeanne Holzbach  
James & Evelyn Howell  
Susan Hudson Laffrey & Brad Laffrey  
Carl & Vicky Hueter  
Iron Fish Distillery  
Mark & Debra Jackson  
David & Mary Jankowski  
Ray & Janice Jensen  
Tom & Diane Jobson  
Al Johnson  
Jeff & Carolyn Johnson  
Julie & Steve Kaiser  
Kanouse Outdoor Restoration:  
Shawn Kanouse  
Patrick & Mary Kelly  
Adam Kennedy & Sheri Rhoads  
Russ King & Sharon Skop  
Edward Klunk  
Knoop Excavating Service, Inc:  
Tom & Lauri Knoop  
Rachel Kook  
Chuck Kopinski & Barb Trudeau  
Krenn Timber Bridge, Inc: Bob Krenn  
Lois Krepps  
Bruce & Jacquelyn Krieger  
David & Mary Kronberg  
Mike & Janet Kronk  
John & Mary Lou Kuehn  
Donna & Scott Lachniet  
Mark Lee  
Leelanau Township Community  
Foundation  
Left Foot Charley  
John Lowery  
Anne Magoun & Bruce Borchardt  
Boden Mansfield  
Cathy Markes  
Charlie & Ginny McCord

Michigan Botanical Society:  
Robert Ayotte  
Michigan Department of Natural  
Resources Forest Resources Division  
Michigan Hydro Relicensing Coalition:  
Bob & Debbie Stuber  
Dennis Mikus  
Mission View Farms:  
Bob & Dina Richard  
John & Cindy Morrissey  
Nature's Reflections:  
James & Sarah Haveman  
Peter & Susan Neithercut  
Douglas Dirk Nelson  
Richard & Penny Nelson  
Jeff & Karen Newman  
Irv Nichols  
John & Lani Ochs  
Old Town Playhouse  
Old Trail Foundation:  
Pete & Anne Eardley  
Oleson Foundation  
onX Maps  
Mark O'Reilly  
Grand Traverse Regional Land  
Conservancy  
Little Manistee Watershed  
Conservation Council  
Overmyer Farm & Forest:  
Leonard & Nathaniel Overmyer  
Packaging Corporation of America  
Patagonia, Inc.  
Douglas Patulski  
Pere Marquette Watershed Council  
Dan & April Postelnick  
Amanda Pry  
QIAGEN: Jeff & Tara Christiansen  
Mark & Kimberly Rapanos  
Thomas Reeber  
Robert Reider & Susan McCraven  
Elizabeth Rodgers  
Rotary Charities  
Rudy & Jill Ruterbusch  
Edward Rutledge  
Kathleen Ryan & Paul Rutledge  
Paula Sagala & Karen Wells  
John Sak  
Theresa Schurman  
Clifford & Kristine Schwandner  
Scientific Anglers  
Anita & Chris Scussel  
Tom & Sue Seefried  
Serra Family Foundation  
James Sherrill  
Don Shook  
Dick & Deb Shotwell

Mike & Penny Sidor  
 Jeff & Sue Silagy  
 Matt & Kim Skeels  
 Robert & Marilyn Smith  
 Jim & Sylvie Squier  
 Pete & Lisa Stalker  
 Christopher Steffen  
 Fred & Deb Steketee  
 Dave & Terry Stellingworth  
 Leroy Strait &  
 Nancy Schumacher-Strait  
 Terry & Kristina Stranz  
 William & Cheryl Sundstrom  
 William & Mary Ten Eyck  
 Carolyn & Kelly Thayer  
 The George Fund  
 The Korff Foundation  
 Jenifer & Matt Thomas  
 Daniel & Stephanie Tresemer  
 Trout & Salmon Foundation  
 Trout Unlimited  
 U.S. Fish and Wildlife Service Great  
 Lakes Basin Fish Habitat Partnership  
 U.S. Fish and Wildlife Service National  
 Fish Passage Program  
 Diane & John VanderVeen  
 Matthew VanHoef  
 Gary Vogel  
 Carol Waters  
 R. Scott & Sue Webb  
 Harry Weller  
 Wesley & Claudia Williams  
 Ron Williamson  
 Mike & Kathy Winczewski  
 Victor & Nila Withee  
 William Wobbekind  
 Steve Woodrow  
 Leonard & Sue Worden  
 William Wuerthele  
 Yoga for Health Education:  
 Michael & Libby Robold  
 Bruce Young  
 Mark Zollner  
 Thomas Zurfluh

#### Memorials & Honorariums

In memory of Joani Braun  
 from James Braun  
 In memory of Mark Bronson  
 from Cheryl Bronson  
 In memory of Christopher David  
 Loyet from Jeff & Tara Christiansen  
 In memory of Ray Schmidt  
 from Phyllis Cupp  
 In memory of Dick Schorffhaar,  
 Great Lakes Fisheries Biologist  
 from Bill Deephouse  
 In honor of Edwin & Carol DeVilbiss  
 from Rob & Allison DeVilbiss  
 In memory of Tom Rozich  
 from James Grant

In honor of Carol Seimon  
 from Dave Grebner & Andrea Yokich  
 In memory of John Karsies  
 from Gary & Barbara Gritter  
 In memory of Elaine Marie Harris  
 from Ed Harris  
 In memory of Sid Blaauw  
 from Ronald & Cathy Helmboldt  
 In memory of Rennie E. Hughes  
 from Ms. Christine Hughes  
 In honor of Antrim Conservation  
 District from Abdeen Jabara  
 In memory of Ray Schmidt  
 from Catherine & Paul Jakubiak  
 In memory of Judith E. Johnson  
 from William & Jacquie Johnson  
 In memory of George Kaminski  
 from Anne Kaminski  
 In memory of Ray Schmidt  
 from Ann Kasdorf  
 In memory of Ray Schmidt  
 from Ted Kraimer  
 In memory of Chris Loyet from Steve,  
 Terri, Suzanne Ludwig  
 In memory of Ray Schmidt  
 from Gary Marek & Ann George  
 In memory of Ray Schmidt  
 from Joanne McDonald  
 In memory of Jack Fuller  
 from Debra Moskovits  
 In memory of Ray Schmidt  
 from Scott & Barb Myckowiak  
 In memory of Jackson D. "Lonnie"  
 Overmyer from Leonard &  
 Nathaniel Overmyer  
 In honor of Gerald Bierens  
 from Michelle Potter  
 In memory of Christopher Loyet  
 from Mark & Elizabeth Reinders  
 In memory of Chris Loyet  
 from Laila Resper  
 In memory of Sue Whitefield  
 from Michael & Libby Robold  
 In memory of Thomas J. Rozich  
 from Michelle Rozich & Ryan Molitor  
 In memory of Kristin Sak  
 from John Sak  
 In honor of Paul Bigford for his  
 services with the P.M. Watershed  
 Council from Dick Schwikert  
 In memory of Jim Shepherd  
 from Christine Shepherd  
 In memory of Ray Schmidt  
 from Kate Smith  
 In memory of Ronald T. Stempin  
 from Barbara Stempin  
 In memory of Ray Schmidt  
 from Bob & Debbie Stuber  
 In honor of Richard Hinterman  
 from Kim & Virginia Virkler  
 In memory of Christopher Loyet  
 from Andy Vitale  
 In honor of Lara Treemore-Spears  
 from Emily Votruba  
 In honor of Frederick Waldschmidt  
 from Susan Waldschmidt

In memory of Jay Yarwood from  
 David Wallace & Heidi Wallace-Bolger  
 In memory of Chris Loyet  
 from Matt Ward  
 In memory of Dennis S. Wisniewski  
 from Trevor & Kim Wisniewski  
 In honor of Walter Weaver  
 from Victor & Nila Withee  
 In memory of Christopher Loyet  
 from Leslie Wood  
 In memory of Marshall W. Rosenow  
 from William Wooden  
 & Susan Rosenow Wooden  
 In memory of Chris Loyet  
 from Todd Zipfel

#### Conservation Sustainers

Wayne Andersen  
 Tony & Susan Baynard

Chuck & Amy Beyer  
 Arthur Curtis, III  
 Mike Donahue  
 & Jennifer Read Donahue  
 Ray & Mary Emerson  
 Colleen Grogan & Michael Grosse  
 Susan Hayes Affholter  
 Tim & Pam Henry  
 Shawn Kanouse  
 John & Ann Kelley  
 Suzie & Wade Knoll  
 Michelle Rozich & Ryan Molitor  
 Kathleen Ryan & Paul Rutledge  
 Lee & Jane Schwocho  
 Emily Votruba  
 Nate Winkler & Jenna Scheub



**Our cherished River Care funders propel multi-year and tremendously impactful projects. A special thanks to these funders for their unwavering support: Packaging Corporation of America, Serra Family Foundation, Andrew R. and Janet F. Miller Foundation, Walters Family Foundation, The George Fund, The Grand Traverse Band of Ottawa and Chippewa Indians, Bell's Brewery, and The Brookby Foundation.**

## Yes! I Want to Support CRA and Practical Conservation!

- ▶  One-Time
  - ▶  Monthly
  - ▶  \$100    \$50    \$35
  - \$500    \$250
  - \$5,000    \$1,000
  - Other \$ \_\_\_\_\_
  - ▶ Options
  - I wish my support to be anonymous
  - Employer match - send forms to CRA
  - In memory of \_\_\_\_\_
  - In honor of \_\_\_\_\_
  - A gift for \_\_\_\_\_
- Please send contact information to CRA.

▶ Name/Business: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City/State/Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Cell: \_\_\_\_\_  
 Email: \_\_\_\_\_

▶ Credit Card:  Visa    MasterCard    Discover    AMEX  
 Card No.: \_\_\_\_\_  
 Expiration Date: \_\_\_\_\_  
 Signature: \_\_\_\_\_

- ▶ Make checks payable to **Conservation Resource Alliance**
- ▶ Donate online at [www.rivercare.org](http://www.rivercare.org)
- ▶ Please consider leaving a legacy of conservation through a bequest in your will or trust. Contact us at **231-946-6817** or [info@rivercare.org](mailto:info@rivercare.org).

**Thank You** CRA is a 501(c)(3) nonprofit and all donations are tax-deductible to the fullest extent of the law.





## Conservation Resource Alliance

10850 TRAVERSE HWY  
SUITE 1180  
TRAVERSE CITY, MI 49684

231-946-6817  
info@rivercare.org  
www.rivercare.org

NON-PROFIT  
ORGANIZATION  
U.S. POSTAGE  
**PAID**  
PETOSKEY, MI  
PERMIT NO. 110

## – A Legacy Takes Root –

In July 2025, Dick Schwikert, the second president of the Pere Marquette Watershed Council (PMWC), a friend of CRA, and a proud old-timer, approached us with an idea: to honor Paul Bigford for his many years of dedicated service to the river he loves as president of the PMWC. Together, we chose to carry out this tribute through CRA's Wild Roots program, creating a living legacy through hands on restoration. By fall, plans took root.

Dick identified a parcel of USDA Forest Service land across from the Rainbow Rapids launch site as an ideal location. One of Paul's favorite fishing spots, the area had been heavily impacted by Emerald Ash Borer and was in need of restoration.

CRA developed a plan and enlisted support from the Pere Marquette Chapter of Trout Unlimited, PMWC, and SEEDS EcoCorps. With help from drift boat captain Walt Grau, who ferried the crew and supplies across the river, work began.

Together, the team planted a riparian buffer consisting of:  
**95 Cedars, 30 White Pines, 25 Swamp White Oaks  
25 Sycamores, 25 Black Willows.**

In time, these trees will form a shaded canopy that cools the river by blocking direct sunlight. Their leaves will feed

macroinvertebrates and enrich the ecosystem, while their roots anchor stream banks, reduce erosion and runoff, filter stormwater, and reduce flood risk.

Like Paul Bigford's steady stewardship, this restored stretch of riverbank will continue giving back to the Pere Marquette for generations.



**Volunteer Wayne Andersen helps transport tree cages during the planting event.**