

THE GLQO WATERSHED JOURNAL



The Gull Lake Watershed includes Gull Lake, Little Long Lake, Grassy Lake, Little Gull Lake, Miller Lake, Bullhead Lake, Duck Lake, Backus Lake, Dake Lake, Elliston Lake, Mud Lake, Wintergreen Lake, and Prairieville Creek.

Cooperative Lakes Monitoring Program

By Mike Gallagher, Water Quality Committee

"The Cooperative Lakes Monitoring Program (CLMP) has been an important component of Michigan's inland lakes monitoring program for over 40 years, which makes it the second oldest volunteer monitoring program for lakes in the country. The primary purpose of this cooperative program is to help citizen volunteers monitor indicators of water quality in their lake and document changes in lake quality over time." That quote came directly from the MiCorps' website.

For a decade, GLQO volunteers have been monitoring Gull Lake and Little Long Lake. Each spring, within two weeks of "ice out" until early in September, they head out in the boat to gather data that helps determine the quality of the lakes. They measure the following:

- * Transparency which is a simple indicator of lake quality
- * Total Phosphorus to determine available nutrients
- * Chlorophyll a to determine the algae level which indicates food availability
- * Dissolved Oxygen an essential ingredient to support fish and vegetation
- * Temperature

We have also participated in two CLMP programs which help us to see changes in shorelines and aquatic vegetation. The Score the Shore program results were poor for Gull Lake but comparable to other densely populated lakes surrounded by homes and docks. There is much room for improvement. The third vegetation survey

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SUMMER 2018

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The Gull Lake Quality Organization is an all-volunteer organization. Our mission is to address concerns and provide education regarding the use of natural resources of the Gull Lake Watershed.

Kalamazoo County Sheriff offers Free Boater Safety Classes

There are three courses remaining for this season: July 14, July 28 and August 18. They begin at 8:30 am at Ziegler Motorsports Conference Room at 5001 Park Dr.

Certification is required of:

- Persons born after December 31, 1978 shall not operate a personal watercraft unless they obtain a boating safety certificate.
- The operators of a personal watercraft must carry their boating safety certificate and display it upon the demand of a peace officer.

For more details or to register, please visit www.kalcounty.com/sheriff.

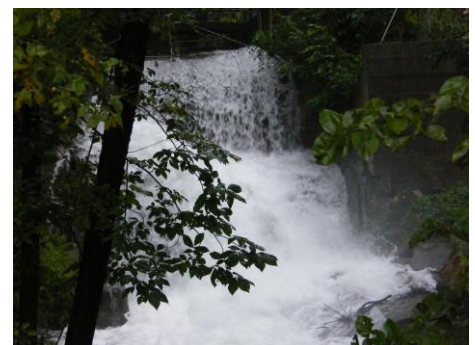
GULL LAKE DAM IN NEED OF REPAIR

We welcomed Jeff Price (pictured right), Gull Lake Association Board Member, to the Welcome to Summer Party to give us an update on the status of the dam. Incorporated in 1921, the sole purpose of the GLA is to own, maintain and operate the dam that controls the water levels on Gull Lake. An inspection of the dam is required every five years. Below are highlights from the results of the 2018 safety inspection and useable dam life assessment.

- The dam is in fair condition. While hazards presenting concern for immediate failure were not observed, the dam's condition has deteriorated and the GLA has identified a need to plan for its rehabilitation or replacement
- The dam was constructed in 1880, with repairs in 1921. There were additional minor repairs thereafter.
- The useful life is based on the structural, mechanical, and hydraulic components of the dam and the overall safety of the dam
- It is typically assumed that concrete and earthen components of a dam will last 50 to 100 years depending on construction materials and methods
- Physical and mechanical processes such as cracking due to freezing and thawing or wetting and drying cycles affect the dam
- With repair, some of the components may last an additional 10-20 years. Other portions of the dam, such as the downstream abutment wall, have deteriorated beyond repair and are assumed to be near the end of their useful life
- Chemical processes such as oxidation of metal components affect the gate house
- Biological processes such as growth of plants in cracks affect the integrity
- Seepage under the foundation or through the embankment was observed and will continue to progress and increase the uplift pressure on the wall and toe over time, increasing the risk for failure
- GLA believes that the embankment has reached its useful life and the dam is nearing the end of its useful life
- **Assuming no catastrophic failure occurs, GLA estimates the remaining useful life of the dam to be 10-20 years.**



Although there are several options for repair and replacement, the recommendation is the removal of the old mill foundation wall and spillway, regrading the downstream slope of the east embankment, and installation of a steel sheet pile spillway with stop logs. This alternative is preferred since it is more cost-effective and has fewer long term risks for failure. The Gull Lake Association is in the process of developing the funding plan for imminent replacement. The projected cost to replace the dam is \$670,000. There may be grant dollars available, however every lake enthusiast whether riparian or not should recognize the need to preserve the dam and with it the treasure of Gull Lake.



New Lake Survey Planned

By Mike Gallagher, Water Quality Committee

Back in 2013, the GLQO joined other Michigan inland lake volunteers and participated in training to learn how to do an aquatic vegetation survey. During July and August of that year we did our first survey of the entire lake. We found 26 species of aquatic plants and a couple initial growths of invasive species that caused concern and a need for more monitoring. Since then, our monitoring shows that these invasive species have not spread and quite possibly could have been in the lake for many years. But in 2015 a new aquatic invasive species was identified - Starry Stonewort. This led the GLQO to hire Kaiser and Associates of Kalamazoo to conduct another aquatic vegetation survey. That survey found the same 26 varieties of vegetation in the lake and also a small area of the lake where starry stonewort was growing. Today, that invader is spreading. So again, the GLQO has hired a professional firm, Progressive AE, to do another survey to determine the location and density of all vegetation in the lake. The results of this survey will help them help us to determine an action plan for managing the invasive vegetation in the lake. The survey is tentatively scheduled for the first week in July and new technology will allow all vegetation species to be located and mapped in just a couple of days. This map will be used to compare the results of future surveys and help us know if our management plan is working. GLQO continues its vigilant monitoring of invasive species in Gull and Little Long Lakes.

Cooperative Lakes Monitoring Program

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since 2013 began on July 3rd. A significant change in aquatic plants is the growth and spread of starry stonewort. Found in 2014, starry stonewort now stretches from the country club boat launch channel to the shallow bay to the north. Management of this invasive species is a main focus of the GLQO. The lake survey being conducted this summer will tell us the density, species and location of all plants in Gull Lake.

In ten years we have noticed only minor year to year changes with phosphorus and chlorophyll levels decreasing slightly. This is partially due to the state law prohibiting phosphorus in lawn fertilizers. Gull Lake is considered oligotrophic with limited nutrients, cool clear waters and dissolved oxygen from top to bottom until late in the summer. Little Long Lake is also oligotrophic but is shallower and becomes oxygen depleted at the bottom as the lake warms and becomes stratified in the early summer. You'll find the annual report here. <http://glqo.net/portfolio-item/water-quality-committee/>

With state funding available for the CLMP program through the summer of 2019 we will continue to participate in CLMP and keep an eye on the lakes we enjoy.

JOIN US FOR THE GLQO ANNUAL MEETING

GLQO invites you to the annual meeting on **Tuesday, August 7th** at the Kellogg Manor House. A social time* begins at 6:30 pm with the meeting beginning promptly at 7:00.

**Light hors d'oeuvres and cash bar.*

This year's "Welcome to Summer Party" was the best attended yet! Over 162 folks joined together to celebrate summer and to learn more about the Cooperative Lakes Monitoring Program, the DNR and Gull Lake Fisheries updates, the Gull Lake Dam Association and GLQO updates. Thanks to all our guests who attended! Special thanks to David Maturen, State Representative, Matt Diana, DNR Fisheries Biologist, Jeff Price, Gull Lake Dam Association Board Member, and Vicki Gesmundo, GLQO Board President, (pictured right) Bryan Beck, Fisheries Committee and Mike Gallagher, Water Quality Committee for presenting that evening.



State Representative David Maturen (pictured left) spoke about the State of Michigan budget process specifically as it related to the funding for the Cooperative Lakes Monitoring Program. The original 2019 budget did not include \$150,000 in funding for the program. CLMP relies upon state funds, along with fees from participating lakes, to manage the program. Thanks in part to the work of Michigan Lake and Stream Associations and concerned citizens, \$150,000 was earmarked for 2019. There is nothing planned for future state funding for CLMP yet. Thanks for joining us Representative Maturen!

The GLQO was fortunate to welcome Matt Diana, a Fisheries Biologist with the Michigan Department of Natural Resources (pictured right), to our Summer Party. Matt covered a number of fisheries topics, including:

- (a) a review of the fish species identified in the lake,
- (b) the past and current fisheries management plans and stocking initiatives, and
- (c) the interrelationship between the various fish species and their respective roles in the ecosystem of the lake.

In addition, Matt addressed a number of questions from anglers and riparian's, including comments related to the smelt population, northern pike size, and fishing tournaments. It was an informative and well-received presentation. Thanks to Matt for taking the time to speak with us!



“YOU and One Other”

Several years ago, GLQO launched an “annual” membership drive. In **late fall of each year**, a GLQO update and invitation to join are sent to current members, lapsed members, riparian’s, neighbors and friends. Hoping to catch any snowbirds who might have missed the fall mailing; we re-send to those who had not yet joined each spring.

At the Welcome to Summer Party, we had a few questions from folks who were not listed on the membership list. Essentially, we “reset” the membership list each January. We have found this process to be most manageable by our membership committee volunteers. It is important to us to recognize all those who support our mission.

This year’s membership drive theme is **“YOU and One Other.”** With nearly 1000 riparian’s in the watershed, we need **YOU and One Other** to join in support of the important work of the Gull Lake Quality Organization. Check out the membership list on page 6 and 7. Talk to your neighbors and friends. Encourage them to become a member! Join today at <http://glqo.net/join/>!

As was noted by Linda Shierlaw, GLQO Board Member, at the Welcome to Summer Party, GLQO and the Gull Lake Dam Association should have the **full** support of all riparian’s and lake users! If you are not yet members...join today!

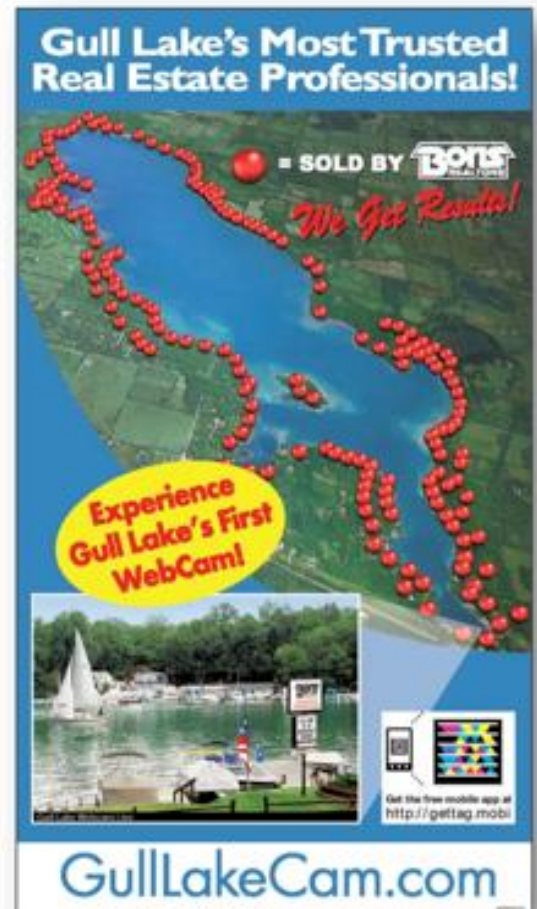


BUILD SOMETHING BETTER.

***Special Appreciation to
AVB for inviting GLQO
members to a private
showing of their parade
home on Gull Lake
Drive and for matching
money raised that day!***

***We thank the
2018 GLQO Corporate Members***

Abigail Hayden Interior Design, LLC
Banner Beachfront Equipment
Bell Tower Lake House Living, LLC
Boris Realtors
Gull Lake Country Club
Hawks Hollow Builders
Mac’s Garage, LLC
Serafino’s



We thank the 2018 GLQO Individual and Family Members

Anonymous (14)	Roger Buddig	Trey and Becky Eldridge	Fred and Nan Harrison
Heather Adams	Keith Buell	Ron Elenbaas	Jeff Price and Sue Harrison
Donald and Becky Adamski	Robert and Belinda Bullard	Bill and Betsi English	Curt and Beth Hartman
Ann and Gregg Agens	Rob and Amy Bulszewicz	John and Janis Etcorn	Henry B. Hawk
Scott and Holly Allen	Randy and Karen Byrd	Carol L. Fetterolf	Pete and Jo Hawk
Steve Allen	Gary and Marianne Caron	Wendy Field	Jim and Marsha Heath
Mike and Lou Ann Ambro	Jane Carpenter	Alice Fish	Rick and Shirley Hebert
Bud and Judi Baldwin	John and Teresa Carr	John and Lorelee Fisher	James and Patricia Heilenbach
Jack Bargo	Janet and John Carrig	Michael and Karen Fisher	Mal and Pat Hickok
Anthony Bartalone	Richard and	Ed and Nancy Fitzgerald	Elizabeth Hill
Barbara Brundage and	Joanne Chamberlin	Ron and Judy Flachs	George and Arla Hillebrand
Bill Barton, Jr.	John and Susan Chrisman	Rick and Pam Foster	Margaret A. Hogan
David and Margaret Battjes	David and Kathy Christ	Kai Free	Fred Holt
Rick and Kathy Beauregard	Gary Cirulli	Tom and Mary Jo Gallagher	Dennis and Kathy Hoorn
Bryan and Courtney Beck	Dorne Clark	Mike and Kathy Gallagher	Jim and Jane Horn
Mac and Susan Behnke	Wanda G. Clawson	Dan and	Curtis Hall and Susan
Lynn and Tom Belco	Bonnie Cleasby	Mary Beth Gallagher	Houseman
Margie and Bob Berres	Linda Cohen	John and Ann Gallagher	Robert Hughes
Dr. Kevin and Mary Beyer	Bruce and Donna Cohen	Pat and Deb Gallagher	Bruce Hutchinson
Karl and Pamela Beysiegel	Jim Collier and	Joni and Roger Ganger	Ed Ihling
Charles Bininger	Stuart Verseman	Jay Garside	Robert and Amy Isom
Margaret Black	Berry Collier	Chip and Miranda Garside	Phil and Carey Isom
Garry Harris and	Bob and Paula Cook	John and Sharon Garside	Fred James
Leigh Blackport	Larry and Judith Crittenden	Judy and Jamie Geary	John and Judith Jereck
Dick and Debbie Boris	Judith F. Croasdale	Dawn Gershinzon	Si and Shirley Johnson
Deb Ball and Rod Borton	Sally and Randy Crockett	Michele Libbrecht and	Steve and Peggy Johnson
Sherwood and	Jerry and Sharon Cross	Jay Gesmundo	Randy Johnson
Kathryn Boudeman	Dwight Curtenius	Jack S. Gesmundo	Susanne J. Johnston
Sherwood and	Robert L. Dahnke	Shahriar Ghoddousi	Dorothy Jones
Sharon Boudeman	Jim Dancy	Susan C. Gilmore	Darrell and Kim Junkins
Kappy Boudeman	Diann and Jim Danhoff	Steve and Elaine Ginsberg	Bob and Val Karam
David and Heide Boutell	Ken and Teri Davis	Don and Janet Gladstone	Mike Kasten
Jon and Susan Bowers	Philip and Terri Dawson	James Gorka	John and Kathy Keagle
Jeff Boyd	Jim and Barb DeKruyter	Gary Granger	Michael Keenan
Robert and Dolores Boyle	Dave and Marge Delano	Bjorn and Lori Green	Richard Keilen
Brenda Brenner	Sara and Rich Deskovitz	Susan Grimm	Steve Keith
Bob and Susan Britigan	Maxine DeVrou	Jim and Bonnie Grooters	Brad and Lauren Keller
Joseph and Kelly Brock	Pam Dewey	Francis Grubelich	John E. Kelly
Joe and Jane Brogger	Laurel and Mark Disney	David Gruss	Dave and Karen Kempe
Nancy L. Brookins	Larry Dopp	Frank and Diane Guarisco	Mark Kemple
Cleve and Sue Brown	John and Susan Doster	William Guzy	Loretta Kerman
John and Judi Brown	Donald and Jeree Drake	David and Michelle Halley	Charles Kettles
Michael and Sara Brundage	Lisa J. Duffy	Stephen Hamilton	Sue Markus and Rick King
Nick and Jane Bruns	Sid Durham	Pete and Margaret Hamlett	Todd and Betsy Kingma
Michael and Arlene Bryant	Dr. David Dvorak	Kathy Hanson	Fred and Pat Kinney
Laurie Hanson and Tracy Buck	Claire and Kris Eager	AJ and Lysanne Harma	Dean and Fran Kirk
Fred and Sharon Buckley	Bonnie and Loyal Eldridge	Pamela Harrington	Brandon and Betsy Klerk

Melinda Klerk	Patrick H. Murphy	Robert and Mary L. Ringemann	Gary and Karen Theisen
Rolf Kletzien	Mike and Susan Murphy	James C Ritz	Ron and Edna Thompson
Wes and Susan Kolb	Stephen and Christine Murray	Wendy Robbins	David and Carol Ticknor
Dave and Kay Koldyke	Brady/Barb Nitchman	Dean Rock	Bill and Carolyn Ticknor
Tim Kool	Markley Noel	Rob and Lori Rowe	Michelle and Chris Tracy
Garry and Claire Krouse	Martha Nolin	Bill and Jane Ryan	Elizabeth Travis
Shirley Kruger	Nancy L. Nordlie	Brad and Rene Saar	Kevin Trayer
John and Martha Kuch	Paul and Sonia Norman	Bob and Judy Sackett	Jerry and Margaret Trepanier
Denise and Mark Lancaster	Kim and Valerie Nuyen	Jim Sahli	Jim Turley
Richard L. Laninga	Robert and Kay O'Boyle	Julia B. Sanger	Gail Turluck
Stephanie Larsen	Sean and Nicol O'Brien	Tom and Judy Schau	Roger and Jeanne Turner
Jim and Linda Lass	Amy and Jeff O'Brien	Dick and Jean Schmitt	Jack Steen and Sarah Turner
Phyllis Lavene	Tom and Charlene O'Neill	Greg and Charlene Schofield	George and Gail Turner, Jr.
Camille Lawrence	Jerry and Max Orum	Robert Schuder	The Tyler Family
Patricia Lawrence	Craig and Sue Osborn	Ken and Pat Schultz	Bill and Ruth Ann Uggen
Joanne and John Lawrence	Edward Overbeck	Louis and Margie Schultz	Christopher Uggen
Barbara and	Nick and Barbara Owings	Jon and Carolyn Schutte	Brad Vandenberg and
Rafael Ledesma	Christine McCarthy and	Jim and Deb Scott	Amy Upjohn
Suzanne Leech	Bob Paksi	Sam and Susan Sefton	Sieto Van Dillen
Wendy Levy	Don and Ann Parfet	Tim and Judy Shank	Bo and Mel Van Peenan
John and Rita Light	William and Barbara Parfet	Tom Shannon	Michelle and
Christopher Light	Preston and Barbara Parish	Mike and Julie Sharp	Peter Van Wormer
Howard D. Linders	Donald and Sue Paulson	Charles and Mary Shaw	Dan Vander Meulen
Ron and Karen Logan	Michael and Frances Peikert	T.R. and Kathy Shaw	Tom and
Pat Long	Karol Peterson	Julie Shaw	Martha Vandermolen
Eric and Charlene Longman	Stephen E. Pew and	Esther M. Shaw	Edwin Vandersalm
John Luchsinger	Kathleen M. Keelan Pew	Jennalie and Joel Shepherd	John and Cathryn VanderSalm
Joe and Madison Lukeman	Kim Ziel and Robert Phillips	Shepherd Family, LLC	Dan and Carol Vogt
Judy Maier	Laura and Gregg Pierce	Richard and Johanna Shields	Jay and Stephanie Walbridge
Laura and Chris Maloney	Rene Poch	Linda Shierlaw	Jack and Jane Wallner
Ray and Carolyn Maly	Alison Pruitt	Bruce and Kathy Shurtz	Paul and Tiana Wang
Tom and Pam Mansager	Daniel Rackiewicz	Bob and Marilyn Simon	Donna and Dan Weaver
Vicki and Mike Marcinek	Martin and Carol Ranly	Greg Smith and Michele Smith	Weckler-Farwell
Linda Markham	Alison Thor and Gerald Rapp	Doug and Deidre Smith	Karen and Mark Weishaar
Shan and Nancy Martin	Ann and Jim Rawsky	Pete and Diane Czuk Smith	James Westcott
Ed and Nancy McCarty	Judah Gesmundo and	Don and Joyce Snow	Bob and Lori Wheelright
Tom and Valli McDougale	Paul Raynes	Margaret Spencer	Jerry Whitaker
Russ and Connie McFee	Robert and Margo Rebar	Carl and Cherie Spinden	David and Cindy Wiedemer
JB and Alba McKay	Bina Reed	James Stahl	Brook and Emily Wilke
Bob and Mary Mellema	Jack and MayBeth Reese	Edward Sternaman	Sally Williams
Amy and James Melvin	Eric and Martha Reid	Carole Stevens	Bruce and Jeannie Williams
Bob Millard	Dave and Michelle Reis	Carolyn Stiles	David Wilson
Kate Miller	Ronald Reisman	Charles Stoddard	Brian and Teri Winne
Sara Miller	Carol and Dave Renz	Harry and Tineke Stolt	Stephen and Linda Winquist
Kevin and Elizabeth Miller	Dave and Shelly Reynolds	Samuel Stone, JR	Chris and Carie Wolters
Dave Mitchell	Robert D. and Mary Jo Rial	Jim Stoneburner	John and Audrey Wood
Kay Gross and	Brian Rice	William D. Johnston and	Tammy Woodhams
Gary Mittelbach	Mark and Marymarie Rice	Ronda E. Stryker	Patricia Wright
Ron Mochizuki	William and Nancy Richardson	Jeff Tafel	Doug and Jackie Wunderly
Ron and Joan Molitor	Crystal and Rollin Richman	Carol Tedrow	Harold and Bonnie Zeigler
Christine L. Mueller			

The Gull Lake Quality Organization

P.O. Box 144 / Richland, Michigan / 49083

Website: glqo.net

Contact: info@glqo.net



Upcoming Events

Tuesday, July 24, 2018 at 7:00 p.m.

GLQO Board Meeting

Kellogg Biological Station: Stack Building

Tuesday, July 24, 2018 from 4:00 to 8:00 p.m.

MSU Dairy Open House

For More Information:

www.kbs.msu.edu/events/dairy-open-house

GLQO Annual Meeting

Tuesday, August 7, 2018

Social: 6:30 p.m. Meeting 7:00 p.m.

Kellogg Manor House

Cereal City Concert Band Lakeside Concert

Sunday, August 26, 2018

3:00 to 5:00 p.m.

Kellogg Manor House

2017-2018 Board of Directors

Vicki Gesmundo Marcinek (20-2)

President

Gary Mittelbach (20-1)

Vice President

Jim Collier (19-2)

Secretary

Don Paulson (20-2)

Treasurer

Bryan Beck (18-1)

John Etcorn (19-1)

Kai Free (18-1)

Kathy Gallagher (20-2)

Mike Gallagher (20-2)

Tom Gallagher (20-1)

Pete Hawk (19-2)

Joe Lukeman (20-1)

Steve Keith (20-1)

Robert Phillips (19-1)

Gregg Pierce (20-1)

Linda Shierlaw (19-1)

Brook Wilke (20-1)

*GLQO by-laws allow volunteers to serve as directors for two consecutive three-year terms. After each Director's name are two numbers: the **year** their current term expires, and the **number** of the current term.*

We welcome you to volunteer for committee work (of your choice) and to participate in our board meetings.

The Gull Lake Watershed includes Gull Lake, Little Long Lake, Grassy Lake, Little Gull Lake, Miller Lake, Bullhead Lake, Duck Lake, Backus Lake, Dake Lake, Elliston Lake, Mud Lake, Wintergreen Lake, and Prairieville Creek.
