<u>Minutes of 2023</u> Gull Lake Watershed annual meeting August 26th, Summer village of Gull Lake hall, 10am to noon

Meeting agenda: up to 79 people were on- line and approx. 120 in person, a record attendance. the minutes of the 2022 annual meeting were posted on our website.

- Agenda:
 - Approval of agenda and last year's minutes (<u>These were moved and seconded and</u> passed by unanimous vote).
 - Introduction, history of our Society and lake level update
 - Progress on adding filtration to restore the stabilization system-
 - Brief Final report on the stream bed, settling pond projects
 - Regional Sewage collection
 - The potential for aquifer and other sources of water for stabilization
 - Treasurers report
 - Membership and Communications report
 - Presidents report including Alberta health on the safety of the beaches
 - Nomination and possibly election of officers and board for the coming year.

Norval's introduction covered the history of our Society and a summary of lake level history,

- Society has been active since 1998 and current name adopted in 2014
- 1924 <u>Lake</u> level was 901.5, currently level is 898.5, approx. 3 meters below the early 1900's. This is in the record low levels of the lake historically
- Moratorium on pumping 2018, up for renewal this year

Paul Anderson provided a presentation on adding filtration to the existing stabilization system will be posted on the GLWS website.

Summary of history of lake levels

- Dam now 1.5 km from waters edge
- Target elevation 899.16, there is previous support from residents and summer villages for an increase in the target and trigger levels.
- Water pumped from 1975 to 2011 was 118 million m3 over 95% still in the lake, raising lake by 2 feet
- Description of the HCL report on the value of pumping
- Review of Prussian Carp issue, it can clone itself and outcompetes native species.
- Gov study concluded nothing could be done but didn't look at pressurized filter solution
- Government model <u>of the lake</u> overestimates, evaporation and is not a realistic <u>model</u>
- HCL work suggested new equilibrium at much lower level.
- SE side of lake watercourses were highest nutrient inputs into the lake
- Approx. 3000 properties around the lake with total assessment of close to \$1 B

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٠	Further falls in lake level could Reduce property values and have major tax,
	quality of life and economic fallout

- 2000 camping spots around the lake
- Over +2000 day users at the provincial park.
- Loss of nesting habitat for waterfowl and impacts to waterfowl for nesting.

Filtration Summary

- Based on support from Jason Nixon and MLA Ron Orr GLWS undertook pilot testing of filtration
- Both Minister of Environment at the time, Jason Nixon, representatives from Alberta environment, and Premier Jason Kenney attended our demonstration
- The technology is a pressurized Forsta Filter
- Eggs and beads couldn't pass through filter during all the tests
- Stantec report 100% successful in preventing transmission of eggs through filtration
- Alberta Agric, and Irrig, prepared to send application, to Alberta Environment re filtration.
- Political leverage may be needed due to severity of the situation if there are continued delays

SEWAGE COLLECTION summary with Rick Assinger

- Rick Assigner reports_interest by_municipalities shows support for a collection system around the lake but it would be expensive and require gov't funding_
 - This is not an imminent project but longer term in the view of Lacomeb county,
- The challenge with septic fields is <u>some areas</u>, including the summer village, is that they are located in sand which does not have the soil microbes to breakdown the waste,
- The sand also allows water to easily flow underground to the nearby lake, which is a concern for the systems discharging into sand.

There were several Questions and comments related to regional sewage collection,

- Pigeon lake's failing example, was due to poor engineering as it wasn't deep enough hence frozen and backed up in the winter
- 202 residents, 11m gallons per person was estimate for usage around the summer village of Gull Lake per year
- Concern was brought up about if there was a collection system, the sewage would be piped to Red deer for treatment and it would be lost to the drainage basin of the lake
- Point was brought up that this is equivalent to less than a day of <u>stabilization</u> pumping,

Jeremy Crawford Membership Social media and website campaign update,

- Membership has gone from around 40 people to close to 1800 since the spring,
- Henry Brander and Jeremy Crawford have worked tirelessly together to see this extraordinary increase in stakeholder membership in the Gull Lake Watershed Society
- We are kow on www.gulllakewatershed.ca, facebook Instagram, youtube and twitter

Lon Kasha described the potential Aquifer project as another approach to stabilizing lake level

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SUMMARY OF STREAM FILTRATION ¶

⁴ significant projects around the lake targeting high nutrient loading streams. ¶

Doef's Greenhouse, summer village project, Prins streambed restoration, Meridian Beach settling pond and a berm created near the stream passing through the Kerr land that keeps the water flowing through a defined stream bed. ¶

Total project grant money, \$100,000, total additional in-kind and contributions over \$130K additional \P

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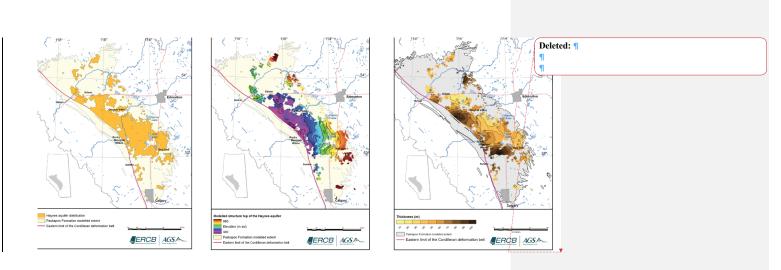
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 Supplemental volumes of water <u>for</u> Gull Lake <u>would be useful</u> due to unreliability of flow 	<u> </u>	Deleted: into
rates of the <mark>B</mark> lindman river		Deleted: are needed
Source would be deep Paskapoo formation - Haynes member		Deleted: b
would not affect the water wells around Gull Lake which are completed in the upper		Deleted: all
Paskapoo which is not hydraulically connected to the Haynes member.	and the second	Deleted: are from
12 trillion m3 volume of available water		Deleted: <#>Average formation depth 400 ¶
65,000 Km2 area of <u>aquifer</u> makes it 85% the size of Lake Superior		Deleted: acquifer
Upper Paskapoo is the main fresh water aquifer for the lakes, rivers, springs and well		Deleted: already
water in the area of Gull Lake		Deleted: r
massive Haynes formation has minimal competitive uses around Gull lake		Deleted: However, the lower and
99% water wells coming from upper not lower aquifer formation		Deleted: is
Lower Paskapoo under constant recharge		Deleted. 15
Per well cost average approx. 150-200K		
Total dissolved solids 500-1000 ppm Entire lake above the Paskapoo		
Gull Lake originally fed by Paskapoo, NO nutrients in water		(Moved (insertion) [3]
Top of Haynes 600 feet below surface 700 meters thick west of Gull Lake		(Moved (insertion) [5]
1000-2000 m3 per day per well		
Costs 200-400K per well pair		Moved up [3]: <#>700 meters thick west of Gull Lak
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ENTIAL LOCATION FOR WELLS FOR AQUIFER AROUND GULL LAKE WITH POWER		Deleted: O
		Execution Company Company

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Streambed restoration: Craig MacLeod

There were 4 major projects that Gull Lake Watershed undertook with the \$100,000 grant from Alberta Resiliency Watershed funds.

• **PROJECT 1**: Approx. 32,000 cash and \$8000 in-kind was spent on the meridian beach settling pond project to settle nutrients coming from the nearby drainage area



• **PROJECT 2**: Ray Prins streambed retoration project. Total project cost \$15,000, Harvey Prins over \$5000 in kind and \$10,000 cash spent



 PROJECT 3: Summer Village settling pond providing nutrient settling for Weiss Street stream, which has one of the highest nutrients around the lake. Total cash cost around \$45,000 and \$3000 in kind contribution for Northside Construction and the land was donated by the summer village.



PROJECT 4: Doef Greenhouse settling pond. Total cost \$100K, Gull Lake watershed contribution \$10,400.



Presidents report. -- Norval Horner

- Long term involvement in lake sampling and monitoring of lake water quality
- Completion of the stream bed and settling pond projects
- Progress on the filtration although slow
- May require major fundraising but a relatively small amount of money given the valuation of properties around the lake
- major thrust on membership and communication membership increased from around 60 with 30 coming to the annual meeting now up to 1800.
- Looking to get more representation from some communities around the lake
- What's ahead
 - o get Carp filtration approved funded and installed
 - o Fund studies on other sources of stabilization water
 - o seek another grant for stream bed/settling ponds
 - o update constating docs and charitable status
 - Coordinate with ALMS and the RDRWS

O Continue lake water sampling		Formatted: Space After: 8 pt, Line spacing: Multiple 1.06
other suggestions and ideas engage HCL on aquifer study_		li, Bulleted + Level: 2 + Aligned at: 3.17 cm + Indent at: 3.81 cm
 Meeting at end of August with Alberta Environment and Alberta 	and the second	Deleted: Key Next steps for Gull Lake Watershed Society:
Agriculture and Irrigation for next steps		
 Add people from membership list to committees, please contact the 		Formatted: List Paragraph, Indent: Left: 3.81 cm
watershed society if you have a passion to help		Deleted: <#>engage HCL for aquifer study¶
Treasurers prelim. report to the GLWS annual meeting		
Information provided by Doug Bradley to Norval Horner		
this report is not quite final as our year end is not till the end of August and so we haven't received a		
final bank statements.		
Incoming bank balance Sept 1, 2022 \$16,030.03 Expenditures on watershed resiliency projects \$10,452.75		
this was all spent on one remaining settling pond project which was done in cooperation with Doefs		
greenhouses where they spent over \$100,000 and the GLWS paid the above share.		
There were some other small expenditures and interest		
Bank balance as of June 30, 2023 \$5344.67		
The society has no other assets other than our bank balance and at this point no other liabilities. Our		
watershed resiliency grant has been spent and the reports have been provided to the agency that		
provided the funding.		
In the interest of full disclosure the society also incurred expenses for a study by Stantec on the viability		
of the filtration but these costs (approx. \$14,000) have been covered directly by Inshore Developments		
Ltd. on behalf of the GLWS. We will decide prior to our year end if we will include them in the Society's		
statements or not. For simplicity probably not as they did not go through our accounts.		
Doug has offered his resignation as his health does not allow him to continue his treasure and		
his resignation was accepted.		
Acceptance of the treasurers report was moved and seconded and passed		
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The following individuals were nominated to serve on the board for 2024		Formatted: Normal, No bullets or numbering
Norval horner - President		
Paul Anderson - Past P		
Keith Nesbitt – VP		
Craig MacLeod – treasurer		
Lon Kasha – director and chair Aguifer committee		
Henry Brander – membership director		
Jeremy Crawford - Communications director		
Kent Coleman – director		
Wendy Konsorada – director environmental		
Lance Dzaman - director		
Marc Godin - director		
there were no nominations from the floor,		Formatted: Font: 12 pt
Retiring with appreciation: Doug Bradley former treasurer, Glenn Fraser, Brad Turner		Formatted: Font: Bold
In accordance with our normal policy the signing offers will become the president Norval		Formatted: Font: Bold
Horner and the new treasurer Craig MacLeod		

Glenn will stay on to work with the aquifer committee

<u>A</u> MOTION TO APPOINT THE NEW BOARD<u>was moved, seconded and passed unanimously</u>: passed,

NOTE: We are still looking for a secretary to replace Craig MacLeod, who is moving to Treasurer

Motion to Adjourn 12:05 pm.

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10 directors

Glenn Fraser will help Lon with Aquifer project ¶ Retiring: Doug Bradley, Glenn Fraser, Brad Turner