

Aquatic Invasive Species (AIS) Prevention and Mitigation Takes a Village

Montana Fish, Wildlife, and Parks (FWP) recently announced that no evidence of invasive mussels was detected in Montana waters last year. This finding, a key takeaway of the 2025 Montana FWP AIS Prevention Report, gives us an opportunity to reflect and celebrate the way people come together across the state to work towards a common goal: protecting our Montana waters.

Montana FWP and its partners conducted a total of 125,928 watercraft inspections in 2025. Analysis of last year's inspections showed that boats intending to launch in Montana had points of origin that extended throughout the entire country, representing an extensive risk of invasive introductions (*see figure on next page*). While these threats are broad, invasive mussels perfectly highlight the need to remain vigilant. Last year, 21 mussel-fouled boats were intercepted before launching in Montana waters. Such a small number shows that the vast majority of people understand how important it is to Clean, Drain, and Dry their watercraft and gear, but it also demonstrates the importance of not becoming complacent. Just one of those mussel-fouled boats slipping through the cracks could establish an infestation.

Long-term data from Montana FWP demonstrates that Whitefish Lake is among the top 15 destinations for mussel-positive waterbody traffic in Montana, with the 4th highest percentage of watercraft intercepted within 30 days of last launching in infested waters—the period that hitchhiking mussels can survive removed from water. This high threat level means it is important for us to do our part locally. In 2017, WLI partnered with the City of Whitefish and Montana FWP to establish inspection stations at City Beach and Whitefish Lake State Park. In 2025, the two stations completed 1683 watercraft inspections. The local effort also includes a decontamination station that performs preventative decontaminations on high-risk watercraft.

WLI further contributes to local AIS prevention through efforts like the Northwest Montana Lakes Network (NMLN), a citizen science program managed in collaboration with Montana FWP that monitors 41 lakes across the area. **(Continued on Page 2...)**

IN THIS ISSUE

AIS Prevention and Mitigation.....	1
Wetland Trail Annual Closure.....	2
Insights from NMLN.....	3
Winter Photos.....	4
WLI Supporters.....	5
Become a WLI Member.....	6

Past issues of LakeFront at www.whitefishlake.org



The City of Whitefish AIS Prevention and Decontamination Station stands ready for another season of protecting the Whitefish Lake ecosystem.

Whitefish Lake Institute
335 Spokane Avenue, Suite B
Whitefish, MT 59937

Voice: 406.862.4327
info@whitefishlake.org
www.whitefishlake.org

Founded in 2005

Mission Statement

The Whitefish Lake Institute is committed to science, education, and aquatic resource initiatives to protect and improve Whitefish Lake and Whitefish area water resources today, while providing a collective community vision for tomorrow.

Board of Directors

Andy Feury, President
Camisha Sawtelle, Vice President
Hank Ricklefs, Secretary/Treasurer
Brian Averill
Lori Curtis
John Muhlfield
Monica Pastor
Ryan Richardson
Mitch Robinson
Todd Votteler

Science Advisory Committee

Sam Bourret, Chair
Megan Chaisson
Matt Church, Ph.D
Richard Menicke
Ryan Richardson
Eric Sawtelle
John Wachsmuth

Staff

Mike Koopal: Founder, Executive Director
Eric Parker: Program Coordinator
Jen Parsons: Finance & Operations Manager
Cassie Roberts: Limnologist

LAKEFRONT is published quarterly by the
Whitefish Lake Institute

Cover photo courtesy of Cassie Roberts



@whitefishlakeinstitute

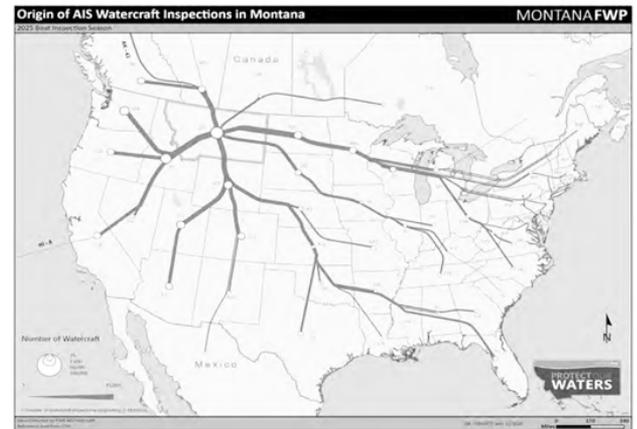


Whitefish Lake Institute

(...continued from Page 1) Each year, WLI offers a training course to our volunteers that covers AIS detection. This year, we are excited to expand that training to include iNaturalist, an interactive app that will better equip our volunteers for visual AIS detection in the field. Additionally, during their annual visit to the program lakes, the WLI Program Coordinator collects an AIS microscopy sample for Montana FWP's Early Detection and Monitoring program. These efforts to empower and educate the broader community also benefit Whitefish Lake, with each of the 41 network lakes acting as a node for early detection and, hopefully, eradication before an invasive species becomes established and spreads throughout the region.

A similar framework proved its merit in 2011 when Eurasian watermilfoil (EWM) was found in Beaver Lake. WLI worked quickly with the City of Whitefish and Montana FWP to eradicate the pernicious invader by installing benthic barriers and conducting a suction dredging campaign. Efforts to prevent the spread of EWM to Whitefish Lake and other local water bodies have been successful. Removal surveys and testing completed in 2025 by Montana FWP confirmed that EWM remains isolated to a few plants by the Beaver Lake boat ramp. Notably, the FWP Dive Team detected and removed EWM from a nearby patch of shoreline where it was growing amongst native submerged and emergent vegetation. Follow-up surveys will continue in Beaver Lake into the future.

From securing funding for special projects like the Whitefish AIS Prevention and Decontamination Station to empowering local volunteers to actively monitor their waters, WLI has a long history of working with our partners and the community to protect the Whitefish Lake ecosystem from invasive species, and we continue expanding our efforts on this front. WLI has a partnership with the City of Whitefish for Environmental DNA (eDNA) sampling on Whitefish Lake and other local waterbodies to monitor for AIS, and a partnership with the US Forest Service to sample for eDNA on 9 lakes of interest in the area, further solidifying our detection network across the region.



A map of origin for watercraft inspections in Montana last year shows risks reaching in from across the country, underscoring the need to stay vigilant against invasives and prevent their establishment in our waters. From the Montana Fish, Wildlife & Parks AIS Prevention Report 2025.

Wetland Trail - Annual Closure



Please note that we are nearing the annual March 15 to May 1 trail closure. This closure will help maintain the structural integrity of the trail, protect native vegetation, and avoid potential spring wildlife/human conflicts. Until then, enjoy your winter wandering along the trail.

From Nutrients to Algae: Insights from Northwest Montana Lakes Network Monitoring

For over a decade, Whitefish Lake Institute has been running the Northwest Montana Lakes Network (NMLN), allowing us to track long-term water quality trends in the lakes across the program.

Recently, WLI looked at trends in nutrients and chlorophyll. Increases in nutrients such as phosphorus and nitrogen are often signs of human influence on a waterbody. Fertilizer, leaking septic systems, and increased runoff from areas without riparian buffers can all contribute to increased nutrient levels in a lake. Although increases in nutrients are not always visually noticeable, when nutrient levels increase, organisms such as algae can absorb these nutrients and grow, causing greener shorelines and lower water clarity. Algae, like plants, contain a pigment called chlorophyll, and by tracking chlorophyll levels in the water, we can track algae growth in a lake over time.

Lakes in the NMLN program are diverse, with different natural nutrient and chlorophyll levels. Geology, size, depth, and watershed type all influence a lake's baseline condition, making it most meaningful to compare a lake to itself over time, rather than comparing one lake to another. Larger, deeper lakes hold more water and are better at buffering human impacts, while smaller lakes can be more sensitive to shoreline changes that affect water quality.

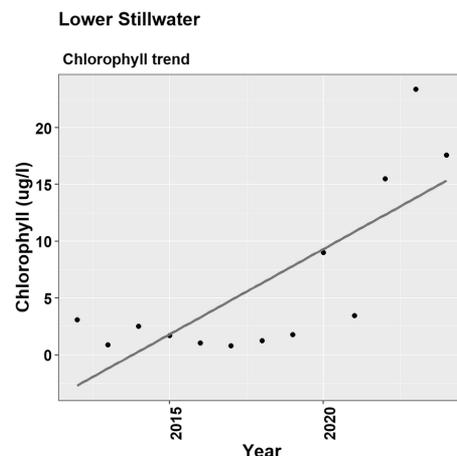
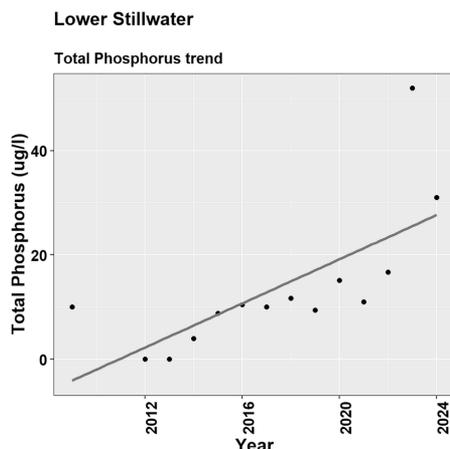
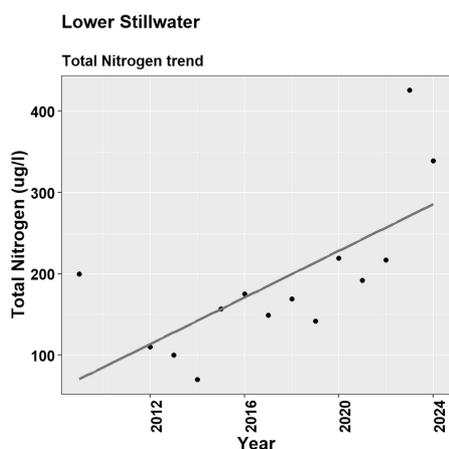
The NMLN program currently includes 41 lakes, all sampled annually for these parameters in July or August with the help of volunteers.

It's important to note that we sample each lake at centrally located deep points, but most nutrients—especially human-caused—enter from the shoreline. In nutrient-limited lakes, like many Montana lakes, these nutrients may be quickly absorbed by organisms in the nearshore area and never reach the center of the lake, which means that the true increases in nutrients may not always show up in our data.

“Once nutrient levels increase, organisms such as algae can take up these nutrients and grow, causing greener shorelines and lower water clarity.”

Data from the NMLN program shows that nutrient levels are rising in some lakes. Phosphorus is increasing in 21 lakes, and nitrogen in 18. Chlorophyll is on the rise in four lakes, all of which have higher phosphorus, and three of which show increasing nitrogen. Only three lakes are experiencing simultaneous increases in nitrogen, phosphorus, and chlorophyll. The good news is that most lakes (38 in total) don't show this “triple trend,” giving them a stronger chance to reverse nutrient increases and protect water quality.

Volunteers play a critical role in the success of the NMLN program. If you'd like to make a difference in protecting northwest Montana's lakes, consider joining us as a volunteer—you can help track trends, protect water quality, and keep these lakes clear, blue, and healthy for years to come. Email eric@whitefishlake.org to learn more.



Three scatter-plot graphs use linear regression to show increased trends in nitrogen, phosphorus, and chlorophyll over the years.



A pair of eagles nest in the Averill's Viking Creek Wetland Preserve.



Meeting of the minds: former and current staff briefly rendezvous at the WLI office.



WLI Limnologist, Cassie Roberts, and Finance and Operations Manager, Jen Parsons, maintain a game camera.



WLI ED, Mike Koopal, and Program Coordinator, Eric Parker, locate a game camera under a tree that toppled in the January windstorm.



Springlike conditions were observed in early February at the Averill's Viking Creek Wetland Preserve.



Mike gives Eric a rundown of the program boats.

Whitefish Lake Institute Supporters

Active Members who have donated for 10+ years since 2005.
Active Members who have donated for 5-9 years since 2005.

Sustainer (\$20,000 and above)			
The Lodge at Whitefish Lake-Averill Family			
Fellow (\$5,000 and above)			
Collaborative Water Resolution, LLC Collins, John & Anne	Hoag, Jim & Anna Jones, Bill & Ann	Pastor, Monica Shennan, Janna & Jamie	Taylor, Don & Ruth Whisler, Steve & Ardy
Guarantor (\$1,000 to \$4,999)			
Abell, Charlie & Susan Atkinson, Richard & Carol Big Sky Chapter ACBS Brisler, Tara & Matt Burke-Feldman Family Fund D.A. Davidson Gordon, Richard & Cheryl Watkins	Gregory, Joe & Cindy Gustafson, Mike Ila B. Dousman Fund, Inc. Martel Construction McCann, Paul & Janice Muhlfeld, John Nelson, Marilyn & Rick	Quinn Family Fund Raudabaugh, Joseph & Beverly Reich, Victoria Ryan, Bill & Bev Scott, Toby Shors, Heidi & Andy Stack Financial Management- Jim & Lisa Stack	Sullivan, Rick and Judi SWCA Environmental Consultants Tamarack Foundation The Bear Stone Fund Valner, Alberto and Stacy Whitefish Credit Union Young, Alison
Visionary (\$500 to \$999)			
Baldridge, Summerfield and Julie Blair, Ric & Dawn Bulkley, Brad & Ann Campbell, Luther & Dorothy Casey, Maureen Center For Native Plants Cleveland, Gail & Bruce Tannehill Covey, Mike & Stacy	Daniels, Matt & Kate First Interstate Bank Fletcher, Greg Forestration, Inc. Gordon, David Grady, Dave & Linda Engh-Grady Hoffman, Arden Houston Point HOA	Jenson, Mike & Barb Jungerman, Mark and Miller, Molly Kasper, Greg and Connie Kelly, Micah Kelly, Pop Pop Koopal, Craig & Ann Kramer Family Fund Lion Mountain Homeowners	Newton, Doug & Amy Johannes Norheim, Robert and Elizabeth Repke, John Ricklefs, Hank & Sue Salt, Deb & Tim Solberg, Dick & Jane Steck, Ann Stinson Family Foundation
Benefactor (\$250 to \$499)			
637 Nature Trail, LLC Abell, Tarn & Marybeth Anderson, Julie Anderson-Montgomery Consulting Engineers Averill, Brian & Fabienne Avenill, Sean Bailey, Michael & Kathleen Bauch, Duane & Valerie Bayne, Bill & Betsy Blake, Cameron & Sandy Gray Brown, Mark and Carissa Bryan, Kirk Bucher, Charles and Sandra Cowett, Mark & Connie Coyne, Wendy	DM Miller Properties, LLC Elskey, Greg and Heather Elsky, Greg and Heather Erickson, Bart & Carole Farm to Fork Frost, Michael & Patti Gersh, Judah & Tanya Guo, Effie Harding, Tom & Sue Hauf, Ron Haymon, Robert & Barbara Krausekhopf Heinrich, Klaus & Joaqueria Hildner, Richard & Suzanne Daniel Hobson, Carmen Kelsey, Aaron and Kim	Koopal, Mike & Mae Kovach Family Trust Lanning, Matthew and Judy Ross Little Bitterroot Lake Association Lyon, Lawrence & Yvette Morgan, Devonna Morsett Whitefish Lake Services Nelson's Ace Hardware Paone, Bill & Robin Phelps, John & Melissa Pure West- Sean Avenill & Matt Buckmaster Roberts, Joe and Nancy Robitzski, Steven & Steph Rowles, Roger & Val Konnerup Schuber, Charlie & Nancy	Schultz, Ralph Scott, Peter & Lori Asplund Short, Dan & Kim Stanley, Christine Steve William and Kristen Riter Stover, Matt and Kim Strand, Tim and Sukey Pfliman Sutter, Ronald & Margó Svennungsen, Nancy & Mark Tate, Bruce & Susan Ward, Benjamin and Katherine Whitefish Marine & Powersports Wollett, Fritz
Leader (\$100 to \$249)			
Abell, Koel & Lazette Anderes, Elise & Stefan Appelgren, Brent Bennett, Bob & Caryl Bowen, Asta Chadwick, Doug & Karen Reeves Chauner, Linda Chauner-Niendorf, Cyndi Christian, Steve & Doreen Cox, Besty & Woody Cuffe, Mick & Lanette Curtis, Kitty & Stewart Stadler Curtis, Walt & Lori Dakin, William & Sarah Danczyk, Gary & Annell Daniels, Scott & Karen Eckert, Will Eiser, Monica & Jim Ennis, Felicia Erickson Torgerson, Courtney Farrar, Kaitlyn Feury, Andy & Terri Flag Nor Fail, Inc.	Fletcher, Sue Griesel, Doug & Rebecca Briber Gunderson, Greg & Catherine Hartman, Sandra Holdhuson, Chris & Linda Saul Ingelfinger, Franz & Cynthia Jordan, Wink & Joy King, John & Maureen Klever, Kevin & Pat Knechtel, Murray & Deb Bartlett Labrie, Bill & Alice Lieser, Ed & Susan Long, Ben and Karen Nichols Luedke, Bret and Ruth Lundgren, Bill and Diane MacCormick, Allison Malletta, Sue & Joe Martin, David & Lynne Metcalfe McCartney, Sierra & Brett Svetlik McCoy, Abe & Shelley McDermid, David McDonald, Teague McIntyre, Sherry	McKimon, John and Rosemary McMahon, Kate & Bob Horne Miller, Ronald and Jean Montgomery, Don and Terri Moore, Pixie Moore, Shawna & Jamie Morrison, Sharon Morton, Ted & Bambi Neff, Samuel & Ruth Noffsinger, David & Michelle Oehlerich, Eric and Anne Olson, Ron & Linda O'Neil, Christy Parsons, Andrew and Alyssa Parsons, Larry and Val Paslawsky, Andrew & Kim Sands Peschel, John & Laura Pierson, Debbie & Mike Regev, Nir & Cherie Robinson, Mitch & Jennifer Roosa, Karl & Elaine Rothberg, Marty Sanderude, Scott and Julie	Saunders, Peter and Karen Sawtelle, Bill & Linda Sawtelle, Cami Shaw, Pam Sheffels, Marcia Small, Lindy and Stephen Shapiro Smith, Lucy Southers, Merry Lynn Stearns, Chuck & Rita Sullivan, Colleen Sunshine, Stephanie Sweeney, Frank & Paula Swope, Jean Anne The Landlord Trifunovich, Dragi Trousdale, David & Jeannine Van Laere, Sabine VanKoten, Doug Walls, Stephanie Whitefish Lake Golf Club Whitefish Lake Restaurant
Sponsor (\$50 to \$99)			
Akey, Lin and Kathy Albert, Chris and Sophie Anderson, John & Shani Apani Askevold, Gerald Balaska, Teri Baldwin, Mike and Virginia Bansak, Tom & Anne Barham, Michael & Kristi Basta, Michael & Sue Behron, LLC Belcer, Ted and Durae Birch Hills Homes Bisharat, Ibrahim & Martha Bourret, Sam and Mikaela Bruzek, Bill & Judith Cameron, Chuck and Vita Wright Cassidy, Dan and Kate Chaisson, Megan Cohen, Connie	Corwin, Bill & Tina Divoky, Terry & Dennis Ericson, Dave and Sarah Fanning, Michael & Jill Friel, Ryan Garside, Susan Gehni, Richard & Glenda Gunderson, Karen Haller, Bruce & Kaye Harrison, Ruth Hartman, Greg Holt, Mark & Chris Hunt, Leslie & Will Hyer, Gary & Jill Johnson, Claudine Kavanagh, John Keane, Leo and Gail Leonard Kermath, Lorne and Leslie Kibbe, Marion Kinonen, Rick	Kirk, Phil & Lesia Kuhl, Tanner & Stephanie Larsen, Arnold & Karen Lawson, Bob Lewis, Casey Lieftring, Bruce and Brenda Winkler Love, William & Catherine Madler, Marianne Magone, Larry & Barb Manning, Brian & Denise Menicke, Richard & Jennifer Asebrook Moffatt, Greg & Mary Anne Moll, Sue & Gaylen Moore, Janice Paul Moffatt Construction Pearce, Bryan and Danielle Rennie Family Ruffatto, Chris Saurey, Wayne & Marisa Van Lawick Schott, Brian & Lyndsay	Sheehan, Paul & Kendra Hope Smart, Mike & Timmie Smith, Dana Smith, Will & Bonnie Sobba, Beth Steitz, John & Carol Treadwell Streeter, Mike & Bonnie Sullivan, Gail Theissen, Dennis & Ginger Thomas, Rob & Darcy Vanderhorst, Eleanor Vine, Carrie & Tegen Wetzler, Matthew and Brandy Whitby, William & Karen Williams, Amy & Timothy Wilson, John & Marjorie Wogen, Stephen and Jenifer Woodruff, Nancy & Steve Thompson
Current Grantors & Research Funders			
City of Whitefish Flathead Conservation District	Montana Fish Wildlife & Parks United States Forest Service	Whitefish Community Foundation Whitefish County Water District	



Whitefish Lake INSTITUTE

335 Spokane Avenue, Suite B
Whitefish, MT 59937

Whitefish Lake Institute Membership Coupon

Yes! Please enroll my membership in the Whitefish Lake Institute, and send me the quarterly newsletter *LakeFront* to keep me informed of the current projects underway and issues being addressed by the Whitefish Lake Institute.

My check is enclosed

Visa  MasterCard  Discover 

Account #:

Expires: _____ 3-digit CVV code: _____

Name _____

Address _____

City _____ State _____ Zip _____

Email _____

Please check your membership category:

- Sustainer \$20,000 and above
- Fellow \$5,000
- Guarantor \$1,000
- Visionary \$500
- Benefactor \$250
- Leader \$100
- Sponsor \$50



Your contribution is 100% tax-deductible.

501 (c)(3) non-profit corporation



Whitefish Lake Institute ♦ 335 Spokane Ave Suite B, Whitefish, Montana 59937

Voice: 406-862-4327 ♦ www.whitefishlake.org

**Help Spread
Awareness of WLI's
Mission!**

Visit our website
www.whitefishlake.org
or stop by the office to
snag your WLI swag!



RENEW ONLINE



Your membership, done in seconds!