

#### **Lakeland Industry and Community Association**

**■** Box 8237, 5107W - 50 Street, Bonnyville, AB T9N 2J5

#### **LICA Watershed Committee**

#### **Meeting Minutes**

Tuesday, September 26, 2023 1:00 p.m. - 4:00 p.m.

#### **LICA Boardroom and Microsoft Teams**

Present: Richard Bourgeois

Clem Parenteau

Kelly Dion-McFeeters

Shawn Elgert Randi Dupras Roxane Bretzlaff

John Ilchuk

Amanda Avery Bibo

Abdi Siad-Omar (arrived at 1:07pm)

Kristen Berezanski

Robert Machatis (arrived at 1:32pm)

#### **Observers and Guests:**

Staff: Kayla Hellum, LICA Environmental Coordinator

Kristina Morris, LICA Executive Director

Eveline Hartog, LICA Administrative Professional Lori Jodoin, LICA Administrative Professional

Regrets: Bill Parker

> Kellie Nichiporik Annette Hobart

#### 1.0 **CALL TO ORDER**

The Committee Chairperson, called the meeting to order at 1:04 p.m.

- 1.1 **Territorial Acknowledgement**
- 1.2 <u>Vision, Mission, and Values</u>
- 1.3 Introductions

#### 1.4 Roll Call

The Chairperson reviewed attendance with the Committee. The Environmental Coordinator let the Committee know that Kellie Nichiporik accepted a new position for work and is unable to attend meetings during the day, so Amanda Avery Bibo, agreed to chair this meeting.

#### 1.5 Approval of Agenda

#### 1.5.1 September 26, 2023, LWC Agenda

#1 Moved by Roxane Bretzlaff AND CARRIED that the September 26, 2023, Agenda be approved as presented.

#### 1.6 Approval of Minutes

#### 1.6.1 April 4, 2023, LWC Minutes

#2 Moved by John IIchuk AND CARRIED that the April 4, 2022, Minutes be approved as presented.

#### 1.6.2 June 29, 2023, Email Update

The Environmental Coordinator shared the June 29, 2023, Email Update to the Committee for information.

#### 2.0 <u>NEW BUSINESS</u>

#### 2.1 Youth Water Council

The Environmental Coordinator presented the Youth Water Council information to the Committee for discussion. She pointed out that other watersheds have Youth Councils and asked the Committee if they were interested in exploring this for LICA.

One Committee member loved the idea and thought it was a great way to get youth involved. They approached a science teacher from Kehewin in regard to starting a science club. Another member asked if we have received any feedback from schools. The Environmental Coordinator said they did not, as she wanted to see if the Committee was interested first before moving forward. She is aware of several schools that have student environmental groups, which would be great groups to target.

Through discussion, committee members felt that it would be a good idea to create a Terms of Reference. It could be used as a guidance document for the youth to operate within, as they could use it to assist them in project selection. It was also recommended that they could reference the IWMP and incorporate LICA values within their project(s).

Committee members felt that the council could start slow for the first year and possibly help out with current projects and extend the audience reach. As they

grow more familiar in their roles, they could then start to propose their own project ideas. One member suggested that they reach out to Myrnam School to learn about the projects they are involved in.

The Committee members support the Environmental Coordinator to further investigate, reach out to schools, and gauge student interest. She will bring the results back to the committee prior to presenting a proposal to the Board of Directors.

#### 3.0 ONGOING BUSINESS

#### 3.1 <u>LLES Program Budget</u>

The Environmental Coordinator presented the LICA Little Environmental Stewards (LLES) Program Budget to the Committee for decision. She noted that the amount may slightly vary, pending the prices of items purchased and that the amount disclosed provides her with a guideline. One Committee member suggested purchasing waterproof paper and mechanical pencils so that the students would have proper materials when participating in the program. The Committee agreed with the budget that was presented.

## #3 Moved by Roxane Bretzlaff AND CARRIED that the LLES Program Budget be approved as presented.

#### 3.2 IWMP Implementation Budget Review & Brainstorm

The Environmental Coordinator presented the IWMP Implementation Budget Review to the Committee.

Committee members discussed options for promotional items suggesting collapsible buckets, bug nets, and goldfish pods with the LICA logo on them. The Environmental Coordinator mentioned that the goldfish pods were connected to the Aquatic Invasive Species grant but could be added in here as well. The Executive Director supported these ideas and thought a variety of items could be purchased.

The Species at Risk flipbooks, which are a quarter of a page in size, are to be printed for increased knowledge in the LICA Region. The Environmental Coordinator is developing this book specifically with the Species at Risk in the LICA region. The suggested quantity for purchase was 400. The Committee members discussed this item and supported the idea of reducing the number of flipbooks to 200 and reallocating the remaining \$2,000.00 toward IWMP promotional items. If more books are needed, they can be ordered at a later time.

One Committee member suggested promoting the Dene and Cree language in the book and offered to assist the Environmental Coordinator with this. Another Committee member questioned whether a book is the right modality for youth as they tend to move toward digital resources. The Environmental Coordinator mentioned that a link or QR code could be created to be shared with them, as another option for viewing.

#### 3.3 Fisheries Workshop Update

The Environmental Coordinator shared a Fisheries Workshop update with the Committee for information. The workshop was held over two days, on September 16 and 17, 2023. Fifteen people registered for the workshop representing all age categories. Six minnow traps were set on the evening of the 16<sup>th</sup> and the traps were pulled on the 17<sup>th</sup>. Sein and kick netting was also completed with the group on the 17<sup>th</sup>. During the workshop, ~60 fishes were caught, representing five different species. One of the species, the lowa Darter, was a surprise, as it is less common to find.

Committee members who were in attendance for the workshop shared their thoughts. One was very impressed with the presentation and the booklets, saying it was a great hands-on experience. The other also thought it was very well done and set up great for kids as well. They recommended holding another workshop in the future or making it a part of a regular workshop rotation for LICA.

#### 3.4 IWMP Fact Sheet

The Environmental Coordinator shared the IWMP Fact Sheet with the Committee. She mentioned that it would be an easy way to distribute information when LICA has a booth at future events. In addition, our Education and Outreach Coordinator could also hand them out at certain LICA workshops or events.

One member requested that the term "stakeholders" be further elaborated. The Environmental Coordinator agreed to update the fact sheet.

#### 3.5 CreekWatch Citizen Science Update

The Environmental Coordinator shared an update on CreekWatch Citizen Science with the Committee. Even though it was promoted on social media and emails went out to different sectors, the interest and community engagement was lower than expected. One Committee member stated that maybe we have reached the end of this program. This program has been delivered for the last three years and perhaps it may be time to conclude it. The Environmental Coordinator agreed that it may be more beneficial to do sampling with laboratory analysis. CreekWatch is solely a Citizen Science endeavor to get people interested about their local waterways.

The question arose from a committee member on whether LICA can do lab analysis. The Environmental Coordinator explained that the WPAC operational funding does not support monitoring, so there is currently no funding to support lab analysis.

In consideration of the topic of monitoring, the Executive Director notified the committee that a representative from the Government of Alberta (GoA) reached out to LICA asking if we had projects that may require in-kind or financial support from the GoA in the next fiscal year. She had identified the top five IWMP priorities and noted that the committee will be meeting later this year to discuss potential implementation projects. She also noted that LICA currently does not have funding to support monitoring efforts and that LICA currently submitted an application for the Aguatic Invasive Species Fund. She asked the committee if

they felt there was any pertinent information that they wished to be shared with the GoA regarding their ask. The Committee felt strongly that we need to increase monitoring efforts, to fill in data gaps. One committee member stressed the importance of deciding in advance the purpose of the data how it would be of value to LICA and the region, and the desired outcomes. They did not want to monitor if the data was not going to be used effectively and one member thought it was better to have an implementation program set up prior to conducting monitoring.

#### 3.6 Aquatic Invasive Species Fund Grant Application

The Environmental Coordinator presented the Aquatic Invasive Species Fund Grant Application to the Committee. One member was wondering where the boat washing trailer would be stored. The Environmental Coordinator explained that Smoky Lake County was interested in hosting the trailer at lakes in their jurisdiction and we could ask that they support storing it, too, but it could also be stored in the locked Bonnyville Community Garden for the winter. A question also came forth regarding the long-term maintenance of the boat washing station after the AIS funding is complete. It would be maintained as a piece of equipment, and minimal costs are required for upkeep. It was stated that the replacement tools would be kept at the LICA office for tracking and would be replaced as needed. One Committee member inquired about staff wages, wondering if wages would come out of the grant. The summer technician contract position would be funded solely through this grant. The budgeted \$37,000.00 would go towards the technician completing this work.

Early detection, monitoring and control efforts are a part of the grant application. The boat washing station could be moved to fish derbies and popular lakes on long weekends, to help educate and promote clean boats. It would also be great for advertising as the trailer would be wrapped with the LICA logo.

#### 3.7 ALMS Conference Report (Colin Coté)

The Environmental Coordinator presented the ALMS Conference Report to the Committee. A Board member, representing LICA, attended the Conference on September 12 and 13, 2023. The main points of his report were shared with the Committee. One member inquired about having access to presentations or reports from the conference. The Executive Director was going to send the committee a link to the conference materials if it was available to the public.

#### 4.0 ACTION LIST

#### 4.1 Follow-up on Action List

#### 4.1.1 **April 4, 2023**

The Committee reviewed the Action List from the April 4, 2023 meeting.

• 9.2.3.3 b) will be removed as Lac La Biche does not have any flood plain mapping.

- 9.4.3.2 e) was completed. The following links were shared by a Committee member during the meeting.
  - Minimum Setbacks for Manure Application
  - AOPA APPLICATION PROCESS WHERE NEIGHBOURS FIT IN
  - <u>Municipalities and the Agricultural Operation Practices Act</u> (AOPA)
  - Agricultural Operation Practices Act
- 9.4.3.3 e) and 9.5.3.1 b) are still in progress and will be changed to Fall 2023
- 4.2.1 the first bullet will be changed to Fall 2023

#### 5.0 UPCOMING MEETING DATES

- 5.1 Board Meeting & Volunteer Lunch September 28, 2023
- 5.2 Annual General Meeting in Lac La Biche October 5, 2023
- 5.3 Next Meeting TBD

The next meeting will occur after the Annual General Meeting, likely in November 2023.

#### 6.0 ADJOURNMENT

The meeting adjourned at 2:15 p.m.

#4 Moved by Kelly Dion-McFeeters AND CARRIED that the meeting be adjourned.

Approved on:		
	Date	
	Signature	

#### <u>2022-23 Attendance</u> <u>LICA Watershed Committee Meetings</u>

NAME	Dec. 1,	April 4,	Sept. 26,	
	2022	2023	2023	
John Ilchuk	А	<b>√</b>		
Kelly Dion-McFeeters	TC	<b>√</b>		
Shawn Elgert	TC	TC		
Robert Machatis	A	A		
Clem Parenteau	<b>√</b>	<b>√</b>		
Amanda Avery Bibo	А	TC		
Roxane Bretzlaff	<b>√</b>	<b>√</b>		
Kristen Berezanski	<b>√</b>	A		
Annette Hobart	$\checkmark$	TC		
Abdi Siad-Omar	А	TC		
Bill Parker	<b>√</b>	<b>√</b>		
Randi Dupras	<b>√</b>	<b>√</b>		
Kellie Nichiporik	<b>√</b>	<b>√</b>		
Richard Bourgeois	<b>√</b>	<b>✓</b>		

Notes: ✓ = Present TC = Telephone Conference A = Absent from Meeting



### LICA Watershed Committee Meeting LICA Boardroom and via Microsoft Teams Tuesday, September 26, 2023

1:00 p.m. - 4:00 p.m.

Item	Agenda	Discussion Leader	Required Outcome
1.0	CALL TO ORDER		
1.1	Territorial Acknowledgement	Amanda	
1.2	Vision, Mission, and Values	Amanda	
1.3	Introductions	All	
1.4	Roll Call	Amanda	For Review
1.5	Approval of Agenda	Amanda	For Decision
	1.5.1 September 26, 2023, LWC Agenda		
1.6	Approval of Minutes		
	1.6.1 April 4, 2023, LWC Minutes	Amanda	For Decision
	1.6.2 June 29, 2023, Email Update	Amanda	For Information
2.0	NEW BUSINESS		
2.1	Youth Water Council	Kayla	For Discussion
3.0	ONGOING BUSINESS		
3.1	LLES Program Budget	Kayla	For Decision
3.2	IWMP Implementation Budget Review & Brainstorm	Kayla	For Discussion
3.3	Fisheries Workshop Update	Kayla	For Information
3.4	IWMP Fact Sheet	Kayla	For Information
3.5	CreekWatch Citizen Science Update	Kayla	For Information
3.6	Aquatic Invasive Species Fund Grant Application	Kayla	For Information
3.7	ALMS Conference Report (Colin Coté)	Kayla	For Information
4.0	ACTION LIST		
4.1	Follow-up on Action List		
	4.1.1 April 4, 2023	Amanda	For Review
5.0	UPCOMING MEETING DATES		
5.1	Board Meeting & Volunteer Appreciation Lunch – September 28, 2023	Amanda	For Information
5.2	Annual General Meeting in Lac La Biche – October 5, 2023	Amanda	For Information
5.3	Next Meeting – TBD	Amanda	For Information
6.0	ADJOURNMENT	Amanda	For Decision



#### **Lakeland Industry and Community Association**

**■** Box 8237, 5107W - 50 Street, Bonnyville, AB T9N 2J5

#### **LICA Watershed Committee**

**Meeting Minutes** Tuesday, April 4, 2023 1:00 p.m. - 4:00 p.m.

**LICA Boardroom and Microsoft Teams** 

Present: Richard Bourgeois

> Kellie Nichiporik Clem Parenteau

Kelly Dion-McFeeters

Bill Parker Shawn Elgert Annette Hobart Randi Dupras Roxane Bretzlaff John Ilchuk

Amanda Avery Bibo Abdi Siad-Omar

Sunal Ojha, Tribal Council Ventures Consultant **Observers and Guests:** 

Staff: Kayla Hellum, LICA Environmental Coordinator

Kristina Morris, LICA Executive Director

Eveline Hartog, LICA Administrative Professional Lori Jodoin, LICA Administrative Professional

Kristen Berezanski Regrets:

Robert Machatis

#### 1.0 **CALL TO ORDER**

Kellie Nichiporik, the Committee Chairperson, called the meeting to order at 1:02 p.m.

- 1.1 **Territorial Acknowledgement**
- 1.2 Vision, Mission, and Values
- 1.3 <u>Introductions</u>

#### 1.4 Roll Call

#### 1.5 Approval of Agenda

#### 1.5.1 April 4, 2023, LWC Agenda

#1 Moved by Clem Parenteau AND CARRIED that the April 4, 2023, Agenda be approved as presented.

#### 1.6 Approval of Minutes

#### 1.6.1 December 1, 2022, LWC Minutes

#2 Moved by Richard Bourgeois AND CARRIED that the December 1, 2022, Minutes be approved as presented.

#### 2.0 NEW BUSINESS

#### 2.1 2022- 2023 IWMP Budget Update

The Environmental Coordinator reviewed the 2022-23 IWMP Budget Update explaining that this budget came from the Palliser Environmental Proposal. There were leftover expenses due to fewer meetings and lower travel costs. With that extra money, hard copies of the IWMP were printed to be shared with decision makers in the Watershed, to assist with IWMP implementation.

#### 2.2 2023-2024 Funding & Projects Update

The Environment Coordinator updated the Committee on the 2023-24 funding. They are still waiting to hear if the WRRP Grant application has been approved.

The WPAC Operational Grant will commence a new 4-year agreement in April 2023, where LICA was granted an increase in funding. With this increased funding, priorities such as the State of the Watershed Report will be addressed. The Riparian Health Campaign is also set to commence in the Spring of 2023.

A Committee member asked if any additional finances for 2023-2024 would be allocated towards the implementation process seeing that the organization received an increase in grant funding. The Executive Director shared that the consolidated budget is currently under review and will be brought to the Board in May for approval. This information will be available at the next Committee meeting. It was also suggested that the committee discusses budgetary needs while reviewing the IWMP Implementation document for a sense of how much funds will be required this fiscal year.

#### 3.0 ONGOING BUSINESS

#### 3.1 IWMP Implementation

The Environmental Coordinator presented IWMP implementation tables to the Committee to facilitate discussion.

#### 9.2.3.2 Groundwater-

#### b) Deep groundwater availability mapping

A Committee member suggested our Environmental Coordinator reach out to AGS as they were the ones who completed deep groundwater mapping.

#### 9.2.3.3 Lake Water Levels-

#### b) Monitor lake water levels of interest to First Nations and Métis

Kehewin is entering their second year of scientific study at Kehewin Lake. This should result in a micro version of this for Kehewin. They are looking forward to seeing what other communities are doing. The Indigenous Summit is being held in May 2023.

A Committee member asked if Beaver Lake should be included in this. Another member was going to check into flood plain mapping information from the planning and development department in Lac La Biche.

Tribal Council Ventures Consultant will be studying water quality in Beaver Lake, Cold Lake, and Frog Lake. Studies will occur in June and July of this year. A Committee member asked if they would be looking into what flows into Cold Lake to identify potential problems. The Consultant was not sure which areas would be used but will be looking at possible locations on April 5, 2023. LICA's EPA representative was interested in LICA partnering with this Consultant to implement this recommendation. They planned to discuss this further.

#### 9.3.3.1 Maintain and Improve Water Quality

#### d) Assess septic and sewage discharge

The Environmental Coordinator asked if the Committee members had any ideas for incentive programs for septic /sewer discharge to surface water. A member stated that septic tank restoration is very expensive and rarely done unless the system is completely failing. The Executive Director suggested that maybe LICA could give a monetary incentive to homeowners through a project-specific grant. A member stated that it would have to be a considerable amount of money, since the replacement cost is so high. Another member suggested that LICA could connect with AUMA, a provincial organization to offer a tax break or possible grant options to be implemented.

It was also shared that Bonnyville Beach had all their residents complete a septic inspection to check for leakages and fix any issues. It was stated by another member that larger centers are accepting waste from smaller communities. Cold Lake is upgrading their septic system to handle waste influx that is being trucked into the city.

Another member suggested looking at the Environmental Damages Fund instead of private incentives. It was also brought up that in a local County for septic upgrades residents were taxed if they were not done, and rebates/credits were

handed out to those who were certified and upgraded their systems. This worked out for this county, but the member was not sure if the MD of Bonnyville would be willing to do this.

Another member stated that Lac La Biche has a bylaw for lake residents to have their water and septic systems connected to the main system. It must be done within five years; however, the cost is very expensive.

#### 9.3.3.2 Monitoring and Evaluation

#### a) Monitoring the Beaver River and its tributaries

Moose Lake Watershed Society samples all five tributaries. The report is posted on their website.

#### 9.3.3.4 Ground Water

#### b) Community-based monitoring

OSM does the monitoring for GOWN, which is a government program for groundwater. Muriel Lake Basin Management Society continues to monitor one ground water well. This information can be found on their website.

#### 9.4.3.2 Riparian Protection

#### e) Agricultural setbacks

A Committee member will look into this and see what exists. They will then share their findings with the Environmental Coordinator. A Committee member stated that on private land, no one is out there enforcing setbacks. A discussion turned to how this could be a part of an educational workshop. LARA continues to send out education on this.

#### g) Oil and gas setbacks

A committee member stated that with most of these issues concerning oil and gas, the government has regulations in place and all of their plans have to be approved.

#### 9.4.3.3 Riparian Conservation

#### a) Riparian Conservation

LICA's EPA representative stated that they would look into this.

#### 9.4.3.4 Riparian Restoration

#### e) Industry support for community restoration projects

Oil companies are involved with this, with ALUMS. Industry is more than willing to discuss collaborative programs.

#### 9.5.3.1 Wetland Inventory and Valuation

#### b) Wetland valuation

A Committee member shared that different levels of evaluation can be done to a wetland. Another member discussed land evaluations and was going to look into what subregional plans state.

Lac La Biche has had meetings with local EPA representatives for wetlands conservation, however, they can only push back where wetlands are prioritized.

A suggestion was also brought forward on connecting with Ducks Unlimited as they had looked into updating maps. Another member mentioned that there are grant opportunities available to get wetland evaluations done. Healthy Water Lac La Biche received a grant to get an evaluation done. This could be a possible LICA grant opportunity.

#### 9.5.3.3 Mitigation

#### b) Agricultural activity

A Committee member stated that most grazing does not apply specifically to wetlands so this would be more of an educational component. However, more money is available for riparian projects, like RALF.

#### 9.6.3.2 Fish Habitat and Restoration

#### a) Water temperature monitoring

A Committee member reminded the group that in the past LICA did complete a flyover of the Beaver River and Moose River. This footage could be reviewed. At that time, they found that riparian health did not need a lot of restoration, but ATCO discovered that they needed to remediate their clearing for power lines. Another member suggested the use of drone technology to view the riparian health of the Beaver River, instead of using a helicopter again, as the drone would be more cost-effective. It was also brought forward to connect with previous recipients of funding for riparian fencing and offsite watering system to see how it is working for them and if they had any recommendations.

#### c) Fish spawning habitat survey

The Muriel Lake Basin Management Society has been participating in a Fall Index Netting Program since the Fall of 2021. Once oxygen levels improve in the water, and fish start to survive over the winter, they hope to restock the lake with fish. It was also noted that oxygen levels were better this winter, in comparison to last year. The Environmental Coordinator asked if there was a priority lake that LICA could work to restore. A member suggested that Fishery Staff may be able to assist with information regarding programs that are already in place. It was also brought forward that ACA website has a list of aerated lakes.

A member suggested using a biologist to investigate and provide data. Another member mentioned that there are programs for re-stocking lakes. Hilda Lake is an excellent example of this.

#### 9.6.3.3 Watercourse Crossing and Stream Connectivity

#### a) b) c) Manage, Monitor and Remediate Watercourse Crossings

LICA's EPA representative mentioned that Alberta Watercourse Crossing Collaborative is working with industry and starting with communities. LICA can tell them priority streams for assessment. An app has been developed so you can map crossings.

#### 9.6.3.4 Shoreline Management (Littoral Zone)

#### c) Shoreline Erosion

LICA's EPA representative suggested considering higher-level priorities, as this is rated medium to high.

#### 9.6.3.8 Aquatic Invasive Species and Disease

#### b) Implement strategies to mitigate the potential for AIS

Cherry Grove has a government boat inspection site set up. There is a potential for spot checks at boat launches in various locations. A committee member stated that Lac La Biche has seasonal environmental technicians that conduct lake sampling and are trained in AIS, they will bring this recommendation forward to the Lac La Biche County and their technicians. Another member stated it is mandatory for dealerships to have boats inspected when they arrive at the dealership. Boats made out-of-province, would have been tested in water before they're sent out, so they are inspected before they are sold. An idea was also brought forward to hold a Citizen Science workshop to teach boaters how to properly inspect.

#### 9.7.3.2 Agriculture

#### a) Environmental Farm Plan

LARA promotes the Environmental Farm Plan program and encourages farmers and ranchers to participate.

#### 9.7.3.3 Forestry

#### a) Apply forestry industry standards

A Committee member stated that best practices are out in legislation and LICA is recommending them.

#### 9.7.3.4.1 General

#### a) Apply oil and gas industry standards

These practices exist and Industry complies.

#### b) Road construction and stream crossings

These practices exist and AER does this as part of the approval process.

#### 9.7.3.4.2 Remediation and Reclamation

#### a) Environmental Assessment

#### b) Reclamation

#### c) Reclamation certificates

Committee members from Industry stated that this is continuous and being done all the time.

#### 9.7.3.4.3 Emergency Response Plans

#### b) Community emergency response

The city of Cold Lake holds meetings almost every month to discuss emergency response plans and they have also just updated their emergency response. AER has a dashboard for real time events, to alert of any emergencies. Lac La Biche has a voyent app specifically for emergencies. Industry members invite municipalities to emergency response plan exercises and communicates with them.

#### 9.7.3.4.4 Orphan Wells

#### b) Recommend wells for reclamation

AER just released a closure nomination process to reclaim orphan wells.

#### 9.8.3.2 Indigenous Knowledge

#### b) Map reflecting Indigenous place names

Kehewin has developed their own mapping platform, but they are interested to see what other communities are doing. A Committee member also suggested that there is a possibility to develop an educational interactive piece for schools with an audio component, so students could hear the Indigenous language being spoken. They spoke of the importance of medicinal plants in the watershed and how to live off the land, especially with health care declining.

Once the Committee had reviewed the IWMP Implementation document, they held a general discussion on what specific projects LICA could become involved in. One Committee member felt that an important project could be survival of the fish. Some assessments might have to be done before the project started but it would be worth looking into. Another member made a suggestion to possibly contact fisheries to see what projects they are involved in. At this time a committee member stated that they would find a contact and share that information with the Environmental Coordinator. It was agreed upon to look further into this.

The second idea brought forward was to focus on riparian health and assessment. A member stated that a lot has been done but the focus was not on why it is important. They agreed that this is a great area that could have a huge educational component brought in. Another member spoke of the importance of getting people outside to the wetlands, to educate them, and provide a space for them to connect with riparian health. This could include workshops for the public or promoting a Citizen Science component. A member spoke about the relationship between plants and nourishing our bodies. Another member brought up the safety side, knowing what is safe to eat in nature.

A question was brought forward asking what kind of projects can be focused on involving water quality. A member suggested possibly looking at scientific laboratory assessments and analysis of the CreekWatch sites, to back up the Citizen Science data. The Executive Director cautioned that LICA would have to verify with AEPA before embarking on this project to ensure that it is not considered monitoring as it is stipulated as being an ineligible expenditure within the WPAC grant. The Environmental Coordinator reminded the Committee that WPAC grant money cannot be used for monitoring, but it may be used depending on the assessment/project. Another member thought creating educational tools would be a great resource. Possibly a book about plants in our watershed areas and what their uses are. This tool could be shared in the community.

Another member spoke about several lakes in the area that have a large amount of recreation and housing development around them. The question was asked, how many houses have actual fields versus pump-out systems? Having a possible program that supports the change from field to pump-out systems could be an option. Funding would need to be made available from the government to get progress and interest in this.

Another Committee member spoke about getting involved in projects that do not involve government regulations. Possibly looking at algae outbreaks and how it affects vegetation and fish. If this project was chosen to move forward, it was

suggested to reach out to an educational institution to see if a graduate student would assist with the education component.

It was then brought forward that people could test their own well water and self-report. Another member suggested that LICA could help pay for the water testing kits. It was cautioned that this may be too close to monitoring and WPAC grant money could not be used in this case.

Lastly, a Committee Member suggested the possibility of doing a project to fill in the gaps of the State of the Watershed Report.

#### 4.0 ACTION LIST

#### 4.1 Follow-up on Action List

#### 4.1.1 December 1, 2022

The Committee reviewed the Action List from the December 1, 2022 meeting.

#### 5.0 UPCOMING MEETING DATES

- 5.1 Board of Directors Meeting April 27, 2023
- 5.2 Next Meeting TBD

#### 6.0 ADJOURNMENT

The meeting adjourned at 3:27 p.m.

#4 Moved by Roxane Bretzlaff AND CARRIED that the meeting be adjourned.

Approved on:		
	Date	
	Signature	

From: Kayla Hellum

To: John Ilchuk; Richard Bourgeois; knichiporik ; Amanda Avery-Bibo; Robert Machatis; Kelly Dion-

McFeeters; Clem Parenteau; abdi.siad-omar ; Shawn Elgert; Annette Hobart; Randi Dupras; Bill Parker

; roxane.bretzlaff

Cc: LICA Reception; Kristina Morris; Stephanie Sitkowski

Subject: LICA Watershed Committee Programs Update

**Date:** June 29, 2023 11:03:00 AM

Attachments: image002.png

image003.png image004.png

Hello LICA Watershed Committee Members.

I hope you are all enjoying the nice weather. As we will not be meeting again until September, I wanted to provide a watershed programs update to the committee.

#### IWMP Implementation Discussion from the April 4th LWC meeting

The following topics were discussed and deemed a priority at the end of the last committee meeting. Therefore, these have been my focus over the last couple of months.

- Fisheries: Fish habitat restoration, fish health, fish survival projects and assessments
- Riparian Health
  - 'Show youth that these are the plants found in a riparian area, and this is why
    they are important.'
  - Promote getting outside.
  - Hands-on workshop to **show** people what different species look like.
  - Workshop to teach foraging.
- The need for an increase in educational resources.
- Need to determine gaps in the State of the Watershed to assist in IWMP Implementation project planning.

#### LICA's Little Environmental Stewards Program

- In light of the discussion from the last meeting, and in order to provide programming to youth to cover a variety of topics (listed above) a 'field day' program is being developed named 'LICA's Little Environmental Stewards'. This field day will consist of three workshop stations versus offering a variety of workshops on different dates. Station 1: Fisheries, Water Quality, and Water Quality Indicators, Station 2: Learning about Plants and Animals in our Region, and Station 3: Air Quality and Monitoring in the LICA Region.
- I am excited for the development of this new program, as I feel it incorporates an increase in education for youth pertaining to the priorities that the LWC discussed at the last meeting. This can be offered to families throughout the summer in addition to classes.
- Please click here to view the proposal that was approved by the Board of Directors. This proposal is inclusive of the program outline with details and ideas for each station including activities and resources to develop.

#### Riparian Health Campaign

- I am currently working to develop this campaign. Morgan, LICA's summer student, has assisted in the development of a brochure for riparian health education.
- Campaign development will continue into the summer.

#### **Fisheries**

- I was hopeful when the Environmental Damage Fund grant was released that we could apply for this grant funding for a fish habitat restoration project. Although, upon further review of the requirements, funding in Alberta will be allocated to priority subwatersheds of the North Saskatchewan watershed. Although the southern part of the LICA Boundary crosses into the North Saskatchewan Watershed Alliance boundary, this area is not a priority area identified for this grant funding. At this time, we are not eligible for this grant funding. I will continue to research different funding sources related to fisheries.
- I have been in contact with Shona Derlukewich, a fisheries biologist who conducts work for the Federal Government and privately through her *School of Fish* business. Thank you to our Chair, Kellie, and Bradley from ALMS for sharing this contact! I am currently looking to book a Fisheries workshop focusing on fish identification for this summer. In addition, Shona also has a great Fish ID book which will be purchased to complement other IWMP programming to increase knowledge and education about fish in our region.

#### **Aquatic Invasive Species Prevention Fund**

- This grant is for projects related to the monitoring and prevention of aquatic invasive species.
- I will be working on a grant application over the next month to apply for this funding. Applications are accepted until August 31, 2023.

#### **Other**

Species at Risk

- Morgan has been assisting me in the development of a Species at Risk flipbook to
  educate the community following community concerns and inquiries. This will be an
  educational resource for the community to learn about Species at Risk that can be
  found in the LICA Region. This was developed with the information that is currently
  available and with species currently listed under Alberta's Species at Risk.
- To note, there are currently 4 mammals, 1 fish, 1 amphibian, and 16 bird species listed under the Species at Risk in Alberta, that reside in the LICA Region for all or a portion of their life. These species will be included in the flip book.

#### **Invasive Species**

• I completed a Noxious weed brochure specific to the Community Garden to educate garden members on the need to control the species that are present there.

 Noxious species include Scentless Chamomile, Perennial Sow Thistle, and Canada Thistle.

#### Citizen Science

• CreekWatch is being offered in the LICA Region to a variety of organizations in an attempt to increase the volunteer efforts at each sampling date. Dates with different community groups are currently being scheduled for the summer.

I will be continuing my review of the State of the Watershed report to determine further data gaps for IWMP Implementation projects. BUT please reach out to me if you have any input for additional projects, grant funding, or have questions regarding the information listed above!

Have a wonderful summer!

Kayla Hellum

Environmental Coordinator



Office: (780) 812-2182 Email: watershed@lica.ca

www.lica.ca

LICA is located on and benefits from the traditional lands of the Denesuliné, Nehiyaw (Cree) and in the heart of the Métis Homeland. LICA respects and honors our responsibility to truth and reconciliation as members of Treaty 6, 8, and 10 and Métis Nation of Alberta – Region 2.





#### **Proposal to the LWC: Youth Water Council**

Morgan Gillis, LICA Summer Student

Recommendation: LICA to consider appointing a Youth Water Council and that they may lead youth-organized programs and campaigns in relation to the Beaver River IWMP.

Discussion: A Youth Council will bring forward new and innovative ideas while reaching a different demographic of the community. This will allow youth to have their voices heard within the LICA Region and foster the next generation's passion for ensuring a healthy and sustainable environment.

Several schools in the region have environmental clubs and programs that encourage environmental stewardship. A Youth Council under LICA will gather a passionate group of students from different areas in the region all with a similar mindset of promoting and preserving our environment. This Council would support the promotion and awareness of LICA's initiatives in schools and may increase the LICA membership and volunteers.

Another consideration is to have this Council brainstorm a project of their own to be funded by LICA. They would be responsible for bringing their project idea to the LWC for acceptance and then to the Board of Directors for approval. If approved, this Council would be responsible for carrying out the work to complete their project. This will support potential youth-led IWMP implementation projects in our Region. The North Saskatchewan Watershed Alliance is spearheading a project similar and is financially supporting a project that is proposed and executed by their Youth Council.

This Council would be designed for youth aged 14-18 who have a passion for environmental stewardship. Students interested in leading environmental change and attending the engagement meetings will be encouraged to participate. The Council's activities will be overseen by LICA's Environmental Coordinator and Executive Director, under the direction of the Board of Directors.

Proposed Layout: The Council would meet on four different weekends, over the course of the year. Meetings could include planning sessions for youth initiatives, education sessions that allow youth to expand their knowledge about the environment and LICA, and activities that engage youth and strengthen the collaborative skills for the Council.



#### Agenda Item 3.1: LICA Little Environmental Stewards Program Budget

Recommendation: It is recommended the following breakdown be used as an expenditure guide for the LICA's Little Environmental Stewards program in the 2023-2024 fiscal year.

## I am seeking committee acceptance of the proposed breakdown below, to guide project expenditures.

Item	Description	Cost	Status
Program Development	Workshop station supplies & activities	\$2,414.41	Paid
Program Development	Workshop station supplies & activities	\$3,748.78	Anticipated
Program Promotional	Roll-up banners, youth promo (bucket hats, bags, water bottles, notebooks), workstation tablecloths	\$ 7,054.85	Anticipated
	Total	\$13,218.04	

<sup>\*</sup>Please note that costs reflected here include refills for one-time use activities, and youth promotional items for two years (estimated two field days/year with  $^{\sim}60$  kids).



## Agenda Item 3.2: IWMP Implementation Budget Review & Brainstorm For Discussion

#### 2023/2024 IWMP Implementation Budget Total: \$23,000.00

Committee Direction	Project Description	Quantity	Cost	Status
Fish & Fish Habitat	Fisheries Workshop: Fish identification and fish habitat knowledge. Including fish ID guides and a meal for participants.	1 workshop 15 participants	\$3,281.96	Paid
Youth Education	LICA's Little Environmental Stewards Program: Program development Including development expenses, supplies, educational resources, and program promotional items.	1 program	~\$13,218.04	\$2,414.41 has been paid to date
Education	Species at Risk: Printing of flipbook The flipbook includes identification tips, habitat information and current threats for each species in the LICA Region.	400	~ \$4,000.00	Anticipated
IWMP Promotional Items	Of the initial IWMP promotional items that were purchased, water bottles were the favorite. Committee input is welcomed to brainstorm ideas.	300	~ \$2,500.00	Anticipated
		Total	\$23,000.00	

<sup>\*</sup>Please note that the riparian health campaign is a separate budget item and is therefore not reflected here.

<sup>\*\*</sup> The Committee is welcome to share any further ideas for education and outreach materials that could be included within the overall budget.







# 'A Healthy Beaver River Watershed for the Future!' — LICA IWMP







## Beaver River Integrated Watershed Management Plan Fact Sheet

# What is the Beaver River Integrated Watershed Management Plan (IWMP)?

- A guidance document and planning tool for resource managers, including governments, planners, Indigenous communities, and other stakeholders and landowners in the watershed.
- The Plan identifies goals for improving and/or maintaining watershed health and makes recommendations on how to reach those goals.



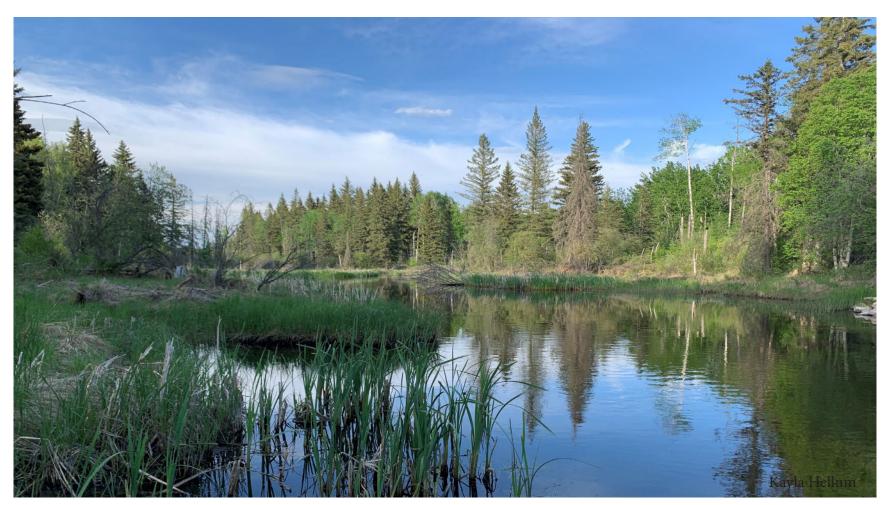
## Purpose, Intent, and Authority:

- The Beaver River IWMP provides broad guidance for watershed management and sets out a clear direction that will result in consistent, specific actions for integrated management of land and water resources to support long-term watershed health.
- The IWMP will not replace the existing authorized CLBR WMP (Alberta Environment 2006a) but rather augment it with aspects not previously considered.

## **Who Does the Beaver River IWMP Affect?**

• The IWMP sets out recommendations for various government levels to landowners. Anyone who lives or plays in the Beaver River Watershed is affected by watershed health. Let's do our part to ensure a Healthy Beaver River Watershed for the Future!





## Why was the Beaver River IWMP needed?

- Integrated Watershed Management Plans are important for guiding land and water resource management in consideration of the environment, sociocultural values, and the economy.
- Implementation strategies that accompany IWMPs are essential for initiating action.
- The Beaver River IWMP better reflects all stakeholder concerns, including First Nation and Métis rights and Indigenous Knowledge.

# Who was Involved in the Development Process?

• LICA's IWMP committee oversaw the Plan's development while engaging with stakeholders, First Nations, and the Métis at key stages to ensure that the IWMP is relevant and reflects local and regional perspectives.



## **Limitations of the Beaver River IWMP:**

The IWMP will not:

- Gather new information to fill data gaps,
- Formulate legislation, policy, or regulations,
- Address air quality unless it relates to other watershed issues,
- Consider the Saskatchewan portion of the watershed.

## Where is the Beaver River IWMP Available?

• The Final IWMP, in addition to other IWMP resources, can be found on the LICA Website, under the Watershed tab.

## Aquatic Invasive Species Prevention Fund

#### Application form

Spring 2023

#### **Notes:**

- As you fill in the form below, use this application guide and spell out all acronyms.
- If you have further questions, contact your regional program coordinator.
- Applicants must submit this form as part of the funding review process.
- If your project proposal is approved and meets the Aquatic Invasive Species Prevention Fund requirements, you will be asked to submit more details as part of contribution agreement negotiations.
- All sections of this form must be completed to be considered.

#### Timelines and how to apply

The completed application form must be submitted via email to the regional program coordinator by August 31, 2023 (closing at 11:59pm local time).

Please note that extensions to the application deadline will not be granted. Applicants are reminded that they should receive a notification of a successful submission within 5 working days of the submission of their application.



#### 1. Project title

Maximum 200 characters

LICA's Aquatic Invasive Species Monitoring and Prevention Project

#### 2. Funding request to Aquatic Invasive Species Prevention Fund

Enter the amount of funding requested for each fiscal year. Projects cannot exceed \$250,000 per fiscal year. Amounts in Canadian dollars.

2024-25	\$141,069.00
2025-26	\$72,744.00
2026-27	\$65,510.00
Total	\$279,323.00

#### 3. Applicant information

Enter information about the applicant and project contact name. Project contact information is for all correspondences about the project, for example the funding decision.

Applicants must be located in Canada to be eligible.

Institution/entity/	Lakeland Industry and Community Association (LICA)	
organization name		
Organization type	Non-government organization	
(select best option, see		
Step 2 for organization		
type description)		
Project contact name	Kayla Hellum, LICA Enviro	onmental Coordinator
and title		
Project contact phone	780-812-2182	
number		
Institution/entity/	Project contact e-mail	Watershed@lica.ca
organization address	Street	5107W-50 <sup>th</sup> Street
	City	Bonnyville
	<b>Province or territory</b>	Alberta
	Postal code	T9N 2J5
	Website (if applicable)	www.lica.ca
Preferred language of	English	
correspondence		



#### 4. Organization description

Provide a brief description of your organization including its mandate.

Maximum 2,000 characters

In response to the expansion of oil and gas production in the region, the Lakeland Industry and Community Association (LICA) was formed in October 2000 as a not-for-profit association, registered under the Alberta Societies Act.

Today, LICA is a Synergy Group that facilitates all stakeholders' voices when addressing issues concerning the environment in our region, an Airshed Zone, and the Watershed Planning and Advisory Council (WPAC) for the Beaver River Watershed, one of eleven WPACs in Alberta.

An 18-seat Board of Directors is responsible for overseeing administration functions and systems of governance that ensure the successful implementation and delivery of the objectives of the different program areas. The Board of Directors includes the following director seats: Community Director (2), Non-Government Director (1), Agriculture Director (1), Forestry/Trapping Director (1), Indigenous (2), Industry Member (3), Local & Provincial Government (8). LICA's Board of Directors ensures all project work is in alignment with LICA's Vision and Mission.

LICA's Vision is that the environment in the LICA region is ecologically healthy and sustainable. LICA's Mission is to collect, share and act upon credible data, Indigenous Knowledge, and information relevant to the environment. This is achieved through scientific study, community engagement and meaningful partnerships. LICA connects stakeholders and promotes community involvement, provides timely, defensible, and accessible data, educates the community advocating for environmental stewardship and responsibly manages resources to achieve its Vision and Mission.

LICA prides itself on education and outreach and the connections made with local communities. Notable highlights from the 2022-2023 fiscal year include 1,483 followers on social media, 288 LICA Members, and 1,157.5 hours of volunteer support on different initiatives and projects! During this time, LICA hosted 97 workshops and events and reached 2,113 people through education and outreach programming. Through watershed monitoring programs, 10 Lakes were sampled through the Alberta Lake Management Society (ALMS) LakeWatch program, which is funded through LICA's Industry partners. As a partner with the RiverWatch Institute of Alberta, LICA also offered the citizen-science CreekWatch program. With the support of community volunteers and the Muriel Lake Basin Management Society,



a local Water Stewardship Group (WSG), 3 Creeks of community interest were monitored to determine their ecological health from chemical, biological, and physic parameters. A winter bird monitoring program to support Species at Risk in Alberta was also implemented, where 239 birds were counted by community members around the region.

LICA published the Beaver River Integrated Watershed Management Plan (IWMP), in 2022, with a Vision of "A Healthy Beaver River Watershed for the Future" to guide watershed management. Development of the Plan was overseen by LICA's IWMP Committee which had representation from Water Stewardship Groups, First Nations, Métis, Community members, Industry, Scientific and Academic organizations, Youth, and all three levels of Government. The Committee was formed to ensure a diverse set of viewpoints contributed to the development of the Plan to guarantee its relevancy and reflection of local and regional concerns. Within the Beaver River IWMP, Aquatic Invasive Species (AIS) were identified as a threat to our natural ecosystems. AIS pose an ongoing risk to Alberta's lakes and streams and Whirling Disease has been identified in watersheds neighboring the Beaver River watershed.

#### 5. Project team experience

#### 5.1 Years of experience

How many years does your organization and team have in delivering aquatic invasive species management programs, projects, or relevant experience to this project?

Number of relevant years of experience	Between 8 and 10 years
--	------------------------

#### 5.2 Previous or current work funded by Fisheries and Oceans Canada

Has your organization ever received funding by Fisheries and Oceans Canada in the past? And/or does your organization currently have a project funded by Fisheries and Oceans Canada? Yes

$\boxtimes$	No
If you	've answered yes, identify the funding program.
Select	all that apply
	Aboriginal Aquatic Resource and Oceans Management
	Aboriginal Fund for Species at Risk





Other (specify in the text box for 5.3 along with the project team experience

#### 5.3 Project team experience description

Briefly provide a description of your organization's and team's experience and capacity in delivering and completing aquatic invasive species management programs, projects, or relevant experience for the project. In addition, please also reflect on your organization's ability to plan, manage, and complete a project. Include a description of team members and their experience, the relevant experience of your project leader, and any previous work funded by Fisheries and Oceans Canada (specify which funding program).

In addition, if you've selected Academia as the organization type in Question 3, the following applies to you. Increasing equity, diversity and inclusion in aquatic invasive species science and research enhances excellence, innovation and creativity and leads to more impactful results for all Canadians. Clearly demonstrate how you will address equity, diversity and inclusion considerations in your project team composition and research design, if applicable.

#### Maximum 2,500 characters

LICA has proudly operated since October 2000, as a not-for-profit association. With a dedicated, resourceful, and educated team of staff members, LICA proudly carries out numerous projects in the region. LICA is eager for the opportunity to launch this program specific to Aquatic Invasive Species. The following activities demonstrate LICA's ability to plan, manage and complete large-scale multi-year projects.

Since 2015, LICA has been funding the <u>Alberta Lake Management Society (ALMS)</u>
LakeWatch program to monitor up to 10 lakes per year. Priority lakes are identified



description).

between ALMS technicians and LICA staff to ensure that long-term monitoring data is derived from the program. The LakeWatch program monitors a variety of parameters, including water chemistry, metals, and invasive Species.

During 2021-2023, LICA partnered with the <u>RiverWatch Institute of Alberta</u> to offer the CreekWatch program in the Beaver River watershed. This program is a community-based monitoring program that is supported by community volunteers to collect water quality data, improve habitat, and contribute to a meaningful understanding of local waterways. LICA's Environmental Coordinator trains community volunteers and oversees all sampling events to ensure that proper sampling protocol and safe handling of portable lab equipment is completed.

LICA was a successful recipient of three Government of Alberta, <u>Watershed Resiliency and Restoration Programs (WRRP)</u> that operated from 2019-2022. Of these grant projects, two were multi-year agreements and involved several partners in various aspects of the project steps. WRRP grants were managed by LICA's Environmental Coordinator. Some of the projects included riparian fencing and offsite watering system installation (inclusive of 7 agricultural producer partners), beaver management device installation (inclusive of 4 municipal and Indigenous Partners), and the completion of large-scale riparian assessments covering over 3,500 km of shoreline in the Beaver River watershed. These projects included the development and execution of individual producer contracts, budget tracking and coordination of multiple partners.

Completed in 2022, the multi-year development of the Beaver River Integrated Watershed Management Plan (IWMP) was achieved. LICA's Environmental Coordinator oversaw the development of the Beaver River IWMP, with the support of LICA's IWMP Committee and Executive Director. The Environmental Coordinator developed budgets, coordinated contractor deliverables, and planned three rounds of engagement sessions with municipalities, Government of Alberta officials, and Indigenous communities. LICA contracted Palliser Environmental Services to assist in Plan development and facilitation of engagement sessions. The Environmental Coordinator worked closely with this contractor to ensure timelines were met and budgets were followed. LICA is proud of the years of work that went into the Plan and the support from stakeholders and rightsholders in the watershed. Implementation of the IWMP is currently underway and is supported by the newly developed LICA Watershed Committee (LWC). The focus of 2023 is to develop informational materials and educational programming to promote a healthy watershed and raise public awareness of riparian health, local fish and fish habitat, and invasive species.



In 2022, the IWMP Committee transitioned to the LWC which oversees all watershed projects to assist LICA's Environmental Coordinator. Together with the implementation of the Beaver River IWMP, this committee consists of 14 members who bring technical knowledge and critical thinking from a variety of backgrounds to the table to support different watershed management programs. All committee decisions are brought to LICA's Board of Directors as a recommendation for approval. Currently, the LWC is focusing on aquatic health, fish and fish habitat and increasing educational outreach on different aspects of watershed health for the Beaver River watershed. Aquatic Invasive Species awareness and prevention are key components of this.

#### **Kayla Hellum, LICA's Environmental Coordinator:**

Kayla assumed the role of LICA's Environmental Coordinator in 2021, and during this time has fulfilled requirements of large multi-year projects such as the three WRRP grants and the Beaver River IWMP. Kayla manages and coordinates all LICA watershed projects under the direction of the Executive Director and Board of Directors. She also represents LICA as the Watershed Planning and Advisory Council (WPAC) Manager for the Beaver River watershed, collaborating and sharing knowledge and experiences with the other 10 WPACs within Alberta on watershed programs and projects.

Kayla has a Bachelor of Applied Science in Environmental Management & Diploma in Conservation and Restoration Ecology, followed by several years of experience in the environmental sector as an Environmental Specialist and Coordinator. Kayla is passionate about the health and sustainability of the Beaver River watershed and knows that Aquatic Invasive Species pose a serious threat to natural waterways. All work completed within this project fund will be managed by Kayla, with updates and reporting provided to the LWC and Board of Directors.

#### **Kristina Morris, LICA Executive Director:**

Kristina assumed the role of LICA's Executive Director in 2020 and currently oversees 5 permanent staff, 2 contractors, and 1 annual summer student. Her primary role is to oversee all aspects of business operation of the organization, under the direction of the board of directors. This includes, and is not limited to, the development and execution of the Association's Strategic Plan, Annual Work Plans, grant reporting, and annual fiscal operating budget. Kristina also maintains collaborative working relationships with organizations, municipalities, Indigenous communities, and the public, to ensure that LICA's mandate and initiatives are known and understood.

Kristina also acts as LICA's alternate for the WPACs and has strong relationships with the provincial WPACs and local Water Stewardship Groups.



Kristina provides the additional capacity for Kayla, who has the technical experience, to execute the implementation of watershed-focused programs and environmental management projects.

#### **Stephanie Sampson, LICA Education and Outreach Coordinator:**

Stephanie assumed the role of LICA's Education and Outreach Coordinator in 2022 and currently coordinates all of LICA's outreach initiatives and campaigns. Stephanie has a background in wildlife and fishery conservation and has been educating the public about wildlife and the environment for the last ten years. Stephanie has strong communication and delivery skills and has continued to help LICA grow its relationship with our surrounding communities. Stephanie will be assisting the project through dissemination of resources, development of social media content and print materials, and educating the public throughout the LICA region on AIS.

#### 6. Project summary

Provide a brief summary of the project including project goals(s), objectives(s) and expected outcomes.

Maximum 2,500 characters

<u>Project Location:</u> All project work will be executed within the Beaver River watershed. See sections 10 and 11 for location details.

<u>Project Supporters:</u> All Counties/ Municipalities and Indigenous Communities located within the Beaver River watershed were contacted regarding this proposed project. Please see the letters of support attached to this application.

Additional Partners for this project include Patrick Hanington of the University of Alberta, and Bradley Peters of the Alberta Lake Management Society (ALMS). Nicole Kimmel with Alberta Environment and Protected Areas (EPA), and Rob Larson with 4 Wing Cold Lake, have also provided letters of support for this project, please find the letters enclosed in this application.

#### **Goals, Objectives, and Expected Outcomes:**

Goal 1: Increase Education and Awareness of Aquatic Invasive Species (AIS)

**Objective:** Promote current AIS campaigns including *Clean, Drain, Dry* and *Don't Let it Loose* within the Beaver River watershed. LICA commits to print and disperse





Canada

campaign resources to lake residents, visitors and community members, and post campaign signage at priority lakes. LICA also commits to print and disperse AIS identification resources and factsheets to support a greater understanding of the species that pose a threat.

Resources will be offered to all Counties/Municipalities, and Indigenous Communities in the watershed to ensure all areas of the watershed are reached.

LICA's current Keep Our Lake Blue campaign, which was co-developed with the Moose Lake Watershed Society, currently supports healthy aquatic ecosystems, and teaches lake residents about actions to take to reduce runoff and pollutants from entering the lakes. As part of this Campaign, LICA also hosts annual shoreline clean-ups, to support Invasive Species control. AIS education will support the existing Keep our Lake Blue Campaign.

**Expected Outcome:** Education on the threat of AIS plays a huge role in prevention and early detection. When citizens recognize and understand the risk of AIS spreading to our watershed, the chances of prevention and early detection are much greater. The Beaver River watershed also consists of the Cold Lake Air Weapons Range, a Federal Royal Canadian Air Force. Education on early detection, and proper protocols including cleaning, draining, and drying will be promoted within the Airbase, to ensure equipment crossing international borders does not pose a threat to our local waterbodies.

#### **Goal 2: Implement Prevention Efforts for Aquatic Invasive Species**

**Objective:** Purchase a CD<sup>3</sup> Mobile Trailer boat cleaning station and make it available during high-traffic times at popular recreational lakes. Traditional decontamination units are effective at removing AIS that are attached to watercraft and equipment but are an untenable expense for many local AIS programs. Much of the risk of spreading can be addressed by providing day-use boaters with the tools to follow best management practices. In conjunction with this trailered unit at select times during the season, a booth will be set up during peak times at lakes (such as during Fish Derbies) to provide AIS educational resources. This will support the cleaning, draining, and drying of different watercrafts to prevent the spread into lakes in the Beaver River watershed. Priority lakes chosen include those that are visited frequently by recreational users from out of province, who have a greater chance of introducing aquatic invasive species.

**Expected Outcome:** Purchasing a public boat cleaning station will increase the prevention efforts of AIS spreading into our waterways. The CD<sup>3</sup> mobile trailer comes equipped with a wet/dry vacuum, air blower and cleaning implements supported by solar energy to be self-sufficient and available for transport to a variety of locations.



Canada

Currently, there is interest from local Counties to host this station at lakes in their jurisdiction within the watershed. This station has built-in software to track unit and tool usage and sends alerts when maintenance is required. It will be wrapped with design artwork to promote the Clean, Drain, Dry and Don't Let it Loose Campaigns when stationary at a lake, or in transit on the highways between host locations. This system will ensure that a variety of lakes and residents are offered the opportunity to complete their due diligence prior to putting their watercraft into the water. The boat cleaning station and educational booth will also serve to educate and inform lake users of the pathways where AIS are most commonly spread. CD3 systems offer an innovative solution to the lack of tools and resources at lake access points. A CD3 system station is a waterless self-service station with tools that boaters can use to effectively clean, drain, and dry their watercraft and trailer. CD3 Systems, when combined with signage, have been shown to reduce AIS violation rates by greater than 70%.

#### Goal 3: Implement a monitoring program for AIS for early detection.

**Objectives:** Use an integrated management approach to contract an AIS technician to conduct yearly monitoring for invasive species during the months of May - August for 2024, 2025, and 2026. Monitoring will be conducted via an eDNA Citizen Science sampler, purchased by LICA, and the invasive species monitoring plan will be developed by LICA's Environmental Coordinator. Samples will be analyzed through the University of Alberta, Patrick Hanington lab with in-kind support (See attached *letter of support).* The AIS technician will conduct daily sampling reports and develop a detailed annual report of AIS within each lake sampled. These reports will be used to educate stakeholders and rightsholders of the findings of this early monitoring program.

In partnership with the Alberta Lake Management Society (ALMS), suspect Eurasian watermilfoil specimens will be accepted, pressed, and assessed for confirmation of invasive or the native Northern watermilfoil species (See letter of support provided by ALMS). Species consideration, sample sites, and pathways are considered within the monitoring plan. This monitoring program will also include monitoring at Primrose Lake, located within the Cold Lake Air Weapons Range, a Federal Royal Canadian Air Force. This is the only lake known within the range to have an active boat launch and early detection monitoring on this lake, specifically, will ensure that equipment crossing international borders in do not pose a threat to our watershed.

**Expected Outcomes:** Gather data of AIS at 36 waterbodies within the Beaver River watershed, promote early detection, and track trends over three years. It is known that the Beaver River watershed is under monitored for AIS and gaps in data have



been identified in numerous lakes, including the priority lakes disclosed in Sections 10 and 11 of this application. This monitoring program will provide valuable information to municipalities, the provincial government, and lake users regarding the status of AIS within these lakes. The Beaver River watershed shares a provincial boundary with Saskatchewan, consists of a federal air weapons range and is often referred to as the 'Lakeland' for its abundance of lakes. LICA understands and feels strongly that an increase in monitoring is needed for early detection and prevention of AIS ensuring a greater chance for control if detected.

#### Goal 4: Implement Control Efforts in response to AIS, if detected

**Objectives:** Develop response plans and procedures for early detection of AIS and implement measures to control/eliminate its presence. Where aquatic invasive species are detected, depending on the species present, appropriate stakeholders and rightsholders will be contacted and notified of possible control measures. In circumstances where species such as the Provincially regulated, Prohibited Noxious weed Himalayan Balsam is detected, plants will be eradicated as required by the Alberta Weed Act. This will be done via hand-pulling and will be disposed of in the appropriate manner. LICA's Keep Our Lake Blue campaign will continue to support shoreline control of invasive species.

**Expected Outcomes:** Control efforts and stopping the spread are imperative when dealing with invasive species as they pose a threat to the natural ecosystems and biodiversity of our watershed. With the control efforts intended with this project, LICA expects to reduce/eliminate the presence of AIS where detected.

#### 7. Addressing priorities

#### 7.1 National priorities

Which national priority or priorities does this project address or link to? Select all that apply

- Promote national outreach campaigns such as <u>Clean Drain Dry</u> and <u>Don't Let it Loose</u>
- Use an integrated management approach that considers species, sites, and pathways for which aquatic invasive species travel to enter and spread in our waters
- Address the threat of aquatic invasive species crossing of international borders
- Expand Fisheries and Oceans Canada's geographical and/or pathway coverage for early detection and response
- Include activities within the three aquatic invasive species management pillars: prevention, early detection, response

Briefly describe how the project addresses or links to the selected national priorities above. Maximum 1,000 characters

#### **Link to National Priorities**

- 1. Promote national outreach campaigns such as <u>Clean Drain Dry</u> and <u>Don't Let it Loose</u> Educational resources for the *Clean, Drain, Dry*, and *Don't Let it Loose*, will be provided digitally by Alberta Environment and Protected Areas (EPA), and will be printed and dispersed to lake users by LICA to increase awareness. Digital versions of signage will also be provided by EPA and will be printed and installed by LICA and supporting Counties/Municipalities and Indigenous communities in the watershed. *Clean, Drain, Dry* and *Don't Let it Loose* branding will also be included on the outside of the boat washing station to further promote the initiatives.
- 2. Use an integrated management approach that considers species, sites, and pathways for which aquatic invasive species travel to enter and spread in our waters.

Time of year will be considered for species life cycles to ensure that early detection monitoring program efforts are relevant. Site locations will be chosen based on the infrastructure present (i.e., boat launches), and frequency of use. AIS such as Whirling Disease, and Crayfish spp., will be monitored in rivers respectively, where target fish species are present, and stream temperatures are appropriate. eDNA is an integrated approach to water sampling and will be utilized for this project with the opportunity to monitor a variety of species!

The CD<sup>3</sup> mobile trailered boat washing station provides an integrated and innovative solution to the lack of tools and resources that are at boat access points throughout the Beaver River watershed.

3. Address the threat of aquatic invasive species crossing of international borders.

The Beaver River watershed is unique in that it consists of a Royal Canadian Air Force, specifically the Cold Lake Air Weapons Range (CLAWR). Prevention, Early Detection and Response efforts included in this project will address any threat that may be present with equipment crossing international borders. LICA will seek collaboration with the CLAWR to raise awareness of the risks associated with AIS and ensure preventative measures are being taken into consideration when using amphibious aircraft. (See letter of support provided on behalf of Personnel Support Programs, 4 Wing Cold Lake).



LICA also plans to work collaboratively with the RCMP detachments to raise awareness of the risks associated with AIS and ensure preventative measures are being taken into consideration when using watercrafts. Certain detachments obtain training interprovincially and overseas, using their own equipment.

## 4. Expand Fisheries and Oceans Canada's geographical and/or pathway coverage for early detection and response.

The Beaver River watershed is under-monitored for AIS and conducting early detection monitoring and response efforts in Northeastern Alberta will expand Fisheries and Oceans Canada pathway coverage.

## 5. Include activities within the three aquatic invasive species management pillars: prevention, early detection, response.

As identified in section 6 of the Project Summary component of this application, these three pillars are the focus of this project.

In summary, **Prevention** will include an increase in public education and promotion of the current campaigns such as *Clean, Drain, Dry* and *Don't Let it Loose*. In addition to the awareness of these campaigns, a boat cleaning station is to be offered during high-traffic times at priority and popular recreational lakes during the summer months with the support of an educational booth at events such as Fishing Derbies.

**Early detection** will include the purchase of an eDNA Citizen Science sampler, equipment, and a contract summer technician position, followed by the implementation of a monitoring program for various AIS in the Beaver River watershed.

**Response** efforts will include proper control and eradication of identified species, including notification to proper stakeholders, rightsholders, and authorities depending on the identified species. Recommendations on control measures will also be provided.

#### 7.2 Regional priorities

Briefly describe how this project addresses or are linked to the respective or appropriate regional priorities.

Maximum 1,000 characters

#### **Link to Regional Priorities**

### 1. Have letters of support from the province identifying their priority species.

Please see the attached letter of support provided by Nicole Kimmel, Aquatic Invasive Species Specialist with Alberta Environment and Protected Areas. As written in the letter of support, aquatic invasive species like invasive mussels could have devastating impacts on native aquatic populations, disrupt food chains and degrade water quality.



2. Involve early detection and response for priority species identified by the respective province.

As identified in the Letter of Support provided by Nicole Kimmel, "Monitoring is an area where more capacity is needed, and the Alberta government is hopeful that monitoring can expand through valued partners like LICA."

3. Have multiple partners, especially Indigenous communities, and organizations.

Please see attached letters of support provided by Nicole Kimmel at the Alberta Environment and Protected Areas, Patrick Hanington at the University of Alberta, Alberta Lake Management Society (ALMS), Beaver Lake Cree Nation, Athabasca County, Buffalo Lake Métis Settlement, County of St. Paul, North Saskatchewan Watershed Alliance, Smoky Lake County, Town of Bonnyville, M.D. of Bonnyville, Kehewin Cree Nation, Rob Larson at 4 Wings Cold Lake, and Lac La Biche County.

4. Help address the aquatic invasive species threat for species at risk and the habitat they depend on.

As available on the Fisheries and Wildlife Management Information Systems of Alberta, Lakes in the Beaver River watershed such as Muriel Lake, Beaver Lake, and Elinor Lake are located in wildlife sensitivity zones for Bird Species at Risk. These lakes are included in the early detection monitoring program.

5. Incorporate aquatic invasive species education and awareness of Clean Drain Dry & Don't Let it Loose.

Educational resource dissemination and awareness will strongly support both the Clean, Drain, Dry and Don't Let it Loose Campaign as resources specific to these campaigns will be what is printed, dispersed, and promoted on the portable trailered boat washing station outer design work. See section 6: Project Summary.

#### 8. Project partnership

Does this project involve collaboration or partnership among multiple stakeholders and/or
partners (including Indigenous groups)?

X	Yes
П	Nο

If you answered yes, provide the list of confirmed or anticipated stakeholders or partners and their role in the project below.

Stakeholder or partner	Organization type	Description of role in project	Confirmed or anticipated
Nicole Kimmel, Alberta Environment & Protected Areas	Province or territory	In support of the project proposal to expand monitoring capacity and to promote the Clean, Drain, Dry and Don't Let it Loose Campaigns.  See attached letter of support.	Confirmed
Patrick Hanington University of Alberta,	Academia	In-kind Supporter: Supporter of Project Activities, and in-kind provider of \$246,000.00 to support lab analysis of AIS for monitoring program. See attached letter of support.	Confirmed
Alberta Lake Management Society (ALMS)	Non-government organization	In-Kind Supporter: Supporter of Project Activities, and in-kind supporter of \$50,000.00 See attached letter of support.	Confirmed
Buffalo Lake Métis Settlement	Indigenous	Supporter of Project: Indicated the benefit that educational resources and an AIS monitoring program will bring to Métis Settlement and Frist Nations in the watershed.  See attached letter of support.	Confirmed





Beaver Lake Cree Nation	Indigenous	Supporter of Project: In support of AIS prevention program as it supports clean, and healthy water, ecosystems, and safe drinking water for their people and animals. In addition to keeping the watershed safe for future generations.	Confirmed
		See attached letter of support.	
Athabasca County	Municipal or local government	Supporter of project: This initiative and the funding is supported in the Athabasca County Strategic Plan 2023-2026 Pillar Two Investing in Infrastructure and our Environment through Goal 4 Protecting the Natural Environment.  See attached letter of support.	Confirmed
Smoky Lake County	Municipal or local government	In support of project activities, particularly at Garner and Whitefish Lakes.  See attached letter of support.	Confirmed
Elizabeth Métis Settlement	Indigenous	Indicated their support of monitoring at Soars and Redspring Lake as there are concerns with Invasive Goldfish and water quality health.	Anticipated



County of St. Paul	Municipal or local government	In support of project application, particularly at Floating Stone Lake.  See attached letter of support.	Confirmed
Town of Bonnyville	Municipal or local government	In support of application and project.  See attached letter of support.	Confirmed
Rob Larson, 4 Wings Cold Lake	Other federal government	Support of increased dispersal of educational resources within their facilities.  See attached letter of support.	Confirmed
Lac La Biche County	Municipal or local government	In support of project activities as it is in alignment with the Counties strategic priorities.  See attached letter of support.	Confirmed
City of Cold Lake	Municipal or local government	Indicated their interest in the boat cleaning station. Anticipated in-kind supporter of project activities.	Anticipated
M.D. of Bonnyville	Municipal or local government	In support of project application and goals.  See attached letter of support.	Confirmed
Kehewin Cree Nation	Indigenous	In support of project application, and shared goals.  See attached letter of support.	Confirmed



		1	
Cold Lake First Nations	Indigenous	Indicated their appreciation for a boat washing station, and the early detection monitoring program for plants and invertebrates. Anticipated in-kind supporter of project components.	Anticipated
North Saskatchewan Watershed Alliance (NSWA)	Non-government organization	In support of project activities as it targets shared goals between LICA and NSWA in safeguarding our natural aquatic environment.  See attached letter of support	Confirmed

### 9. Letter of support

Will you be submitting a letter of support from	a respective provincial or territorial agency for
this project?	

⊠ Yes

□ No

### 10. Project location

Identify the latitude and longitude point that best represents the project location.

Project location	Latitude (decimal	Longitude (decimal	Province or territory
description	degree format e.g.	degree format (e.g	or region or
(name of	43.09057)	80.16062))	geographical scope
waterbodies and or			
type of ecosystem)			
(maximum 500			
characters)			

Beaver River Watershed -	54.26963	-110.73953	Alberta
LICA office Coordinates included.			
Signage and educational resources will be dispersed throughout the watershed.			

### 11. Project activity location

Provide details on the location(s) of the project activities if they are different than the project location identified above.

Activity location description (name of waterbodies and or type of ecosystem) (maximum 500 characters)	Latitude (decimal degree format e.g. 43.09057)	Longitude (decimal degree format (e.g 80.16062))	Province or territory or region or geographical scope
Early Detection Monitoring:	54.59675	-112.63996	Alberta
Amisk Lake			
Early Detection Monitoring:	54.20254	-110.32876	Alberta
Angling Lake			
Early Detection Monitoring:	54.388501	-110.755597	Alberta
Beaver River			
Early Detection Monitoring:	54.513545	-112.476672	Alberta
Buffalo Lake			

Early Detection Monitoring:	54.65472	-112.58353	Alberta
Chump Lake			
Early Detection Monitoring:	54.47849	-110.19235	Alberta
Cold Lake			
Early Detection Monitoring:	54.51145	-110.53508	Alberta
Crane Lake			
Early Detection Monitoring:	54.66870	-111.64991	Alberta
Elinor Lake			
Early Detection Monitoring:	54.54320	-110.33670	Alberta
Ethel Lake			
Early Detection Monitoring:	54.21502	-111.62873	Alberta
Floating Stone Lake			
Early Detection Monitoring:	54.46333	-111.56418	Alberta
Fork Lake			
Early Detection Monitoring:	53.91397	-110.33841	Alberta
Frog Lake			
Early Detection Monitoring:	54.20009	-111.72889	Alberta
Garner Lake			
Early Detection Monitoring:	54.51953	-110.43347	Alberta
Hilda Lake			
Early Detection Monitoring:	54.25281	-110.72148	Alberta
Jessie Lake			



Early Detection Monitoring:	54.03471	-110.90610	Alberta
Kehewin Lake			
Early Detection Monitoring:	54.47071	-112.76984	Alberta
Long Lake			
Early Detection Monitoring:	54.16896	-111.49862	Alberta
Lower Mann Lake			
Early Detection Monitoring: <b>Manatokan</b>	54.47162	-110.94050	Alberta
Early Detection Monitoring:	54.62060	-110.28583	Alberta
Marie Lake			
Early Detection Monitoring:	54.27901	-111.10382	Alberta
Minnie Lake			
Early Detection Monitoring:	54.23712	-110.89185	Alberta
Moose Lake			
Early Detection Monitoring:	54.7353	-110.65341	Alberta
Muriel Lake			
Early Detection Monitoring:	54.68431	-112.54654	Alberta
North Buck Lake			
Early Detection Monitoring:	54.65760	-111.41449	Alberta
Pinehurst Lake			
Early Detection Monitoring:	54.78989	-110.05182	Alberta
Primrose Lake			



Early Detection Monitoring:	54.107479	-110.080823	Alberta
Redspring Lake			
Early Detection Monitoring:	54.24154	-110.30268	Alberta
Reita Creek			
Early Detection Monitoring:	54.73794	-111.32480	Alberta
Seibert Lake			
Early Detection Monitoring:	54.64528	-112.71291	Alberta
<b>Skeleton Lake North</b>			
Early Detection Monitoring:	54.61090	-112.72201	Alberta
Skeleton Lake South			
Early Detection Monitoring:	54.15018	-110.14783	Alberta
Soars Lake			
Early Detection Monitoring: Touchwood Lake	54.79827	-111.41480	Alberta
Early Detection Monitoring:	54.14086	-111.51503	Alberta
Upper Mann Lake			
Early Detection Monitoring: Whitefish Lake	54.36289	-111.89980	Alberta
Host for the Boat Cleaning Station: Garner Lake	54.20009	-111.72889	Alberta
Host for the Boat Cleaning Station: Whitefish Lake	54.36289	-111.89980	Alberta



A possible host for the Boat Cleaning Station: Cold Lake	54.47849	-110.19235	Alberta
Host for the Boat Cleaning Station: Floating Stone Lake	54.21502	-111.62873	Alberta

#### 12. Importance of project and activities location

Select all that applies.

$\boxtimes$	Project enhances protection of critical habitat FWIof Species at Risk Act-listed species.
	rioject childrices protection of <u>childa habitat</u> i wior <u>species at hisk Act listed species.</u>
	Project enhances protection of Marine Protected Areas
$\boxtimes$	Location of high socio-economic or cultural value
$\boxtimes$	Location is of importance to Indigenous Peoples
$\boxtimes$	Location is important for fish and fish habitat
	Location has high carbon storage value
	Location has high climate resilience, meaning it is more likely to persist
	Not applicable
	Other (specify in text box below with description of the importance of the project location)

Briefly describe the importance of the project location (if applicable).

Maximum 2,000 characters

The Beaver River watershed is located in the boreal plains of east-central Alberta and West-central Saskatchewan, in Treaty 6, 8, and 10 territories and in the Métis homeland. The total drainage area of the Beaver River at its confluence with the Churchill River is 50,003 km², with about half of the watershed (22,000 km²) in Alberta. Please note that this project will only take place in the Beaver River watershed located within the Province of Alberta.

The Beaver River originates near the Hamlet of Lac La Biche as the outflow from Beaver Lake. It flows in an easterly direction for about 250 km, flowing south of Cold Lake, before entering Saskatchewan. The Cold River originates at the east end of Cold Lake, in Saskatchewan becoming the Waterhen River, and continues to flow east to join the Beaver





River. The river flows north and joins the Churchill River at III a-la-Crosse before flowing into Hudson Bay. Activities in this watershed may influence as far as Hudson Bay.

Prior to the arrival of Europeans, the Cree and Dene established an independent and organized society that included a monadic lifestyle. The land provided First Nations with everything they required for their mental, physical, spiritual, and emotional well-being. This watershed is a sacred place to many Indigenous Communities (Beaver River IWMP, 2022).

The Beaver River watershed is now one of eleven Watershed Planning and Advisory Councils in Alberta. This watershed consists of six counties/municipalities and 12 Indigenous Communities that reside or have traditional lands within the watershed. Aquatic Invasive Species threaten our natural ecosystems and directly affect the residents, stakeholders and rightsholders who call this watershed home.

This area can be known as the 'Lakeland' for its diversity and quantity of lakes present. It is a tourist hot spot in northeastern Alberta that provides numerous opportunities for boating, fishing, hiking and other lake recreational activities. These activities are a pathway of AIS into our waterways. Priority waterbodies will be included in early detection monitoring as any waterbody that has a public dock or access point is a threat for invasive species. This project will take place throughout the Beaver River watershed which is an area of Alberta that is under monitored in terms of Aquatic Invasive Species. Lakes in the Beaver River watershed such as Muriel Lake, Beaver Lake, and Elinor Lake are located in wildlife sensitivity zones for bird Species at Risk. These lakes are included in the early detection monitoring program.

All project work will be within the Beaver River watershed with the exception of Frog Lake which is located within the North Saskatchewan Watershed. Frog Lake First Nations' traditional territory lies within both the Beaver River watershed and the North Saskatchewan watershed. With the significance that Frog Lake holds with this community, we have included it as part of this project's early detection monitoring program. Please see the letter of support attached provided by the North Saskatchewan Watershed Alliance in support of project activities.

#### 13. Species

List the targeted aquatic species and anticipated benefitting species from the project (maximum 20 species).

Species	Population	Target	<u>Aquatic</u>	Committee	Species at	<u>Federal</u>
name	or	non-	<u>Invasive</u>	on the	Risk Act	Recovery
		indigenous	<u>Species</u>	Status of	(SARA)	



(common and scientific)	designatable units (if relevant)	or invasive species Or Benefitting species	Regulations (Part 2 and 3) or other legislation	Endangered Wildlife in Canada (COSEWIC) status	Schedule 1 status	Strategy in place
Quagga Mussel	N/A Will collect data with early detection monitoring program.	Target non- indigenous or invasive species	Listed in Aquatic Invasive Species Regulations Part 2 or 3	Not applicable	Not applicable	No
Zebra Mussel	N/A Will collect data with early detection monitoring program.	Target non- indigenous or invasive species	Listed in Aquatic Invasive Species Regulations Part 2 or 3	Not applicable	Not applicable	No
Eurasian Watermilfoil	N/A Will collect data with early detection monitoring program.	Target non- indigenous or invasive species	Listed or otherwise noted in provincial and/or territorial legislation	Not applicable	Not applicable	No
Goldfish	N/A Will collect data with early detection monitoring program.	Target non- indigenous or invasive species	Listed or otherwise noted in provincial and/or territorial legislation	Not applicable	Not applicable	No
Whirling Disease	N/A	Target non-	Listed or otherwise	Not applicable	Not applicable	No



	Will collect data with early detection monitoring program.	indigenous or invasive species	noted in provincial and/or territorial legislation			
Northern Crayfish	N/A Will collect data with early detection monitoring program.	Target non- indigenous or invasive species	Listed or otherwise noted in provincial and/or territorial legislation	Not applicable	Not applicable	No
Rusty Crayfish	N/A Will collect data with early detection monitoring program.	Target non- indigenous or invasive species	Listed in Aquatic Invasive Species Regulations Part 2 or 3	Not applicable	Not applicable	No
Spiny Water flea	N/A Will collect data with early detection monitoring program.	Target non- indigenous or invasive species	Listed in Aquatic Invasive Species Regulations Part 2 or 3	Not applicable	Not applicable	No
Himalayan Balsam	Presence Extent Unknown. Data Deficient	Target non- indigenous or invasive species	Listed or otherwise noted in provincial and/or territorial legislation	Not applicable	Not applicable	No
Flowering Rush	Presence Extent Unknown.	Target non- indigenous	Listed or otherwise noted in	Not applicable	Not applicable	No



Data	or invasive	provincial		
Deficient	species	and/or		
		territorial		
		legislation		

#### 14. Aquatic invasive species management pillars

Identify which pillars the project addresses.

Select all that apply

$\boxtimes$	Prevent	tion
-------------	---------	------

- **Response**
- Reporting, such as developing tools to help with reporting
- ☐ Not applicable

#### 15. Broader initiatives

Identify if your project is linked to a broader initiative

Select all that apply

	Aquatic Species at Risk
	Blue Economy Strategy
$\boxtimes$	Fish and Fish Habitat Protection
$\boxtimes$	Fisheries Management
	Pacific Salmon Strategy Initiative
	Protecting oceans

- □ Regional watershed initiative (specify in text box below)
- ☐ Restoration plan (specify in text box below)
- ☐ Wild Atlantic Salmon Conservation Strategy
- ☐ Not applicable
- ☐ Other (specify in the text box below)





Briefly describe the link to the broader initiative identified above (if applicable).

Maximum 2,000 characters

Maximum 2,500 characters

#### **Regional Watershed Initiative:**

As LICA is one of 11 Watershed Planning Advisory Councils in Alberta, the Water for Life Strategy is incorporated into our Strategic Plan. Therefore, this project is in alignment with the three main goals of the Alberta Water for Life Strategy:

- 1. Safe, secure drinking water supply,
- 2. Healthy aquatic ecosystems,
- 3. Reliable, quality water supply for a sustainable economy.

Specifically, this project will support healthy aquatic ecosystems within the Beaver River watershed of Alberta.

#### 16. Skills development, education, and outreach

Does	your project include a skills development, education, and/or outreach component?
$\boxtimes$	Yes
	No
of yo	, list the different skills development, education, and outreach initiatives that will be part ur activities and provide information on how they will contribute to the long-term fits of the project.

LICA's Aquatic Invasive Species Monitoring and Prevention Project, Outreach Component:

- 1. A booth will be set up during busy lake weekends, fishing derbies and during community event days to raise awareness of aquatic invasive species and the Clean, *Drain, Dry* and *Don't Let it Loose* campaigns.
- 2. With the purchase of a public boat washing station, this equipment will be offered at different lakes throughout the summer season, as part of the awareness campaign, to promote cleaning, draining, and drying of watercraft equipment. This will assist the government of Alberta in the prevention of AIS as this initiative is in support and offered to complement the Provincial boat check-stops as additional prevention efforts. This is a long-term project that LICA will support and collaborate on with Municipalities/Counties in the watershed to continue to offer after the duration of this funding. The boat washing station has built-in software to collect data on the number/time of uses and tools that were utilized the most. This data will inform



- decisions in long-term management regarding appropriate and successful locations to house this boat washing station, and the species that would have been most protected by, based on the cleaning tools that were utilized.
- 3. LICA's social media following during the 2022-2023 fiscal year was 1,483, with 2,113 people reached through education and outreach programming. AIS awareness will be posted on social media and included in current and future outreach initiatives to expand our reach. Social media awareness supports long-term education of AIS in our watershed.
- 4. AIS educational resources will be offered to Municipalities/Counties and Indigenous Communities for dispersal throughout the watershed, encouraging them to implement measures to monitor and/or prevent the spread of AIS. Throughout the IWMP developmental stages, select Municipalities/Counties have identified their need to increase capacity for AIS monitoring. This project will kick-start AIS monitoring in the region and will support long-term monitoring initiatives throughout the watershed. LICA will provide support to other long-term monitoring initiatives for AIS with the use of the eDNA equipment purchased through this funding.
- 5. Where species such as Himalayan Balsam are detected, control efforts such as manual removal will be implemented. This will be promoted in the community to educate residents, and volunteers will assist in eradication. LICA continues to promote and organize several shoreline clean-ups with different groups such as local high schools, and through its Keep our Lake Blue Campaign with participating WSGs. This is a target in LICA's Annual Work Plans and continues to be met to promote the education of invasive species and to support the preservation of our shorelines.
- 6. LICA is currently developing a youth program named *LICA's Little Environmental Stewards*. AIS awareness will be included in educational lectures, and students will be advised of species of concerns and current *Clean, Drain, Dry* and *Don't Let it Loose* campaigns. Campaign materials and species identification booklets will also be provided to youth participants of this program. Education of youth is important to help shape the knowledge of AIS in the next generation. Long-term knowledge and awareness are implemented in youth education and are considered in this project.

#### 17. Ongoing sustainability of the project

Describe the measures that will be carried out to ensure ongoing sustainable results of the project and its activities beyond the life of this project. For projects that would normally need ongoing maintenance (for example projects involving construction, or the development of online tools), or ongoing personnel support, please indicate measures and/or approaches to reduce the need for ongoing maintenance or support.



#### Maximum 2,500 characters

LICA will continue to promote prevention of AIS in the watershed and will share resources with stakeholders and rightsholders. Education of AIS will continue to be a part of current and future programming. Educational signage will remain in place at priority lakes throughout the watershed and will support awareness of AIS.

Once purchased through this funding, the public boat cleaning station will continue to be offered at different locations throughout the watershed with the support from Municipalities and Counties.

Once purchased through this funding, the eDNA Citizen Science sampler will be owned and housed at the LICA office and will be used for the continuation of lake and stream monitoring in the watershed. The data collected and analyzed through this funding, will be shared with all stakeholders and rightsholders in addition to being publicly available on the LICA website to support sharing of knowledge to influence AIS awareness, prevention, early detection, and control.

#### 18. Work plan, activities, and budget

Identify key activities within your project and provide a description (including techniques and/or methods that will be used as well as the amount requested from this Fund for each of the them, amounts in Canadian dollars). Activities should be organized in fiscal years and there may be several activities for each fiscal year. Select the closest activity category.

Fiscal year	Activity title	General description of the activities, key stages to be undertaken, techniques and/or methods	Budget/ Amount requested from this Fund
2024-25	Educational Resources: Prevention	Printing of AIS pocket guide, Clean, Drain, Dry and Don't Let it Loose Campaign materials and factsheets.	\$5,400
2024-25	Prevention Efforts	Purchase of portable boat cleaning station. Includes outer design work for campaign marketing, shipping to LICA, and software for use tracking.	\$70,700.00



2024-25	Early Detection: Monitoring Program	Expenses related to seasonal technician contracted to complete monitoring program (Wage, travel expenses, PPE)	\$37,030.00
2024-25	Early Detection: Monitoring Program	Purchase eDNA Citizen Science Machine, filters, other sample equipment & lab analytical supplies.	\$27,389.00
2024-25	Response: Control Measures	Equipment required for the manual removal of invasive species such as Himalayan Balsam.	\$550.00
2025-26	Educational Resources: Prevention	Printing of AIS Pocket Guides, and AIS Educational signage and hardware.	\$11,700.00
2025-26	Prevention Efforts	Portable boat cleaning station: maintenance & upkeep costs	\$2,000.00
2025-26	Early Detection: Monitoring Program	Expenses related to seasonal technician contracted to complete monitoring program (Wage, travel expenses)	\$37,030.00
2025-26	Early Detection: Monitoring Program	Purchase eDNA filters, replacement components, other sample equipment & lab analytical supplies.	\$21,814.00
2025-26	Response: Control Measures	Replacement equipment required for the manual removal of invasive species such as Himalayan Balsam.	\$200.00
2026-27	Educational Resources: Prevention	Printing of AIS pocket guide, Clean, Drain, Dry and Don't Let it Loose Campaign materials and factsheets.	\$5,400.00



2026-27	Prevention Efforts	Portable boat cleaning station: maintenance costs	\$2,000.00
2026-27	Early Detection: Monitoring Program	Expenses related to seasonal technician contracted to complete monitoring program (Wage, travel expenses)	\$37,030.00
2026-27	Early Detection: Monitoring Program	Purchase eDNA filters, replacement components, other sample equipment & lab analytical supplies.	\$20,880.00
2026-27	Response: Control Measures	Replacement equipment required for the manual removal of invasive species such as Himalayan Balsam.	\$200.00
	•	Total	\$279,323.00

19.	<b>Permits</b>	and	autho	rizations
<b>エン・</b>		and	autilu	/I 12a LIVII3

Ident	Identify any permit(s) or authorization(s) required for this project.			
	Fishing license			
	Project near water authorization, related to fish and fish habitat protection			
	Not applicable			
$\boxtimes$	Other (specify in the text box below)			
Maxi	mum 1,000 characters			
	Cold Lake Air Weapons Range requires authorized approval to access Primrose Lake. per authorizations will be obtained to access this sample location.			

## 20. Measuring program performance

Enter planned amounts.

	Performance measure	Planned
--	---------------------	---------

Number of partners engaged and involved in	
the project. The Recipient (applicant) and Fisheries and Oceans Canada must not be	14
counted as partners.	
Number of Indigenous groups engaged	12
and/or involved in the project	
Number of aquatic invasive species dealt	10
With in the project	
Number of aquatic invasive species listed on	
the Aquatic Invasive Species Regulations School 10 1 Part 2 and Part 2 dealt with in	4
Schedule 1 Part 2 and Part 3, dealt with in	
the project  Areas severed for early detection and or	
Areas covered for early detection and or	22,000 km <sup>2</sup>
response and or control actions taken (square metres/kilometers)	(Extent of the Beaver River watershed).
Number of activities that directly contributed	
to restoring or protecting species at risk	2
critical habitat	2
Circlearnabitat	1 contract position for 3 seasons.
	Increased internal capacity of LICA to carry out
Number of jobs created	project coordination.
Number of jobs created for Indigenous	1 contract position available to successful
individuals	candidate.
Number of people trained	26
Number of Indigenous individuals trained as	
part of capacity building initiatives	12
Number of education and outreach materials	~5,560 copies of campaign resources and
created	signage printed.
Number of outreach events conducted (for	8 – AIS awareness in outreach booths at
example, but not limited to, presentations,	community events, at Fish Derbies, and
workshops, etc.)	supported by KOLB shoreline cleanups.
1 - 1 1	I. I I

End of application form.



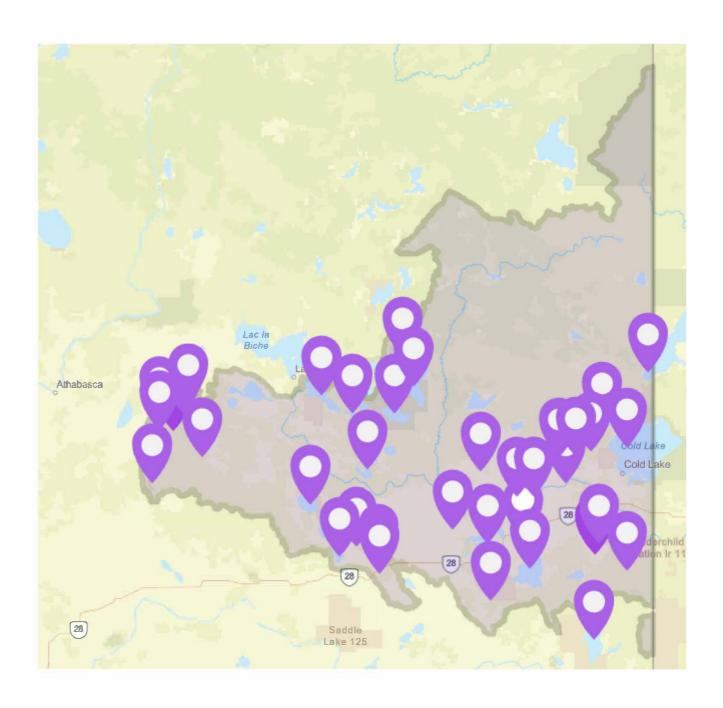


#### Aquatic Invasive Species Prevention Fund, Supporting Documents

#### LICA's Aquatic Invasive Species Monitoring and Prevention Project

- Early Detection Monitoring Program: Beaver River watershed & sample site map
- Letters of Support
  - 1. Alberta Environment & Protected Areas: Nicole Kimmel
  - 2. 4 Wing Cold Lake
  - 3. Athabasca County
  - 4. Beaver Lake Cree Nation
  - 5. Buffalo Lake Métis Settlement
  - 6. County of St. Paul
  - 7. Kehewin Cree Nation
  - 8. M.D. of Bonnyville
  - 9. North Saskatchewan Watershed Alliance
  - 10. Smoky Lake County
  - 11. Town of Bonnyville
  - 12. Lac La Biche County
  - 13. University of Alberta: Patrick Hanington
  - 14. Alberta Lake Management Society: Bradley Peters

## Early Detection Monitoring Program: Beaver River watershed boundary & sample site map







Resource Stewardship Division

6<sup>th</sup> Floor, Forestry Building 9920 - 108 Street Edmonton AB T5K 2M4 Telephone: 780-427-7791

www.alberta.ca

July 19, 2023

## RE: Letter of Support for the Lakeland Industry & Community Association (LICA) Project Proposal under the Aquatic Invasive Species Prevention Fund

Dear Aquatic Invasive Species Prevention Funders,

I am writing to express my support for the Lakeland Industry & Community Association's proposal for expanded monitoring capacity and to promote the 'Clean, Drain, Dry" and 'Don't Let It Loose messaging to raise awareness about the issue of aquatic invasive species.

Invasive species pose a serious threat to ecosystems and economies around the world. In Alberta, aquatic invasive species like invasive mussels could have devastating impacts on native aquatic populations, disrupt food chains, and degrade water quality. Monitoring is an area where more capacity is needed, the Alberta government is hopeful that monitoring can expand through valued partners like LICA.

LICA has an exceptional track record of success in previous monitoring, promoting awareness of invasive species and best management practices to prevent their introduction and spread. By partnering with LICA, the project will be able to leverage already existing expertise in environmental monitoring, environmental management and community education and outreach.

I believe that this project has the potential to make a real impact in the fight against invasive species in Alberta and beyond. By supporting the expansion of monitoring and education we can inspire a new group of environmental stewards to take action to protect our natural resources.

Thank you for your consideration of this important proposal.

Sincerely,

Nicole Kimmel

Aquatic Invasive Species Specialist Alberta Environment & Protected Areas 9920-108 Street NW Edmonton, Alberta T5K 2M4 nicole.kimmel@gov.ab.ca

Classification: Public



To Whom It May Concern,

On behalf of Personnel Support Programs, 4 Wing Cold Lake, I am writing this letter of support concerning the LICA application to the Aquatic Invasive Species Fund.

The request for funding support with regard to the Beaver River watershed is an important issue that impacts many within the region, including those of us at 4 Wing Cold Lake. While my operations in and of themselves have limited involvement within this body of water, many of our facility users and program attendees are impacted by this cause.

With that, we would be happy to support the increased dispersal of educational resources within our facilities in order to create a greater awareness of this issue, how it affects our community and how we can better support it in an environmentally conscious manner.

Sincerely,

Rob Larson Senior Manager Personnel Support Programs 4 Wing Cold Lake PHONE: 780-675-2273 FAX: 780-675-5512 www.athabascacounty.com



3602 - 48 Avenue ATHABASCA, ALBERTA T9S 1M8

August 2, 2023

Lakeland Industry & Community Association (LICA) 5107 50 Street Bonnyville, Alberta T9N 2J7

Attention: Kayla Hellum Environmental Coordinator

Via Email: watershed@lica.ca

Dear Kayla

RE: Aquatic Invasive Species Fund – Letter of Support

On behalf of Athabasca County, I am pleased to provide a letter of support to the Lakeland Industry & Community Association (LICA) your application for the Aquatic Species Fund for the Beaver River watershed.

Athabasca County is aware that this application is to increase the prevention, early detection, and response efforts of aquatic invasive species in the region.

This initiative and the funding is supported in the Athabasca County Strategic Plan 2023-2026 Pillar Two Investing in Infrastructure and Our Environment through Goal 4 Protecting the Natural Environment.

Please note, this letter of support does not preclude any financial or in-kind contribution from Athabasca County at this time.

Please contact me at 780-675-2273 or <u>cao@athabascacounty.com</u> if you have any questions or if you require additional information.

Sincerely,

Pat Vincent CLGM Interim CAO



CREE NATION

July 31/2023



Box 960, Lac La Biche, AB, T0A2C0 Ph:780 623 4549

To Whom It may concern:

This letter is to confirm that we are in support of LICA's application for the aquatic invasive species prevention program. As a Nation we support clean and healthy water, ecosystems and safe drinking water for our people and animals. As well as keeping it safe for future generations.

We support the detection, prevention and early response against aquatic invasive species that may harm our lakes and streams.

Sincerely,

Micheal Lameman

Visions of Tomorrow

P.O. Box 960, Lac La Biche, AB T0A 2C0

Office: 780-623-4549

web: www.blcn.ca

Fax: 780-623-4523

Toll Free: 1-877-610-3110



August 1st, 2023

Fisheries and Oceans Canada Ontario and Prairie Region 1028 Parsons Rd SW Edmonton, Alberta T6E 0J4

Subject: Letter of Support for Aquatic Invasive Species Fund for the Beaver River Watershed

To whom it may concern,

My name is Janessa Desjarlais. I work for Buffalo Lake Métis Settlement (BLMS) in the Consultation Office. My role in Consultation is the Habitat Stewardship Coordinator. On behalf of BLMS we would like provide our input in relation to the Aquatic Invasive Species (AIS) Fund for the Beaver River Watershed. Buffalo Lake Métis Settlement is one of eight Métis Settlements in Alberta. The land base of BLMS comprises approximately 35,356 hectares (3.75 townships). Buffalo Lake is located in east-central, Alberta, 200 kilometers north-east of Edmonton. The current population sits at 1,236 people. Buffalo Lake is also located in the Upper Amisk River Sub-basin of the Beaver River Watershed.

Buffalo Lake Métis Settlement has had a working relationship with Lakeland Industry & Community Association (LICA) for multiple years now. LICA has helped BLMS tremendously with capacity building activities. Currently, LICA and BLMS also have future programs and workshops in place for settlement members and staff as well.

We understand that LICA is applying for the Aquatic Invasive Species Fund for the Beaver River Watershed. Aquatic invasive species are a threat to the many lakes in the Beaver River watershed. If LICA is a recipient of this grant, not only will LICA implement AIS educational recourses, a lake monitoring program for various AIS and where/if AIS are detected and the implementation of necessary control efforts, but it would also be beneficial and educational for the Métis Settlements and First Nations who are also located in this watershed.

As a community who is based in and is a user of the Beaver River Watershed, Buffalo Lake Métis Settlement strongly supports LICA in their proposal for the Aquatic Invasive Species Fund. Should you have any questions, please do not hesitate to contact me at <a href="mailto:idesjarlais@blmetis.ca">idesjarlais@blmetis.ca</a> or 780-689-2170. Thank you for taking the time to read our letter.

Sincerely,

Janessa Desjarlais

Habitat Stewardship Coordinator, Consultation

Buffalo Lake Métis Settlement

(780) 689-2170

www.BuffaloLakeMS.ca

#### **COUNTY OF ST. PAUL**

5015 – 49 Avenue, St. Paul, Alberta, T0A 3A4 www.county.stpaul.ab.ca

Our Mission - To create desirable rural experiences



August 10, 2023

To whom it may concern:

## RE: LICA's application for the AQUATIC INVASIVE SPECIES FUND for the Beaver River watershed

Please accept this letter of support in principle from the County of St. Paul No. 19 to accompany LICA's application for the Aquatic Invasive Species Fund for the Beaver River watershed.

LICA has proven to be a progressive environmental representative and a formidable Watershed Planning and Advisory Council in Alberta, for the Beaver River Watershed. Their efforts and objectives for a healthy aquatic ecosystem and quality water supplies for a sustainable economy have been revered with the development of an Integrated Watershed Management Plan (IWMP) for the Beaver River. The IWMP incorporates environmental, social and economic factors which support interdependent human, animal and ecosystem health.

In the event that LICA should be successful with their application, the County of St. Paul would appreciate Floating Stone Lake as consideration for a priority lake for the Aquatic Invasive monitoring program, sign installation and/or to host the boat cleaning station. This County lake receives a vast array of visitors not only from the County of St. Paul itself but from its neighboring municipalities. County Council believes that this lake would highly benefit from an increase of education with early detection and quite possibly the implementation of necessary control efforts of aquatic invasive species.

If you have any further questions, please feel free to contact me at 780-645-3301 ext. 1208 or <a href="mailto:skitz@county.stpaul.ab.ca">skitz@county.stpaul.ab.ca</a>.

Sincerely,

Sheila Kitz CLGM,

Chief Administrative Officer

Phone: 780-645-3301

Email: countysp@county.stpaul.ab.ca

August 22<sup>nd</sup>, 2023

Box 1166 Elk Point, Alberta T0A 1A0

RE: LICA's application for the Aquatic Invasive Species Fund

To whom it may concern,

Kehewin Consultation fully supports LICA's application under the Aquatic Invasive Species Fund for the Beaver River watershed. Kehewin Consultation has worked closely with LICA on shared goals for watershed health and knows that Aquatic Invasive Species pose a serious threat to Alberta's watersheds.

We understand that the intent of this multi-year grant funding is to increase the prevention, early detection, and response efforts of aquatic invasive species (AIS) in the Beaver River Watershed. If LICA is a successful recipient of this grant, this funding will support the increased dispersion of AIS educational resources, will implement a monitoring program for various AIS and where/if AIS are detected, the implementation of necessary control efforts.

Kehewin Consultation is committed to finding tangible data that assists with building our internal capacity, in addition, our goal is based on exercising our inherent treaty rights and responsibilities, co-existing with Canada and their own foundations, overall, we support all aspirations for past, current, and future generations, in terms of collective benefit.

Aquatic invasive species pose a serious threat to biodiversity and our natural environments. Prevention, early detection, and response efforts incorporated in this project for the Beaver River watershed are necessary in the fight against AIS spread. Kehewin Consultation is delighted to offer a Letter of Support for LICA's application to the Aquatic Invasive Species Fund.

Regards

Ken Dion

Consultation Manager

Kehewin Cree Nation #123

1 (780) 815-1214



August 10, 2023

Lakeland Industry and Community Association PO Box 8237 Bonnyville, AB T9N 2J5

To Whom it May Concern:

#### Re: Letter of Support - Aquatic Invasive Species Fund

On behalf of the Municipal District of Bonnyville (M.D.), I would like to express our support for the Lakeland Industry and Community Association's (LICA) application to the Aquatic Invasive Species Fund for the Beaver River watershed.

Via email: watershed@lica.ca

Through this program, LICA proposes to implement an Aquatic Invasive Species (A.I.S.) monitoring program at a variety of lakes in the watershed, and implementation of necessary control efforts where required as well as offer a voluntary public boat cleaning station during high-traffic weekends for lake users and install educational signage at priority lakes. This will help to increase awareness of A.I.S. for both our residents and visitors alike.

The M.D. appreciates that this funding opportunity will significantly increase the prevention, early detection, and response efforts of A.I.S. in our region, we look forward to seeing this vital initiative realized in the near future.

Sincerely,

Barry Kalinski

Reeve

/ww



#### 202, 9440 49 Street, Edmonton, AB T6B 2M9 | **NSWA.AB.CA**

August 10, 2023

**Aquatic Invasive Species Protection Fund** 

RE: Letter of Support - Application to the Aquatic Invasive Species Prevention Fund

To Whom It May Concern,

I am writing to indicate our support for the Lakeland Industry & Community Association's (LICA) application to the Aquatic Invasive Species Protection Fund (AISPF) for multi-year funding to increase the prevention, early detection, and response efforts to aquatic invasive species (AIS) in the Beaver River Watershed. This project targets shared goals of both LICA and North Saskatchewan Watershed Alliance (NSWA) to safeguard our natural aquatic environment and provide options for managing and controlling invasives in the Beaver Watershed. The program also includes public education and outreach campaigns which align with the NSWA's goals to support overall watershed literacy.

The NSWA is a multi-stakeholder watershed partnership that has for more than 20 years provided a forum to address issues and initiate actions that positively affect the North Saskatchewan River watershed in Alberta. The <a href="NSWA Integrated Watershed Management Plan">NSWA Integrated Watershed Management Plan</a> (2012) (IWMP) was developed by stakeholders across the watershed, and it encourages all activities that lead to improved watershed knowledge and condition. Preventing the establishment of invasive species and managing the impacts of those that have arrived is important to maintain watershed resiliency and biodiversity, which benefits both wildlife and humans.

LICA has consistently demonstrated its commitment to improving the health of the aquatic ecosystem and to improving overall awareness of watershed issues. Their proposed work to enhance AIS monitoring, prevention, and control serves a growing need across all watersheds. We believe that LICA is well-equipped to effectively utilize AISPF funding to address the growing threat of aquatic invasive species. Their work not only contributes to the protection of the Beaver River watershed but also enhances the resilience and sustainability of our ecosystems for future generations.

We are eager to support this collaborative initiative and promote its implementation.

Sincerely,

Scott Millar, Executive Director North Saskatchewan Watershed Alliance



## **Smoky Lake County**

P.O. Box 310 4612 McDougall Drive Smoky Lake, Alberta TOA 3CO

Phone: 780-656-3730 1-888-656-3730 Fax: 780-656-3768

www.smokylakecounty.ab.ca

August 3, 2023

Kayla Hellum, Environmental Coordinator, Lakeland Industry and Community Association (LICA) 5107W - 50th Street, Bonnyville, AB, T9N 0A6

Emai: watershed@lica.ca

RE: Letter of Support, Aquatic Invasive Species Fund Application for the Beaver River watershed

To Whom it May Concern,

I hope this finds you well. On behalf of Smoky Lake County Council, I am pleased to provide this letter in support for LICA's application under the Aquatic Invasive Species Fund for the Beaver River watershed (which covers more than 10% of Smoky Lake County, and several of our lake subdivision communities).

We understand that the intent of this multi-year grant funding is to increase the prevention, early detection, and response efforts of aquatic invasive species (AIS) in our region. If LICA is a successful recipient of this grant, this funding will support increased disbursement of AIS educational resources, will implement a monitoring program for various AIS and where/if AIS are detected, the implementation of necessary control efforts.

We see immense value in the several project components that will benefit our County, including:

- Implementing an Aquatic Invasive Species monitoring program at a variety of lakes in the watershed.
- Testing will be completed for a variety of invasive species.
- Offering a voluntary public boat cleaning station at different locations during high-traffic weekends for lake users.
- Increased dispersal of educational resources.
- Installation of AIS educational signage at priority lakes.
- Implementation of AIS control measures, where necessary.

We hope in particular that Garner and Whitefish Lakes will be prioritized under the program for monitoring and sign installation and/or a location to host the voluntary boat cleaning station.

Please do not hesitate to contact myself or our Administration at 780-656-3730/lhalisky@smokylakecounty.ab.ca. Sincerely,

Lorne Halisky

Reeve & Division 4 Councillor, Smoky Lake County



# Town of Bonnyville

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PLEASE VISIT BONNYVILLE ON THE WORLD WIDE WEB www.bonnyville.ca

August 22, 2023

Kayla Hellum Environmental Coordinator LICA - Environmental Stewards PO Box 8237 Bonnyville AB T9N 2J5

Dear Sir/Madame:

RE: Letter of Support - LICA - Aquatic Invasive Species (AIS) Fund Grant Application

Council of the Town of Bonnyville, at their regular Council meeting of August 22, 2023 passed a resolution to provide a Letter of Support for the LICA – Aquatic Invasive Species Fund Grant Application.

The Council of the Town of Bonnyville is please to be able to support the LICA – – Aquatic Invasive Species Program in the implantation in regards to the threat of AIS in the area.

We look forward to a favourable response to this grant application and look forward to working with LICA in the program delivery and outcomes.

Yours truly,

Elisa Brosseau

Mayor

Town of Bonnyville

moreco

EB:tg



Office of the Mayor

August 18, 2023

Lakeland Industry & Community Association Environmental Stewards PO Box 8237 Bonnyville, AB T9N 2J5 Delivered via email: watershed@lica.ca

To Whom it May Concern:

On behalf of Lac La Biche County Council, I wish to express our support for Lakeland Industry and Community Associate (LICA) and their latest project by applying for the Aquatic Invasive Species Prevention Fund offered by Fisheries and Oceans Canada.

This multi-year grant would increase the prevention, early detection, and response efforts of aquatic invasive species in the Beaver River Watershed. It would also support the disbursement of educational resources, and implementation of a monitoring program for aquatic invasive species and necessary control efforts.

One of Lac La Biche County's key strategic priorities includes the environment, which involves the thoughtful stewardship of our natural environment. This project aligns with our strategic priorities, and as such, Lac La Biche County supports this project.

We look forward to seeing how this project can assist our region.

Sincerely,

Paul Reutov

Mayor, Lac La Biche County

cc:

Lac La Biche County Council

Melanie McConnell, Acting Chief Administrative Officer



Kayla Hellum

Lakeland Industry and Community Association (LICA)

Re: Fisheries and Oceans Canada Aquatic Invasive Species Prevention Fund Application

Dear Kayla,

I am pleased to provide this letter in support of your application to the Fisheries and Oceans Canada Aquatic Invasive Species Prevention Fund. My research group and I have spent the past decade working to design and validate DNA-based tests for aquatic organisms, including aquatic invasive species and species at risk relevant to Alberta. These efforts recently yielded a substantial grant funded by Alberta Innovates and supported by Alberta Environment and Protected Areas, Parks Canada, the City of Calgary, the Alberta Lake Management Society and the North Saskatchewan Watershed Alliance. This grant, which amounts to ~\$1.7 million in funding, supports our program to design and implement eDNA-based tests for numerous invasive species in Alberta and implement them as part of a province-wide surveillance effort.

Thus, my group and I are perfectly situated to support your proposal to the AISPF. We have secured digital PCR infrastructure and validated dPCR tests for all of the organisms identified in your proposal's eDNA objective. Thus, we can provide significant in-kind support to your proposal to the amount of \$246,000.00.

I look forward to our future collaboration.

All the best,

Patrick Hanington

Professor

University of Alberta School of Public Health





LICA Environmental Stewards 5107W-50<sup>th</sup> Street Bonnyville, Alberta

**RE: Letter of Support for Aquatic Invasive Species Fund** 

To Whom It May Concern,

Please accept this letter as an indication of our support for LICA Environmental Stewards application to the Aquatic Invasive Species Fund.

The Alberta Lake Management Society is a registered charity based in Edmonton, Alberta. We have spent more than 25 years developing and delivering community based water quality monitoring projects on lakes. Specifically, a focus of our efforts is on the early detection of aquatic invasive species including zebra mussels, quagga mussels, spiny water flea, and Eurasian watermilfoil. These species pose a significant threat to the health of our freshwater ecosystems, and early detection is a critical component of a successful rapid response plan.

ALMS and LICA have collaborated for two decades to rigorously monitor lakes within the Beaver River Watershed region. These lakes represent some of Alberta's most valuable water resources, and their vulnerability to aquatic invasive species requires constant vigilance. We are happy to support enhanced and expanded monitoring of lakes within this region for aquatic invasive species. ALMS aquatic invasive species data, collected over 40 samples events through our LakeWatch program, will be added to this project. We are also happy to enable the genetic testing of watermilfoil specimens through the Alberta Plant Health Lab for accurate species identification.

In total, ALMS in-kind contribution to this project totals \$50,000.

Sincerely,

**Bradley Peter** 

**Executive Director** 

Bradley Peter

Alberta Lake Management Society

ALMS Workshop Sept. 12 & 13 2023, Sylvan Lake

Sylvan Lake is experiencing invasive species problem with goldfish. Difficulties arising with remedy approaches due to collaboration; 8 different municipalities border the lake, and it seems everyone wants a different approach.

ALMS; AGM to be held in person and virtually in November, no date yet.

Winter water sampling program is expanding.

OSM (Oilsands Monitoring) is using the ALMS Lakewatch program.

ICBM (Indigenous Community Based Monitoring) is using ALMS Lakekeepers program.

MNA (Metis Nation of Alberta) is collaborating.

MNA is surveying harvesters. Interesting point on survey is that "comments" are compiled and used to create future surveys.

LICA was acknowledged and thanked for participation and funding during presentation.

Pigeon Lake Combined Feedlot Operation; (CFO) application was denied (Big news!). The Pigeon Lake Watershed Stewards (PLWS) appealed the application and won. PLWS jointly with Landowners and First Nations were successful. This was the first time this type of action was used and may have set a precedent. PLWS is willing to share knowledge and resources with others if requested.

Alberta Biodiversity Monitoring Institute (ABMI); 6 lakes pilot project combining water samples taken at the same place and time as a satellite image is taken. The image pixels are matched to lab test results. A database is being compiled and programs created. By 2025, satellite images will be able to be used monitor and forecast algal blooms in lakes much as radar is used for weather monitoring!

Irrigation and Water diversion projects; Much discussion about economic value vs natural value. No consensus on topic!

Nitrate contamination of groundwater; All testing of groundwater near dense agricultural use areas in Alberta show high nitrate levels. High nitrate levels can lead to eutrophication and algae blooms. Higher levels of salinity noted in southeast corner of Alberta and near oilsands operations.

## LICA Watershed Committee Meeting

Date: April 4, 2023 Recorder: Lori Jodoin

#### **ACTION LIST**

Task		Date to be completed	Person assigned to task	Υ
3.1 <u>I</u>	WMP Implementation			
•	9.2.3.2 b) Deep Groundwater Availability Mapping- reach out to AGS regarding mapping	Spring/Summer 2023	Kayla	IP
•	9.2.3.3 b) Monitor lake water levels of interest to First  Nations and Metis- check into flood plain mapping information from the planning and development department in Lac La Biche.	Spring/Summer 2023	Randi	ΙΡ
•	9.4.3.2 e) Agricultural Setbacks- look into this and see what exists	Spring/Summer 2023	Shawn	ΙΡ
•	9.4.3.3 e) Riparian Conservation- look into this	Spring/Summer 2023	Abdi	IP
•	9.5.3.1 b) Wetland Valuation- look into what subregional plans state.	Spring/Summer 2023	Abdi	ΙΡ
•	9.6.3.2 c) Fish Spawning Habitat Survey- connect with Fishery staff to see what programs are in place.	Spring/Summer 2023	Kayla	ΙΡ
•	Look into viable IWMP implementation projects based on committee discussions at the April 4 <sup>th</sup> meeting.	Spring/Summer 2023	Kayla	IP
4.1.1	Follow Up on Action List			
•	Review State of the Watershed Report to look for potential projects to fill in the gaps.	Summer 2023	Kayla	IP
Item	s Brought Forward			
4.2.1	Top Five Priorities for Beaver River IWMP Implementation			
•	Contact AEP regarding assistance with floodplain mapping.	Spring 2023	Kayla/Abdi	IP
•	Continue to assist where possible to implement and share the IWMP.	Winter/Spring 2023	LWC	IP

**Next Meeting: TBD** 

## LICA Watershed Committee Meeting

4.3.1 Current Proposed Budget			
Continue to research and establish contacts regarding review and revision of State of the Watershed report.	Spring 2023	Kayla	IP
5.1.1 Follow Up on Action List			
Present IWMP report to municipalities in the LICA region.	Winter/Spring 2023	Kayla	IP