



Lakeland Industry and Community Association

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

780 812-2182 780 812-2186 www.lica.ca

BOARD OF DIRECTORS

Meeting Minutes

Thursday, November 19, 2020

9:00 a.m. – 12:00 p.m.

LICA Boardroom/Microsoft Teams

Present:	Jason Quinney (via Microsoft Teams) Sheena Oman (via Microsoft Teams, arrived at 9:50 a.m.) Richard Bourgeois Amanda Avery-Bibo Heather Harms (via Microsoft Teams, left at 12:31 p.m.) Wayne Bamber (via Microsoft Teams, left at 10:22 a.m.) John Ilchuk Duane Zaraska Anthony Traverse (via Microsoft Teams) Lorna Storoschuk (via Microsoft Teams) Shawn Elgert (via Microsoft Teams, left at 12:00 p.m.) Annette Hobart (via Microsoft Teams, arrived at 10:04 a.m.) Abdi Siad-Omar (via Microsoft Teams, arrived at 9 :19 a.m.) Dana Swigart (via Microsoft Teams) Lorin Tkachuk (via Microsoft Teams)
Observers and Guests:	
Staff and Contractors:	Kristina Martel, LICA Executive Director Michael Bisaga, Environmental Monitoring Programs Manager (via Microsoft Teams) Lily Lin, Data & Reporting Specialist (via Microsoft Teams) Tricia Fleming, Environmental Coordinator Rachel Bates, Education & Outreach Coordinator Tina Martin, LICA Administrative Professional (via Microsoft Teams) Eveline Hartog, LICA Administrative Professional
Regrets:	Craig Copeland Cody Jackknife Francis Nkemamin

1.0 CALL TO ORDER:

Amanda Avery-Bibo, the LICA Board Chairperson, called the meeting to order at 9:06 a.m.

1.1 ntroductions and Sector Updates

The LICA Chair and the Executive Director introduced the new Education & Outreach Coordinator.

1.2 Vision, Mission and Values

1.3 Roll Call

1.4 Approval of Agenda

#1 Moved by Duane Zaraska AND CARRIED that the November 19, 2020, Agenda be approved as presented.

1.5 Approval of Minutes

1.5.1 October 22, 2020 – Organizational Meeting

#2 Moved by John Ilchuk AND CARRIED that the Minutes of the October 22, 2020, Board meeting be approved as presented.

1.5.2 October 22, 2020 – Board Meeting

#3 Moved by Jason Quinney AND CARRIED that the Minutes of the October 22, 2020, Board meeting be approved as presented.

2.0 ONGOING BUSINESS

2.1 Education and Outreach Update

The Executive Director delivered the Education & Outreach update.

The new Education & Outreach Coordinator gave an update on the WPAC E&O meeting she attended noting that funding has been secured for the planned WPAC educational videos in which LICA wrote a letter in support.

Notification was also provided that that classroom presentations are currently being scheduled and will begin in December.

2.2 Environmental Monitoring Programs Update

The Manager of Environmental Monitoring Programs delivered his report. New developments to note:

- The tree removal application for the Maskwa station is being submitted today.
- The Oil Sand Monitoring (OSM) released the appointed members of the Technical Advisory Committee. The Airshed seats have been removed.

Further discussion was held on the topic of the landowner dispute near Cold Lake and LICA's position. It was determined that LICA will remain a neutral third-party in this legal matter and will provide monitoring data in accordance with LICA's Vision, Mission, and Values.

#4 Moved by Duane Zaraska AND CARRIED that LICA will approach the two landowners and state that we are open to be a neutral forum to facilitate discussion and suggest that the MD of Bonnyville be involved in the matter. LICA is willing to work with a neutral third-party (such as the MD of Bonnyville) to support the discussion of monitoring and will provide the data solely to the third-party for information.

The Manager of Environmental Programs requested approval of the Terms of Reference for the Acid Deposition Monitoring Program Enhancement Committee and to begin soliciting members for this committee.

#5 Moved by John Ilchuk AND CARRIED that the Terms of Reference for the Acid Deposition Monitoring Program Enhancement Committee (ADMPEC) be approved and begin the appointment process of committee members.

2.3 Environmental Coordinator Report

The Environmental Coordinator delivered her report noting that the WRRP grant has been extended another year.

2.3.1 CreekWatch Citizen Science Monitoring Program

Members of the Board expressed interest in having creeks that run into the Beaver River, such as Jackfish Creek, be included in future years of the monitoring program.

The Board requested that the Environmental Coordinator contact the Cold Lake High School and discuss the RiverWatch Program implemented at the school to prevent duplication of waterway monitoring.

#6 Moved by Duane Zaraska AND CARRIED that LICA participate in the CreekWatch Citizen Science Monitoring Program within the LICA region and conduct water quality monitoring in up to two waterbodies for the 2021 sampling season.

2.3.2 GIS Course & Software Recommendation

The Environmental Coordinator noted that online training would commence in January 2021. The Board confirmed that LICA has a handheld GPS unit which could create wave points compatible with the ArcGIS program.

#7 Moved by John Ilchuk AND CARRIED that LICA provide funding for the training of the Environmental Coordinator in an 'Introduction to GIS using ArcGIS' course administered by ESRI Canada, and the purchase of ArcGIS software.

2.4 Administration

2.4.1 Executive Director's Report

The Executive Director delivered her report noting that LICA is increasing safety protocols due to rapid increases in Covid-19 cases. For future meetings, Board and Committee members are encouraged to attend meetings virtually, when possible.

Lease negotiations are being finalized. The new lease amount is \$3,000/ month as predicted in the 2020-21 Budget.

The Executive Director will commence the Leadership Certificate training, approved as part of her hiring-conditions, in December 2020.

#8 Moved by John Ilchuk AND CARRIED that the Governance Committee review Policy 3.9 *Leaves of Absence and Sick Leave* to add a clause on Bereavement Leave in accordance with the Alberta Employment Standards Code: *An employee who has been employed by the same employer for at least 90 days is entitled to up to 3 days of unpaid leave in a calendar year upon the death of a family member.*

2.4.2 Financial Reports

2.4.2.1 Accounts Receivable Report to November 10, 2020

The accounts receivable report as of November 10, 2020, was presented to the Board.

2.4.2.2 Finances to Date October 31, 2020

The Finances to Date as of October 31, 2020, were presented to the Board.

2.4.3 Governance Committee

Nothing to report.

2.4.4 Education and Outreach Committee

Nothing to report.

2.4.5 Technical Working Group (TWG)

Nothing to report.

2.4.6 Integrated Watershed Management Plan Committee (IWMPC)

Nothing to report.

3.0 OTHER BUSINESS

3.1 LICA Boundary Expansion Motion Amendment

In consideration of LICA's resources and overlap of other airsheds and WPACs, the Board agreed to amend the previous LICA Boundary Expansion motion, made on September 24, 2020. The Board accepts the recommendation brought forward by the Manager of Environmental Monitoring Programs on September 24, 2020 and agreed to appoint an ad hoc committee to further review other boundary expansion opportunities.

#9 Moved by Duane Zaraska AND CARRIED that the original September 24, 2020, Board Meeting Motion of the LICA boundary expansion be amended to read:

- **Expand the LICA Monitoring Zone to match the existing LICA boundary, AND**
- **Relocate the 3 redundant passive air monitoring stations to the expansion area using a low-density array arrangement (e.g., 6 x 6 township grid).**
- **Deploy 3 PurpleAir to communities in the expansion area (St. Paul, Lac La Biche, + one TBD).**
- **Through outreach efforts, highlight these changes and the availability of data, monitoring results, and the community air canister sampling program.**
- **Amend Appendix A of the LICA Bylaws to reflect the boundary change.**

#10 Moved by John Ilchuk AND CARRIED that LICA appoint an ad-hoc committee to review and assess opportunities for further expansion of the LICA boundary.

4.0 ACTION LIST

4.1 Follow-up on action list

4.1.1 October 22, 2020 Board of Directors Meeting

The Board reviewed the action list from the October 22nd, 2020, Board of Directors Meeting.

5.0 UPCOMING MEETING DATES

5.1 Board Meeting – December 17, 2020

6.0 IN CAMERA

#11 Moved by Duane Zaraska AND CARRIED that the Board go in camera at 12:08 p.m.

#12 Moved by Lorna Storoschuk AND CARRIED that the Board in camera session conclude at 12:30 p.m.

7.0 ADJOURNMENT:

The meeting adjourned at 12:32 p.m.

#13 Moved by John Ilchuk AND CARRIED that the meeting is adjourned.

Approved on: _____
Date

Signature



Lakeland Industry and Community Association
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LICA Education & Outreach Board Update November 12, 2020

2.1 Education and Outreach Update

Program Updates – 2020/2021

People Reached	Water School Programs	Youth & Summer	X-Stream Science	Community Events	LICA Workshop/ Events	Little Green Thumbs	CARS	Air School Programs	Stream of Dreams	Contests
576	15	16	1	3	1	0	0	4	0	4

Recent Events

- None at this time, as LICA is in the process of hiring a new Education & Outreach Coordinator.

Bonnyville Community Garden & Compost (BCGC)

- LICA was not a recipient of the the Rural Communities Foundation Grant to fund the remaining portion of the Bonnyville Community Garden and Compost (BCGC). As previously planned, an application will be submitted to the Lakeland Credit Union for sponsorship funding.
- The Executive Director looked into LICA’s insurance coverage for the BCGC. Coverage for this additional plot of land will be an extra \$75 and will cover liability associated to stairs in addition to our current General and Commercial Liability Plan. This additional cost is within budget and should come into effect shortly.
- Stairs have been constructed and installed at the compost bins. The Town of Bonnyville was consulted prior to construction and building code was followed. Labor was provided in-kind by Trevor, Pastor of the Bonnyville Alliance Church.
- The BCGC is now ready for Spring – the soil is completely levelled and seed has been spread.
- The main Garden sign is being designed by Thinkwerkx and should be erected this month.
- companion planting, composting, and other sustainable gardening practices.
- Outstanding items that require action:
 - Finalizing draft Garden and Member Guidelines.
 - Develop and order garden rules signage and supporter signs
 - Seek presenters for the winter workshops

LICA Calendar Contest

- Work is underway on the LICA 2021 Calendar; winners have been chosen and contacted, and Dark Horse is working on the design.

LICA Photo Contest

- LICA's photo contest winners have received their prizes. I plan to have a digital flipbook designed to showcase all the photo entries submitted this year, rather than print a booklet. This compliments the direction of LICA going paperless.

Classroom Presentations

- No classroom presentations were provided this month due to the vacancy in the Education & Outreach Coordinator position.

Upcoming Events

- TBD

Environmental Monitoring Programs

November 19nd 2020, Board of Directors Update

Routine Operations & Reporting

Station Moves and Siting Improvements: **MASKWA** – Imperial is improving the driveway to create safer winter access for the station. A needs assessment for consultation on tree removal is proceeding this week (week of November 16th). If approved, tree removal will proceed in February pending a wild-life sweep. We are making progress on re-establishing the site access agreement and are discussing both the terms of the short-term site improvements and long-term presence on Imperial's lease (vegetation management, Prime contractor status, etc.). **COLD LAKE** – The City of Cold Lake has given LICA the *green light* to proceed with the site enhancements needed to improve safety at the station. Work is expected to commence this week (November 16th, 2020). Awaiting final logistics from AEP to coordinate moving the station. **PAMS** – Applied for a by-law variance for the station due to fence height and location. Still targeting a November 2020 relocation to Lac La Biche.

Network Maintenance and Enhancement: Implemented incremental improvements for different aspects of LICA's monitoring programs including security cameras, memory upgrades, new temperature & relative humidity sensors.



Special Projects

CASA COVID-19 Ad-Hoc Committee: Attended the first CASA COVID, Consumer Transportation, Air Quality (CTCAQ) Ad Hoc Group meeting. Co-presented on behalf of the Alberta Airshed community to show work that had been undertaken to understand the air quality impacts of changes in activities and behaviours during the early phase of the COVID-19 pandemic.

Airshed Council Technical Committee: Discussed potential update the Air Monitoring Directive (AMD) calibration requirements from monthly to bi-weekly or quarterly. Discussed calculation of data availability; currently each airshed has its own way of calculating operational uptime. More guidance on calculating operational time will be provided in a revised Chapter 6 of the AMD. The revisions will be sent out for full public consultation in 2021. Smoke reporting protocol is being reviewed internally by AEP. Decision/approval of the protocol is expected in time for the next wildfire season.

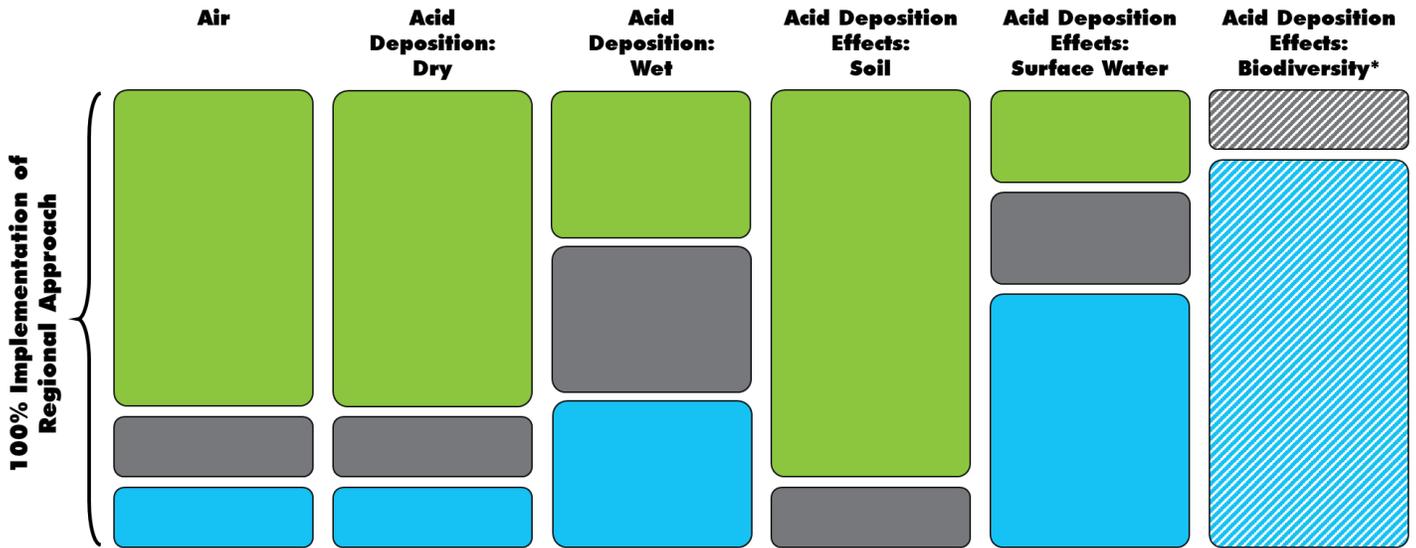
Oil Sands Monitoring Planning Process: No update on the planning cycle since the all-Technical Advisory Committee meeting was held on September 10th, 2020.

Landowner Dispute: LICA has been approached about a potential monitoring role regarding an air quality issue involving the use of a boiler on private land. An opportunity statement will be presented to the board regarding the issue.

Acid Deposition Monitoring Committee: The terms of reference for this committee have been prepared and are being presented to the board for approval. The following concept diagram helps illustrate the scope of work for the Acid Deposition Monitoring Program Enhancement Committee (ADMPEC):



Regional Acid Deposition Monitoring Program



Key:

- Monitoring Components: Existing Operated by LICA and/or Others
- Monitoring Components: Estimated Enhancement Needed to Meet New Regulatory Compliance Needs
- Monitoring Components: Estimated Enhancement Needed to Complete Regional Approach

* Not a compliance need but may be evaluated for future consideration while regulatory compliance monitoring components are being developed

Michael Bisaga
Monitoring Programs Manager

Lily Lin
Data and Reporting Specialist

monitoring@lica.ca

EMP Manager's Opportunity Statement Report

November 19th 2020, Board of Directors Meeting

Landowner Dispute: Air Quality Impacts of Boiler Use

- Issue:** LICA has been approached by both parties involved in a landowner dispute regarding the use of a boiler to heat a quonset/outbuilding. The boiler is creating an air quality issue because of the smoke it produces.
- Background:** LICA was first approached by the landowners and Alberta Health Services (AHS) early in 2020 about air quality monitoring. Given that AHS knew the background and nature of the air quality complaints, LICA offered advice (pros, cons, limitations, data interpretation) of providing a monitoring service. AHS ultimately decided not to proceed with monitoring or sampling work and instead, provided advice about best burning practices and flue design. With the onset of winter, regular use of the boiler has resumed and so too have the air quality concerns. LICA is aware that the issue has been elevated and has become a "legal matter".
- Response:** Any possible monitoring that LICA could deploy at this location has limitations in both the substances that can be detected and in the interpretation of the results. Simple monitoring devices such as the Purple Air can provide useful onsite continuous measurement of particulate matter, however the species of particulates cannot be identified. Discrete canister sampling can provide insight on the presence of hydrocarbon species and different products of combustion however, the list of species is extensive and difficult to interpret. Given the Portable Air Monitoring System's (PAMS) high deployment cost, its intended use for monitoring projects that last longer than a season, and objective for monitoring for community-level air quality issues, it wouldn't be appropriate to use the PAMS to address these complaints (LICA has already committed the PAMS to a Lac La Biche deployment). The landowners were informed of LICA's decision-making process; LICA committed to bringing this issue to the board to consider a monitoring response.
- Approach:**
1. Do nothing. Indicated that LICA does not have a role to play and this matter is out of the organization's scope of monitoring objectives.
 2. Provide a narrow-scope third-party monitoring service with limited interpretation of results. Identify that the data can be used to help inform best practices.
- Risks:** The risks of **not monitoring** include:
- Possible negative impact on LICA's reputation. There might be a perception that the organization is unable to respond to concerns in the community.
- The risks of **monitoring**:
- Both a limited substance list and sampling time resolution. The data that is produced may not be useful.
 - Given the nature of the low-temperature start-up burn, there is a high probability that toxic and carcinogenic substances will be found if sampling is carried out properly and at the right time (this would be true in any wood-burning activity).
 - Limited capacity to provide in-depth health-centred interpretation of the results.
 - Scope creep. This will have to be managed but is naturally limited by funding.
 - Potential complications associated with involving LICA in an on-going legal matter.
- Costs:** **PurpleAir:** \$300, WiFi Connection: \$400 per modem start-up, \$50 per month service
Canister: \$400 per sample, \$30 shipping

LICA

Lakeland Industry and Community Association

Acid Deposition Monitoring Program Expansion Committee (ADMPEC)

Terms of Reference

The Lakeland Industry and Community Association (LICA) formed an Acid Deposition Monitoring Program Expansion Committee (ADMPEC) to assist in the development and oversight of the expansion of LICA's Acid Deposition Monitoring Program (the Program); the expansion of the Program will be completed in phases and this Terms of Reference applies to Phase One of the ADMPEC. Phase One of the expansion will address development of an acid deposition monitoring plan (the Plan) to meet the needs of new regional regulatory compliance acid deposition monitoring and reporting requirements (Appendix A). Phase Two will address implementation of the Plan. Phase Three will address further enhance of the Program to implement a complete regional approach to acid deposition monitoring and reporting. The ADMPEC is an ad-hoc committee of LICA which shall report its activities and requests to the Board for approval. The ADMPEC is supported by representation from industry, government, indigenous communities and the public, which allows for a diverse insight, expertise, and support for the development of recommendations for acid deposition monitoring.

1.0 Purpose

- 1.1** To support the LICA Board's Vision and Mission.
- 1.2** To operate within LICA Board approved work plans and budget and be accountable to the LICA Board of Directors regarding oversight of the implementation, operation, reporting, and management of the ADMPEC.
- 1.3** To make recommendations related to messaging about acid deposition monitoring issues, goals, objectives, targets, recommendations and other items related to the AMDPEC.
- 1.4** Deliver relevant, accurate, reliable, and credible data and information that addresses stakeholder needs and priorities.
- 1.5** To address Phase 1 objectives by June 1, 2021 and develop a monitoring plan that meets regulatory compliance needs including:
 - (a) for air:
 - (i) a plan to monitor dry and wet deposition;

(b) for soil:

- (i) identification of soils that are sensitive to acid deposition and will likely receive aerial deposition inputs;
- (ii) a plan to monitor soil quality at locations representative of the soils identified in (b) (i);
- (iii) a description of how soil quality data collected under this program will be used to determine potential acidification effects under periods of increased sulphur dioxide emissions;

(c) for water:

- (i) a summary of existing water quality data collected to date and analysis of the results;
- (ii) a plan to monitor water quality for water bodies which will likely receive aerial deposition inputs;
- (iii) identification of local water bodies that are sensitive to acidification;
- (iv) a description of how water quality data collected under this program will be used to determine potential acidification effects under periods of increased sulphur dioxide emissions;
- (v) a plan to develop triggers for further enhanced surface water quality monitoring to determine impacts of aerial deposition inputs;

(d) reporting schedule for monitoring activities conducted for (a) through (c)

2.0 Operating Principles

2.1 The ADMPEC will follow LICA's Vision and Mission and will operate within LICA's policies in support of the Strategic Plan.

2.2 The ADMPEC will meet monthly at a minimum.

2.3 The ADMPEC will report to the Board, and when needed, be responsible for facilitating Board discussion regarding their recommendations.

2.4 The ADMPEC will ensure that the Plan effectively addresses regulatory compliance needs.

2.5 Members will actively participate and contribute to regular meetings and the group's work.

2.6 Members will communicate with employers, organizations, and stakeholders

they represent about ADMPEC's objectives, priorities and accomplishments, as well as any issues that may need to be resolved.

2.7 Meetings will be documented with summary notes, decision records and action logs to be issued within a reasonable time for review by the ADMPEC prior to the final issue. These will be made available to all ADMPEC members as part of the review process.

2.8 The ADMPEC will strive for consensus recommendations and decisions. If it becomes clear that the ADMPEC cannot make a consensus recommendation, the recommendation of the majority and the non-consensus position(s) will be presented for the Board to decide.

2.9 Outside expertise may be invited to contribute as required as directed by the Technical Staff.

3.0 Membership

The membership of the ADMPEC is made up of the Manager of Environmental Monitoring Program, Executive Director, Manager of Environmental Programs, core members, and resource members. Core members are selected by the sectors that they represent or are appointed by the LICA Board. Resource members are included by invitation of the Manager of Environmental Monitoring Programs or Executive Director.

3.1 The ADMPEC chair shall be a Board Director appointed by the Board and must be present at all committee meetings.

3.2 The Chair of the Board may attend as ex-officio.

3.3 Community members may be appointed by the Board, and shall be eligible for remuneration and expenses according to LICA policy.

3.4 The Board may request additional members from among Industry, Government, and Non-Government organizations to be appointed from their respective sectors and may be eligible for remuneration and expenses according to LICA policy.

3.5 The core membership will be Board approved.

3.6 Core Membership

3.6.1 Alberta Environment and Parks (AEP) – Sector nominated

3.6.2 Alberta Energy Regulator (AER) – Sector nominated

3.6.3 Industry, Oil & Gas – Sector nominated

3.6.4 Agriculture - Sector nominated

- 3.6.5 LICA Board Directors- Board appointed
- 3.6.6 Indigenous Communities – Sector nominated
- 3.6.7 Environmental Organizations & Special Interest Groups - Sector nominated
- 3.6.8 Municipal Governments - Sector nominated
- 3.6.9 Community Members - Board appointed
- 3.6.10 Scientific and Academic Organization & Institutions - Sector nominated

3.7 Resource Membership

- 3.7.1 Third-Party Contractors
- 3.7.2 Data and Reporting Specialist, LICA
- 3.7.3 Fisheries and Oceans
- 3.7.4 Environment Canada
- 3.7.5 Government Health Representatives
- 3.7.6 Industry Representatives
- 3.7.7 Education and Outreach Committee, LICA
- 3.7.8 Technical Working Group, LICA
- 3.7.9 AEP Technical Monitoring Expertise
- 3.7.10 Agriculture and Agri-food Canada
- 3.7.11 Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)
- 3.7.12 Others as required

4.0 Meetings

- 4.1** Committee meetings will comply with Policy 1.6 Board and Committee Meetings.

5.0 Roles and Responsibilities of the ADMPEC and its Members

5.1 ADMPEC Members (in general)

- 5.1.1 Actively participate in meetings and provide technical knowledge and support, as well as the viewpoints of the sector, stakeholder and profession they represent.

- 5.1.2 Develop monitoring and reporting recommendations for acid deposition.
- 5.1.3 Assess material monthly and make recommendations as required regarding the development of the Plan.
- 5.1.4 Provide support for planning future phases of the Program.
- 5.1.5 Keep the development of the Plan in alignment with LICA's Strategic Plan and budget.
- 5.1.6 Engage other expertise as needed from member organizations and/or others.
- 5.1.7 Consider the application of Quality Assurance and Quality Control functions as required by LICA's Quality Assurance Program in the development of the Plan.

6.0 Specific ADMPEC Member Roles

6.1 Manager of Environmental Monitoring Programs

- 6.1.1 Act as ADMPEC Vice-Chair to convene meetings and prepare agendas.
- 6.1.2 Report to the LICA Board as a representative of the ADMPEC.
- 6.1.3 Keep the Oil Sands Monitoring Secretariat (OSMS) informed of the development of the Plan. Seek funding from OSMS for Phase 2 (implementation of the Plan) and Phase 3 (enhancement of the regional Program).
- 6.1.4 Ensure the ADMPEC operate cost-effectively and within budget.

6.2 Manager of Environmental Programs

- 6.2.1 Participate in meetings and provide watershed technical expertise in the development of the Plan
- 6.2.2 Ensure alignment with the Integrated Watershed Management Plan.

6.3 Executive Director

- 6.3.1 Advise the ADMPEC on LICA policies as required.
- 6.3.2 Act as a liaison between other LICA committees and the ADMPEC.
- 6.3.3 Maintain collaborative relationships with stakeholders.

6.4 Education & Outreach Coordinator

- 6.4.1 Advise the ADMPEC on best practices to engage with the public for input on the Plan.
- 6.4.2 Assist in coordinating and delivering outreach activities to engage the public, such as forums.
- 6.4.3 Promote the development and progress of the Plan to the public and disseminate materials as they become available.

6.5 Board Director

- 6.5.1 Act as a liaison between the LICA Board and ADMPEC.

6.6 Administration Staff

- 6.6.1 Arrange for minute taking and distribution of minutes and other meeting materials.

6.7 Industry Member(s)

- 6.7.1 Understand and represent their sector's interests and regulatory requirements.
- 6.7.2 Fund Phase One activities of the ADMPEC as required.

6.8 Agriculture Representative(s)

- 6.8.1 Understand and represent their sector's interests and regulatory requirements.

6.9 Community Member(s), Environmental Organization(s) & Special Interest Group(s)

- 6.9.1 Represent the public interest, bringing a local perspective to the Plan.
- 6.9.2 Ensure that the programs are operated in a transparent manner.

6.10 Indigenous Representative(s)

- 6.10.1 Ensure Traditional Environmental Knowledge is recognized and integrated into the Plan.

6.11 AEP and AER Representative(s)

- 6.11.1 Provide advice and technical input regarding the operations and design of the Plan.
- 6.11.2 Provide a link to other Government of Alberta and Regulatory staff and resources.

6.11.3 Act as a liaison regarding regulatory requirements, policy development, and approvals.

6.12 Scientific and Academic Organization & Institution(s)

6.12.1 Provide advice and technical input regarding the operations and design of the Plan.

6.13 Third-Party Contractor(s)

6.13.1 Perform duties according to approved standards and protocols as per their current contracts.

7.0 Evaluation

7.1 The ADMPEC shall review its Terms of Reference and evaluate its objectives annually.

Appendix A:

Amending Approval: 68492-01-06

Alberta Energy Regulator

Environmental Protection and Enhancement Act

AMENDING APPROVAL

ALBERTA ENERGY REGULATOR

ENVIRONMENTAL PROTECTION AND ENHANCEMENT ACT **R.S.A. 2000, c.E-12, as amended.**

APPROVAL NO.: 68492-01-06

APPLICATION NO.: 027-68492

EFFECTIVE DATE: October 18, 2019

EXPIRY DATE: May 31, 2022

APPROVAL HOLDER: Cenovus Energy Inc.

Pursuant to Division 2, of Part 2, of the *Environmental Protection and Enhancement Act*, R.S.A.2000, c.E-12, as amended, the approval for the following activity:

Foster Creek enhanced recovery in-situ oil sands or heavy oil processing plant and oil production site

is amended as per the attached terms and conditions, and Schedules I to XI.



Shay Dodds, P.Eng.
Manager, In Situ South, Authorizations Branch
Alberta Energy Regulator

October 18, 2019

Environmental Protection and Enhancement Act Approval No. 68492-01-00 is hereby amended as follows:

1. Conditions 3.18, 3.19, 3.20 and 3.21 are deleted and the following is substituted:

3.18 Notwithstanding Table 3.1, the sulphur dioxide emissions from the plant shall not exceed 7.0 tonnes per day (on a calendar day basis) for the period commencing from October 18, 2019 and ending on December 31, 2020.

3.19 Notwithstanding Table 3.1 and Condition 3.18, the approval holder may bypass one (1) non-regenerative sulphur unit train for repair and maintenance provided that:

- (a) a minimum uptime of 90% is maintained for each non-regenerative sulphur unit on an annual basis, for the period commencing from February 13, 2019 and ending on December 31, 2020;
- (b) the minimum sulphur recovery requirements as outlined in Table 1 of ID2001-03: Sulphur Recovery Guidelines for the Province of Alberta is met except for the period commencing from February 13, 2019 and ending on December 31, 2020; and
- (c) the sulphur dioxide emissions from the plant shall not exceed 8.0 tonnes per day (on a calendar day basis) for the periods when the sulphur unit train is bypassed for repair and maintenance, commencing from October 18, 2019 and ending on December 31, 2020;

unless otherwise authorized in writing by the Director.

3.20 In the event that a non-regenerative sulphur unit is bypassed, the approval holder shall provide in the monthly Air Emission Report to the Director, the following:

- (a) a description of the events or circumstances that led to the bypass; and
- (b) an outline of the action taken to control the magnitude and duration of this event(s).

3.21 The approval holder shall operate a continuous ambient air monitoring station and monitor ambient air parameters as specified in TABLE 3.4, unless otherwise authorized in writing by the Director.

3.22 In addition to the monthly and annual reporting requirements in TABLE 3.2 and TABLE 3.3, the approval holder shall report to the Director the results of the ambient air parameters as required in TABLE 3.4, unless otherwise authorized in writing by the Director.

TABLE 3.1: AMBIENT AIR MONITORING AND REPORTING

MONITORING STATION	PARAMETER	MONITORING PERIOD	REPORTING	
			MONTHLY	ANNUALLY
One continuous ambient air monitoring station, as per <i>Air Monitoring Directive</i>	Sulphur dioxide concentrations, wind speed and wind direction	Continuously, starting from February 13, 2019 to December 31, 2020	Yes	Yes

4. The following is added after Condition 3.22:

3.23 The approval holder shall submit an Acid Deposition Monitoring Program proposal to measure aerial deposition effects on aquatic and terrestrial ecosystems to the satisfaction of the Director on or before March 31, 2020, unless otherwise authorized in writing by the Director.

3.24 The Acid Deposition Monitoring Program proposal shall include, at a minimum, all of the following:

(a) for air:

(i) a plan to monitor dry and wet deposition from project activities;

(b) for soil:

(i) identification of soils that are sensitive to acid deposition and will likely receive aerial deposition inputs from project activities;

(ii) a plan to monitor soil quality at locations representative of the soils identified in (b) (i);

(iii) a description of how soil quality data collected under this program will be used to determine potential acidification effects under periods of increased sulphur dioxide emissions;

(c) for water:

(i) a summary of existing water quality data collected to date and analysis of the results;

(ii) a plan to monitor water quality for water bodies which will likely receive aerial deposition inputs from project activities;

(iii) identification of local water bodies that are sensitive to acidification;

- (iv) a description of how water quality data collected under this program will be used to determine potential acidification effects under periods of increased SO₂ emissions;
 - (v) a plan to develop triggers for further enhanced surface water quality monitoring to determine impacts of aerial deposition inputs;
 - (d) reporting schedule for monitoring activities conducted for (a) through (c); and
 - (e) any other information requested in writing by the Director.
- 3.25 If the Acid Deposition Monitoring Program proposal is found deficient by the Director, the approval holder shall correct all deficiencies identified in writing by the Director, by the date specified in writing by the Director.
- 3.26 The approval holder shall implement the Acid Deposition Monitoring Program as authorized in writing by the Director.
- 3.27 The approval holder shall only implement changes to the Acid Deposition Monitoring Program as authorized in writing by the Director.



Shay Dodds, P.Eng.
Manager, In Situ South, Authorizations Branch
Alberta Energy Regulator

October 18, 2019



Environmental Coordinator Programs Update

November 2020 Board Meeting

November 19, 2020

To: LICA Board of Directors

From: Tricia B. Fleming, Environmental Coordinator

Background:

To provide updates to the Board of Directors on the various projects, duties, regional updates and WPAC operational tasks.

Discussion:

Watershed Restoration and Resiliency Program (WRRP) -2019-2022

NOTE: Blank cells in the UPDATE column reflect no change since the last Board report

PROJECT	ACTION	TARGETS	TIMELINE	STATUS	UPDATES	
1. Riparian Restoration	Jessie Lake Restoration Site 1 (Pathway)	Initial riparian assessment	Fall 2018	Complete		
		Order riparian plants	Spring 2019	Complete		
		Tree planting	Spring 2020	Complete		
		Riparian health inventory	Summer 2021			
	Jessie Lake Restoration Site 2 (Rodeo)	Initial riparian assessment	Fall 2018	Complete		
		Order riparian plants	Spring 2019	Complete		
		Tree planting	Spring 2020	Complete		
		Riparian health inventory	Summer 2021			
2. Riparian Fencing & Off-Site Watering Systems	Riparian Fencing – Private Kunec	Fence installation	Fall 2020	In Progress	On Oct. 26, 2020 Nick communicated that the fencing company had not yet arrived at his farm, but would attempt the week of Nov. 2 if the ground was not frozen	
		Riparian health inventory	Summer 2021			
		Photo documentation	Summer 2020 Summer 2021	Complete		
	Riparian Fencing – Other farmland	Fence installation	Summer 2021		<ul style="list-style-type: none"> • Luke Tellier has already completed the fencing that was part of this grant. He is arranging receipts to be sent to LICA • I am trying to arrange a time to visit the property to view the project location and confirm fencing has been complete • I last contacted Luke on Nov. 5 for an update, but he was unable to talk 	
		Photo documentation	Spring/ Summer 2021			
	Off Site Watering System - Kunec	Consultation with owner and LARA.	Spring 2020	Complete		
		Installation	Fall 2020		No update on when the unit will be installed	
	3. Riparian Assessment		Finalize and sign contract	Fall 2020	Ongoing	<ul style="list-style-type: none"> • I have been in discussion with Mary Ellen from the North Saskatchewan

	Fiera Biological Consulting	Share report	Spring/ Summer 2021		<p>Watershed Alliance (NSWA) and Shari from Fiera about project methods and best means to prioritize waterbodies for assessment</p> <ul style="list-style-type: none"> I sent a prioritized list of waterbodies for assessment, details I want included, and our total budget amount for this project to Shari. I asked that she provide comments and/or recommendations on how best to accomplish our goals and use the information to develop a revised project proposal
4. Beaver Management Devices	Install Beaver Management Devices	Determine sites for management devices	Fall 2020	Ongoing	<ul style="list-style-type: none"> The due date for proposal submission from our watershed partners is Dec. 7, 2020 I have been responding to partner questions related to the proposal process I have not made further progress on determining approval requirements because I have had other more pressing time commitments
		Apply for approvals	Winter 2021		
		Order materials / Hire Contactor	Winter 2021		
		Install devices	Spring/ Summer 2021		
5. Site Assessments	Caring for the Green Zone; Riparian Health Assessments method				
		Kunec farm	Fall 2018 Updated Summer 2020	Complete	Complete
		Riparian Fencing - Other farmland	Spring/ Summer 2021		
6. Performance Monitoring	Private Lot: NW 21-62-5-W4M	Photo documentation	Summer 2021		
	Jessie Lake Restoration Site 1 (pathway)	Riparian health inventory – Cows and Fish	Summer 2021		
		Count the number of living trees that were	Spring/ Summer 2020		

		planted in 2020			
		Photo documentation	Spring/ Summer 2020		
	Jessie Lake Restoration Site 2 (rodeo)	Riparian health inventory – Cows and Fish	Summer 2021		
		Count the number of living trees that were planted in 2020	Spring/ Summer 2020		
		Photo documentation	Spring/ Summer 2020		
	Kunec Farm	Riparian health inventory – Cows and Fish	Summer 2021		I am waiting for confirmation from Cows and Fish that this is possible in their work schedule
		Photo documentation	Summer 2020 Summer 2021	Complete	
	Riparian Fencing - Other farmland	Photo documentation	Spring/ Summer 2021		
	Beaver sites	Photo documentation	Spring/ Summer 2021		
7. Education and Outreach	Shoreline Clean up	Host annual shoreline clean up with Notre Dame High School	Fall 2021		
		Host annual community shoreline clean up	Summer 2021		
	Cows & Fish Beaver Deceiver Workshop	Host workshop	Spring/ Summer 2021		

Watershed Restoration and Resiliency Program (WRRP) – 2020-2022

NOTE: Blank cells in the UPDATE column reflect no change since the last Board report

PROJECT	ACTION	TARGETS	TIMELINE	STATUS	UPDATES
Restoration and Enhancement	Community hub rain garden	Determine site location(s) for rain garden(s)	October 2020	Ongoing	<ul style="list-style-type: none"> The rain garden location is planned to be next to the Shaw House at Vezeau beach, Moose Lake I have drafted a contract for the Alberta Low Impact Development Partnership (ALIDP) and sent it to Leta for her compile the missing information I have drafted a MOU for the MD of Bonnyville. I am planning a meeting with Katlyn (MD of Bonnyville) and Leta (ALIDP) for the first week of Dec. to make introductions and discuss project details.
		Hire landscaping contractor	October 2020		
		Design rain garden	Spring 2021		
		Complete rain garden	Winter 2021		
		Design rain garden sign	Spring 2021		
		Install rain garden sign	Fall 2021		
	Street 2 Stream workshops Public workshop Municipal workshop	Complete by Fall 2021 Complete by Fall 2021	Ongoing	I plan to discuss further with Cows and Fish and Leta once more progress has been made on the rain garden	
Riparian Assessment	Hire Cows and Fish to conduct a riparian health inventory on Luke Tellier's property	Spring/ Summer 2021		I am waiting for confirmation from Cows and Fish that this is possible in their work schedule	
Conservation	OHV signage	Design OHV signs	Summer 2020	Complete	<ul style="list-style-type: none"> The Iron Horse Trail Association is still attempting to install the signs before freeze-up and I have been waiting for confirmation of date I have contacted Cynthia from the AEP for an additional Keep Wheels Out of Water sign I have contacted Call Before You Dig to assess the proposed sign location
		Install OHV signs: Iron Horse Trail	Fall 2020		
	Muriel Lake	Fall 2020			
Legacy signage	Design legacy signs: Riparian Health	Winter 2021			

		Riparian Fencing			
		Beaver Management			
		Install legacy signs	Spring/Summer 2021		
	Jessie Lake shoreline clean-up and weed pull		Summer 2021		
Research	Jessie Lake water quality sampling	Collect water samples (ALMS)	June-Sept. 2021		
		Share ALMS report	Winter 2021		

Integrated Watershed Management Plan

- I am still waiting confirmation on the next meeting date.
- I met with Sandi (from Palliser) to discuss her progress and content for the next committee meeting.
- I completed a point of contact list for IWMP stakeholders except for those I am still waiting for replies. This list is designed to be extensive and include all potential interested organizations within the province and applicable federal agencies. The list will be used to provide updates on our progress and inform about engagement sessions.
- I revised the committee Terms of Reference for review at the next meeting
- I completed a IWMP committee summary to date for new committee members

Education and Outreach

- Calendar
 - I helped prepare the calendar by organizing winner information, creating 'Green Tips', and making a list of special environmental days

Community Inquiries

- The Muriel Lake Basin Management Society has requested assistance in determining how they can install a bridge for an OHV trail
 - I have reached out to Cynthia from the AEP (my contact for the Keep Wheels Out of Water campaign) to see if she has any recommendations on how to proceed

Meetings and Educational Sessions Attended

None to report

Conclusion:

This report provides the highlights from the Environmental Coordinator of what has occurred since the previous Board meeting.

Recommendation:

This report is filed with the Board Minutes for information.

Recommendation to the Board

Participation in CreekWatch

Tricia B. Fleming: Environmental Coordinator

Recommendation:

LICA to participate in the CreekWatch Citizen Science Monitoring Program within the LICA region and conduct water quality monitoring in up to two waterbodies for the 2021 sampling season.

Background:

CreekWatch is a province-wide program conducted by the non-profit RiverWatch Institute of Alberta since 2014. The citizen science-based program engages adult volunteers to collect water quality data to help address community concerns or inquiries about aquatic health related to runoff. Data is entered by volunteers on a public, on-line platform that instantly graphs results. Each project is uniquely designed to address specific volunteer group and research question needs. CreekWatch staff provide portable water quality labs that contain all necessary equipment for water sampling, and training to volunteers (and LICA staff). The program aspires to:

- Create a stormwater monitoring network using community volunteers.
- Generate a sense of community pride through accomplishment and teamwork.
- Collect relevant, reliable and credible water quality data.
- Document baseline stormwater quality for our urban creeks.
- Engage a public able to understand and contribute to the management of urban stormwater creeks.

LICA was approached by RiverWatch to determine our interest in partnering to extend the CreekWatch Monitoring Program to the Beaver River, Moose Lake tributaries, and other creeks, rivers, or tributaries of concern within the LICA region beginning in 2021.

The Environmental Coordinator reached out to our watershed partners in the Bonnyville, MD of Bonnyville, and Cold Lake regions to gauge interest, potential research questions and project locations. The inquiry was limited to these partners because it was determined that it would be in the best interest of LICA to begin this program in a small capacity for the first year, by sampling one or two sites close to the office, to properly manage our volunteers and gauge the overall success of the program. If successful, the project may be extended to other areas in the LICA region in following years.

Based on watershed partner feedback, LICA has selected the Unnamed Creek that runs from Garnier Lake to Muriel Lake for CreekWatch 2021. The Muriel Lake Basin Management Society (MLBMS) has requested that this creek be sampled near its entry into Muriel Lake. This location has been sampled as part of the X-Stream Science monitoring program for the last three years. The MLBMS is interested in extending water quality monitoring in this creek because the creek has a history of health challenges and is the largest waterbody flowing into Muriel Lake. The MLBMS also feels that they will be able to recruit volunteers to conduct the monitoring. Please see the attached letter for more information.

A second location may be chosen; however, project scope, volunteer recruitment needs, and LICA staff availability requires further consideration before this decision is made.

Budget

The program will be funded by the RiverWatch Institute of Alberta. RiverWatch is in the process of obtaining a grant to cover the cost of an additional portable water quality lab for LICA (a total cost of \$2,000) and has asked, if unsuccessful, whether LICA would assist in applying for grant funding.

Additional Pros of participation in CreekWatch

- Water monitoring in the Beaver River Watershed is of great interest to LICA. However, it has been difficult to engage in monitoring because it is an activity specifically excluded from WPAC and WRRP grants. To date, we also have not been able to have water monitoring conducted as part of OSM. This program would facilitate our ability to participate in water quality monitoring and get the community actively involved.
- This program will help fulfill LICA's desire to increase citizen science programs; outlined in Strategy 1.2.3 of LICA's Strategic Plan.
- This program will develop a new partnership with a watershed group and may create potential opportunities to engage with different community members, stakeholders, and Indigenous communities within the LICA region
- RiverWatch also offers an educational program to high school students that would complement LICA's Education & Outreach. The field trip involves a river rafting field trip that consists of floating 10km down a river, taking water samples along the way and finishing the trip at a water treatment facility to test how clean the river actually is. This program does have a cost associated to it and is not included in the recommendation at this time.

Potential Cons of participation in CreekWatch

- Planning, organization, and implementation of the program will add to the Environmental Coordinators workload. However, it was determined that the additional workload is manageable.
- LICA staff may have to assist with water sampling and/or data entry, if individual projects are unable to maintain an engaged volunteer base.

RECOMMENDATION TO THE BOARD

FINANCING GIS COURSE AND SOFTWARE

TRICIA B. FLEMING: ENVIRONMENTAL COORDINATOR

RECOMMENDATION:

LICA to provide funding for the training of the Environmental Coordinator in an 'Introduction to GIS using ArcGIS' course administered by ESRI Canada, and the purchase of ArcGIS software.

ISSUE:

The Environmental Coordinator is seeking this training opportunity to improve her capabilities to organize, understand, report, and interpret data. This would also support better education and representation of LICA projects to our stakeholders.

BACKGROUND:

ABOUT GIS

Geographical information system (GIS) is a framework for gathering, managing, analysing, and informing about spatial and geographical data. GIS can integrate and analyze many types of data and visualize results using maps and 3D images. With this unique capability, GIS provides opportunities for more in-depth analysis of data by revealing patterns, relationships and alternative situations that assist more robust decision-making. Additionally, this method provides the ability to communicate, share, and collaborate on information using visuals that facilitate data comprehension and interpretation. GIS is extensively used by many organizations in virtually every field.

BENEFITS OF GIS THE ENVIRONMENTAL COORDINATOR POSITION

Geospatial information is an essential component of every task I undertake as the Environmental Coordinator; therefore, having knowledge and skills on how to maximize the comprehension, utilization, and communication of this information is invaluable to the responsibilities of my position. It is also becoming more apparent that I require GIS training to adequately communicate and collaborate with partners. On almost every project, I am confronted with GIS inquiries that I am currently unable to fulfill. This includes partners attempting to communicate with me using GIS tools that I am unable to add to, use, and/or understand; requests for maps I am unable to produce; and an understanding that GIS-based maps could facilitate communications, outreach and education.

EXAMPLES OF POTENTIAL APPLICATIONS FOR GIS (IN ADDITION TO ENHANCING EDUCATION AND OUTREACH)

INTEGRATIVE WATERSHED MANAGEMENT PLAN

- The IWMP committee has agreed that a geospatial map should be a component of the survey to allow surveyors to document specific locations of concern or importance. Fin MacDermid, with the Cold Lake First Nations, has volunteered to help develop this part of the survey since we currently lack internal capacity in this area. Although we appreciate this offer, I prefer to manage the survey internally to better manage and utilize data and streamline the process.

WATERSHED RESILIENCY AND RESTORATION

- I have requested partner input for location recommendations for several projects within the WRRP grants. With GIS, I would be able to map all locations along with other project considerations to determine best strategies for accomplishing project goals.
- Large-scale riparian restoration.
 - This is a GIS-based project; thus, having GIS knowledge will improve my ability to understand and utilize results.
 - The contractor completing the project will provide maps detailing results, with some maps targeted to inform municipal governments. However, to use the maps for further research or educational purposes, I will require GIS training and ArcGIS software.

COURSE GOALS

- Identify appropriate data to support a mapping project
- Create a map, add data to it and symbolize map features to support the map's purpose
- Share data, maps and other content in an organizational portal
- Perform spatial analysis to obtain information about map features within an area of interest

THE SOFTWARE

GIS software allow users to create searches, store and edit spatial and non-spatial data, analyze spatial information output, and visually share results in map format.

COSTS

COURSE: \$1,050 CAD

SOFTWARE: \$150 CAD annually (Non-Profit pricing)

LICA currently has the budget to support my participation in the *Introduction to GIS using ArcGIS* course and the annual software fee.

REPORT

November 12, 2020

TO: LICA Board of Directors
FROM: Executive Director
RE: **EXECUTIVE DIRECTOR'S REPORT – October 2020**

Discussion:

Please consider this as my report to inform the LICA Board of Directors of the various tasks and activities undertaken over the summer months in addition to my regular duties as Executive Director.

Pandemic Response Update

- LICA staff are following the *COVID-19 Office Re-Opening* Protocol upon entry of the office, hosting meetings, and greeting visitors.

Funding/Financials Update

- LICA has received the second grant installments from AEP for the WPAC, AEG, and WRRP grants. We are currently waiting for the second invoice payment from the OSM Contract.
- LICA Signing Authority transfer was completed for the newly appointed Officers. A meeting was scheduled on November 9th, with Arianne to review the LICA online banking and CAFT systems and associated sign-off timelines.
- The LISC is planning to meet on November 16, 2020, at which time the approved LICA 2021-22 Consolidated Budget and proposed amended Funding Formula Agreement will be reviewed.

Education & Outreach Position Update

- Interviews were held on November 28th and 29th; a total of 7 candidates were interviewed. Following the interviews, the Hiring Committee requested that the top 3 candidates submit a 1 minute video on a specific topic to demonstrate their presentation skills.
- Rachel Bates was the candidate selected to be hired for the E&O Coordinator Position. An employment agreement was developed and executed by the Officers on November 6th. Please contact me directly if you'd like to view the agreement. Rachel's start date is November 12, 2020.

LICA Technology Update

- The board room tech upgrade installation was completed on November 10, 2020.
- LICA experienced a brief blackout on the website and emails on November 5th. This was due to the ownership transfer of the LICA domain from Octopus Creative Inc. to Kyle, our current IT provider. The transfer was initiated by the cancellation of LICA's G-Suite subscription and the issues were rectified by 4pm that day.
- I plan to tender IT service provider services at the end of November 2020. This task was re-prioritized in accordance to the increase in my workload.

Additional Updates:

- LICA was recognized by the Lakeland Chamber of Commerce and the House of Commons Canada for 20 years of business.
- Board Governance Development Training has concluded. The organizers are in the process of recording these webinars for registrants unable to attend. A link will be forwarded to the Board once these sessions are available.
- CNRL approached LICA and asked if they could provide a presentation to the LICA BOD on the Manatokan landfill now scheduled to receive 3rd party waste, followed by a tour of the facility. For those interested, this presentation is planned for the December 17th BOD meeting.
- Attended the Synergy Alberta AGM on November 10, 2020. Elections were held for one Community Director and one Industry Director seat. There was no discussion on the direction Synergy Alberta will be taking within the next year.
- Robert Machatis provided a CLFN 101 presentation to LICA staff on November 10, 2020. This meeting presented the opportunity to strengthen the relationship between LICA and CLFN and collaborate on future initiatives.
- Bereavement Leave
 - Additional administrative support was requested of Eveline on November 4th because of an extended leave of absence from Tina after experiencing a couple of deaths in her family within one week. While being supportive of Tina's wellbeing, I also needed to look at the well-being of LICA and our operations. The tasks assigned were time-sensitive items that needed to be addressed, which includes Committee meeting preparation and Board meeting preparation. This authorization was brought forward to the Officers for their awareness and the additional hours will be compensated by the wages not spent towards the vacant E&O position. The overall budget will not be affected.
 - LICA currently does not have a Bereavement Leave policy, which I feel is necessary to include in our existing *3.9 Leaves of Absence and Sick Leave Policy*. I recommend that the Board assign the Governance Committee with the task to review the 3.9 policy and add a clause in accordance with the [Alberta Employment Standards Code](#): *An employee who has been employed by the same employer for at least 90 days is entitled to up to 3 days of unpaid leave in a calendar year on the death of a family member.*

Recommendation:

This report be received as information and filed. In addition, recommendations outlined within this report are noted and may be further discussed at the meeting.

Respectfully submitted,

Kristina Martel
Executive Director, LICA – Environmental Stewards

EXECUTIVE DIRECTOR RECOMMENDATION TO THE BOARD

NOVEMBER 19, 2020, LICA BOARD OF DIRECTORS MEETING

RECOMMENDATION #1:

Amend the original September 24, 2020, Board Meeting Motion of the LICA boundary expansion as presented:

Expand the LICA Monitoring Zone to match the existing LICA boundary, AND

- ***Relocate the 3 redundant passive air monitoring stations to the expansion area using a low-density array arrangement (e.g. 6 x 6 township grid).***
- ***Deploy 3 PurpleAir to communities in the expansion area (St. Paul, Lac La Biche, + one TBD).***
- ***Through outreach efforts, highlight these changes and the availability of data, monitoring results, and the community air canister sampling program.***
- ***Amend Appendix A of the LICA Bylaws to reflect the boundary change.***

RECOMMENDATION #2:

LICA appoints an ad-hoc committee to review and assess opportunities for further expansion of the LICA boundary.

ISSUE:

The Manager, Environmental Monitoring Programs, Mike Bisaga, presented a recommendation to the LICA Board of Directors on September 24, 2020, which was accepted and the motion made A) did not capture the full recommendation that was accepted and B) included an additional expansion component not included in the original recommendation. Following the motion, concerns were immediately raised that the additional expansion commitment was made without adequate visualization of the extent of re-zoning. This issue was immediately identified to the LICA Board of Directors via email on September 24, 2020, to which many responses were not in favor of this motion.

Attached is a series of maps representing the current LICA boundary and the proposed LICA boundary expansion to which a motion was carried at the September 24, 2020 Board of Directors Meeting (described below):

Moved by Annette Hobart AND CARRIED that

- A) The LICA Monitoring Zone be expanded to match the existing LICA boundary;**
- B) The LICA boundary be expanded to include the County of Lac La Biche and municipalities split within the current boundary; and**
- C) LICA amends Appendix A of the LICA Bylaws.**

Part A of the motion is a portion of the original proposed recommendation by Mike Bisaga to expand the Air Monitoring Zone to match the existing LICA boundary, Part B is the addition made during the meeting's discussions, and Part C is a requirement LICA must follow.

For your reference, the recommendation presented by Mike Bisaga on September 24, 2020, is attached.

CONCERNS:

Additional considerations:

- Should the LICA Boundary be expanded to include the County of Lac La Biche and municipalities split within the current boundary, we would be overlapping 2 Airshed and 3 WPAC zones. (Note that LICA's current boundary overlaps 1 WPAC zone.)
 - Overlap of other Airshed and Watershed zones may provide benefits as well as challenges.
 - Benefits: provide new opportunities to collaborate with neighboring partners
 - Challenges: repetitive/duplicate work, insufficient resources (financial, staff, equipment), other conflicts and issues related to authority
- This motion will **substantially increase** the LICA boundary. Concerns with this level of expansion include:
 - Factors such as additional funding, staff, and resources must be considered. LICA does not currently have the resources to support this level of boundary expansion if the expectation is to conduct work in all of the LICA Region. This includes financial support (to support initiatives, additional mileage, and additional wages if needed), human resources to fulfill the work, monitoring and other equipment.
 - Clear work expectations for Airshed, Watershed and Education and Outreach within the new boundary must be clearly defined.
 - LICA must consider the potential impacts of existing relationships with current and future members. Although there is potential to increase our membership and revenues, we must ensure that we
 - maintain and continue to build our existing relationships with stakeholders and indigenous communities.
 - can deliver quality services/benefits to each member.

Summary of LICA Board of Directors Comments from my Follow-up Email:

In addition to the responses of opposition to the motion, the following Board of Directors provided their input to consider:

Colin Woods:

- I do not believe that LICA is positioned appropriately at this time to deliver on its mission and values across the proposed new boundary area.
- LICA has done an excellent job in recent years growing its brand and community awareness within its current boundary. It is important that we continue to further support and solidify this presence. I fear LICA does not have the resources to do this and expand into new areas.
- LICA has experienced some recent staff/contractor changes, and it is anticipated that we will see more significant change at the LICA Board table. It is my recommendation that LICA focus on supporting people in their new roles and ensuring all the great work LICA does isn't negatively impacted by change.
- I recommend that potential projects that exceed our current boundaries be approved as "one-offs" when supported by the Board, rather than expanding everything to match occasional one-offs.

Abdi Siad-Omar:

- LICA is also a Watershed Planning and Advisory Council for Beaver River Watershed. I recall when Beaver River WPAC was amalgamated to LICA, questions were raised that LICA boundary does not cover the entire watershed. In addition to adjusting air-shed boundary, it would be appropriate to reflect on the watershed boundary.

Lorin Tkachuk:

- I believe as long as we are not overlapping existing air shed boundaries it is a good idea.
- I feel that just because the boundary changes does not mean we need to have as extensive monitoring everywhere.

- I see it more as a where we can monitor not a where we have to monitor situation if there was no existing monitoring or air sheds groups in those areas. Idea would be if funding becomes available for expansion, we have the area to do it.

Tanya Hintz:

- I'd be interested to understand the outcome we LICA is trying to achieve by having the Air and Watershed boundaries match? Would this expand monitoring? If yes – how would the additional monitoring be funded?
- Are each of the incorporated counties required to have membership?
- The boundary has incrementally increased. How will LICA continue to provide membership benefits in this large region? Will this result in increased staff and how will LICA fund.

Wayne Bamber:

- We must consider how the expansion will affect LICA's Industry Funding Partners. The expansion of the LICA Boundary will affect the metrics, Industry Partners involved, and the allocated funding percentages.

CONCLUSION:

As the change(s) to the LICA boundary cannot be implemented until next year, upon review of the LICA Bylaws, it is strongly encouraged that the motion regarding the LICA boundary expansion be amended as originally presented. Also, it is recommended that a committee be appointed, if deemed necessary, to further research possible outcomes of expansion as originally actioned by the Board.

September 24th 2020

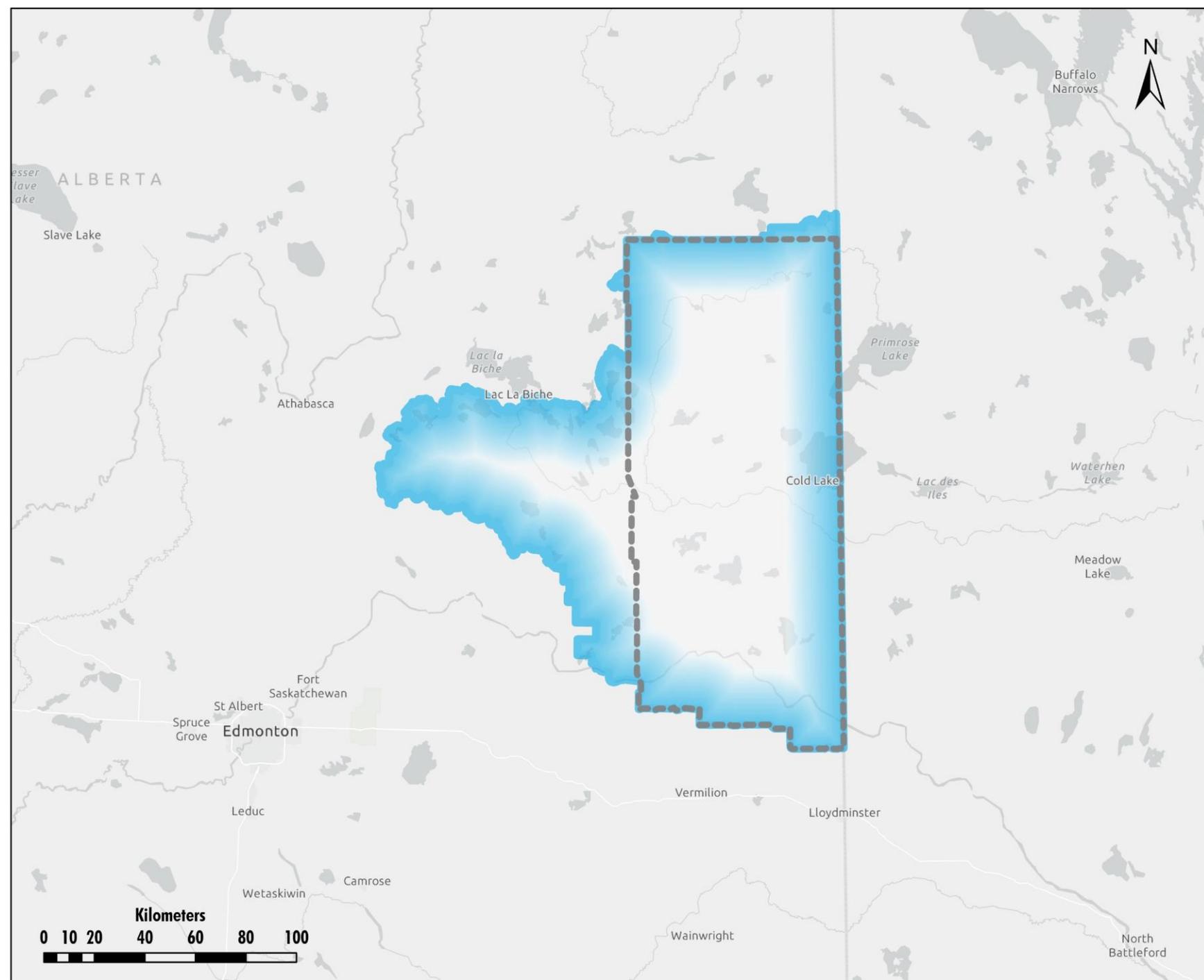
Board of Directors Meeting:

Boundary Change Motion

"Moved ... and carried that the LICA Monitoring Zone be expanded to match the LICA Boundary and that the LICA Boundary be extended to include the County of Lac La Biche and other split municipalities. Be it further moved that Appendix A of the LICA Bylaws be amended to reflect this change."

 **Current LICA Boundary**

 **Current Air Monitoring Zone**



September 24th 2020

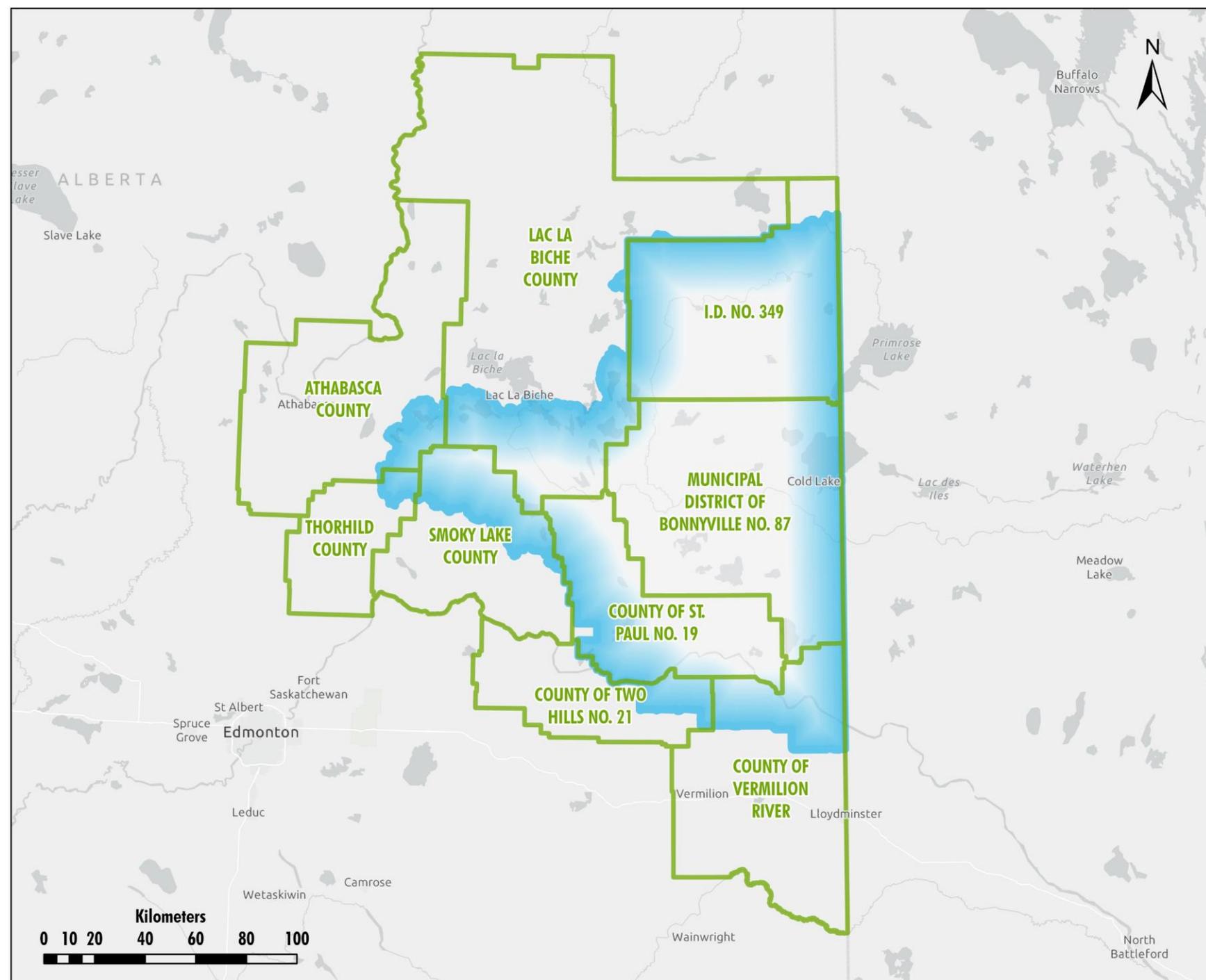
Board of Directors Meeting:

Boundary Change Motion

"Moved ... and carried that the LICA Monitoring Zone be expanded to match the LICA Boundary and that the LICA Boundary be extended to include the County of Lac La Biche and other split municipalities. Be it further moved that Appendix A of the LICA Bylaws be amended to reflect this change."

 Municipal Boundary

 Current LICA Boundary



September 24th 2020

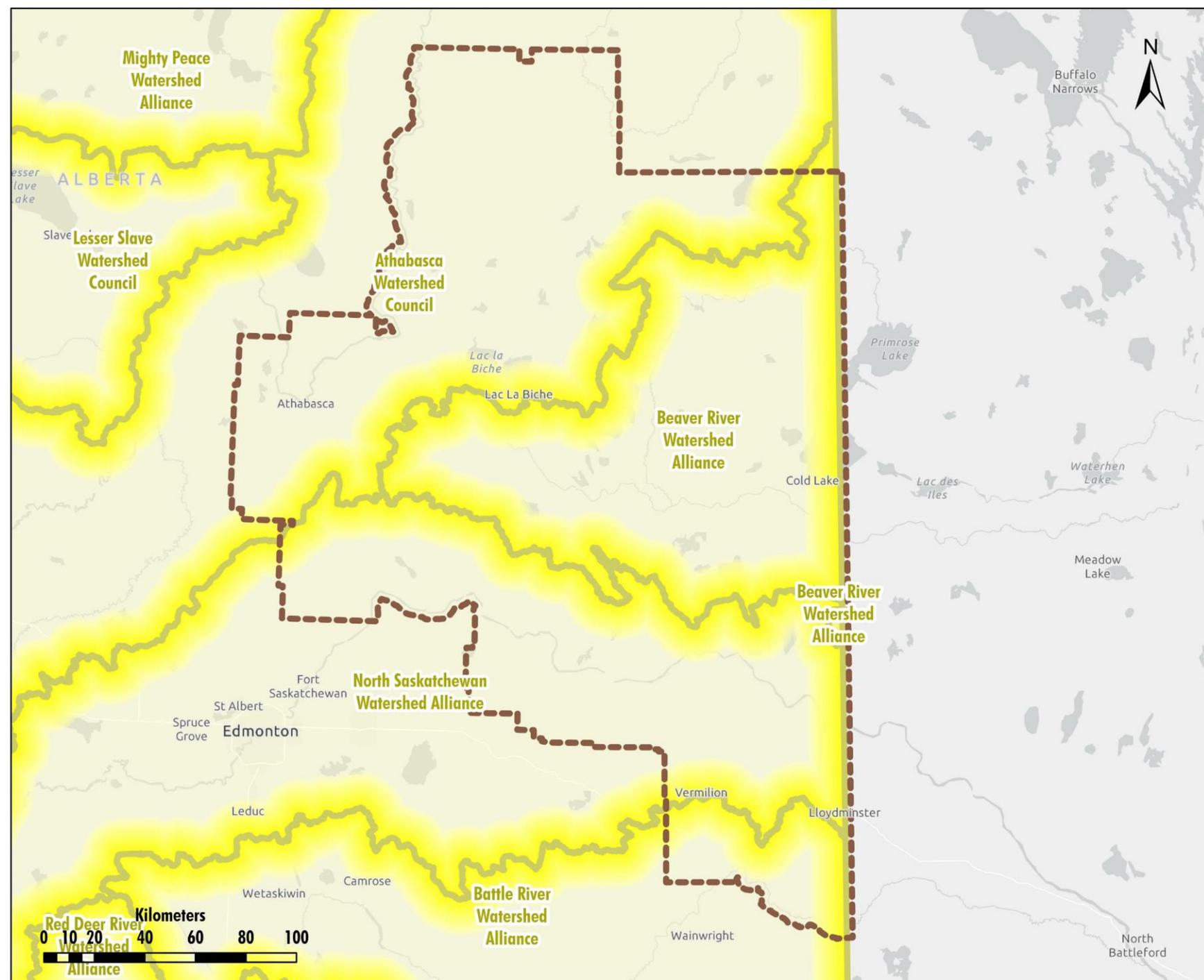
Board of Directors Meeting:

Boundary Change Motion

"Moved ... and carried that the LICA Monitoring Zone be expanded to match the LICA Boundary and that the LICA Boundary be extended to include the County of Lac La Biche and other split municipalities. Be it further moved that Appendix A of the LICA Bylaws be amended to reflect this change."

 Proposed LICA Boundary (Includes Split Counties)

 Alberta WPAC Boundary



September 24th 2020

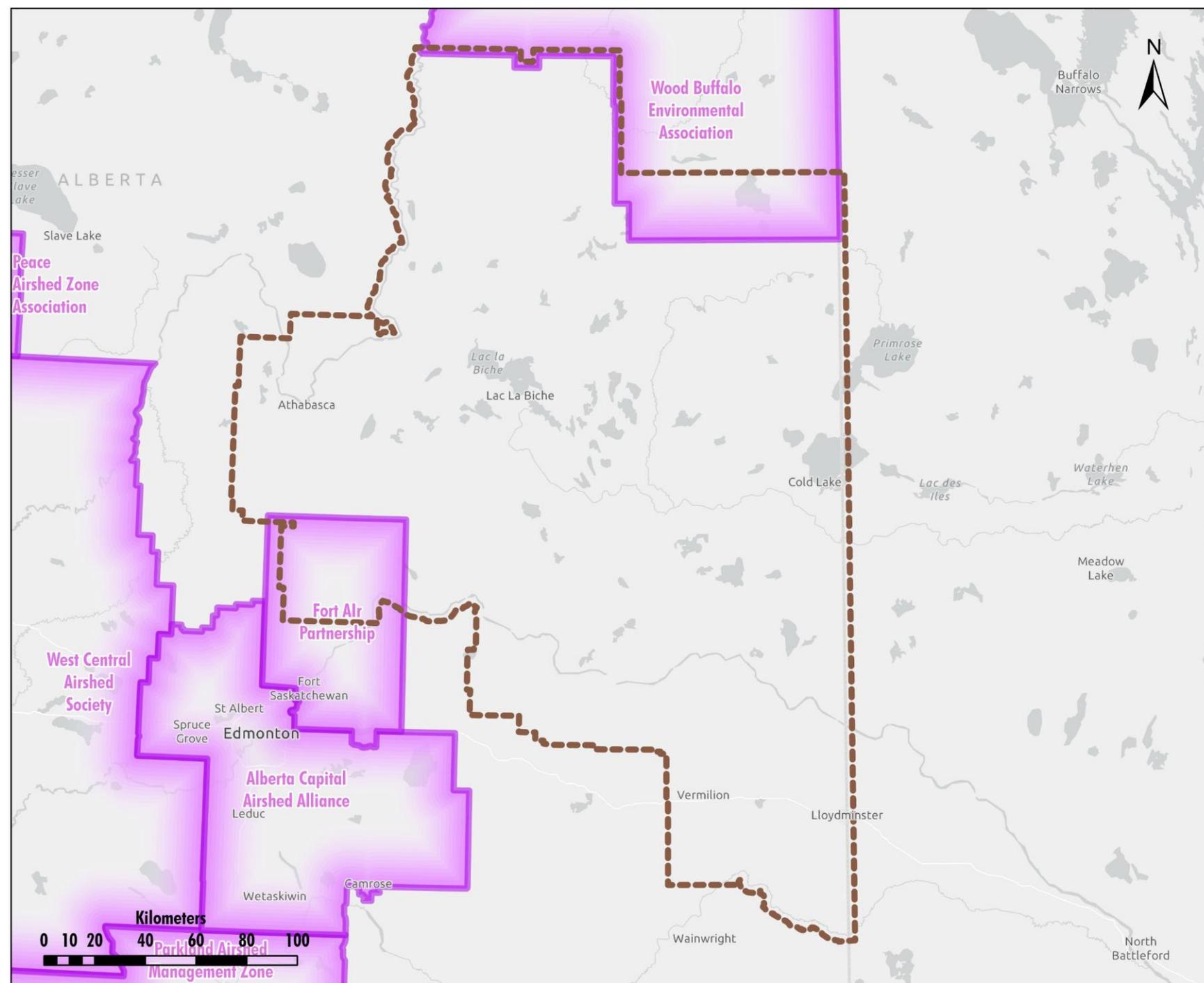
Board of Directors Meeting:

Boundary Change Motion

"Moved ... and carried that the LICA Monitoring Zone be expanded to match the LICA Boundary and that the LICA Boundary be extended to include the County of Lac La Biche and other split municipalities. Be it further moved that Appendix A of the LICA Bylaws be amended to reflect this change."

 Proposed LICA Boundary (Includes Split Counties)

 Alberta Airsheds Boundary



EMP Manager's Recommendation Report

September 24th 2020, Board of Directors Meeting

Air Monitoring Zone Boundary Change

Issue: LICA is relocating its Portable Air Monitoring System (PAMS) to Lac La Biche. This location is outside of the current 'air monitoring zone' boundary. The LICA Board proposed developing an ad hoc committee to review the airshed boundaries. This proposal identifies an alternative approach.

Background: **Rationale for Deployment in Lac La Biche:** Deploying the PAMS in Lac La Biche represents an opportunity to provide the AQHI in a populated center that lacks permanent air quality monitoring. LICA also delivers several education and outreach programs in the Lac La Biche area and the monitoring presence will complement these efforts.

Monitoring outside of the Boundary: With the commissioning of the St. Lina monitoring station, LICA has monitored air quality outside of the air monitoring zone boundary since 2009 (see Figure 1). The St. Lina monitoring location is ideally suited to meet the objective of monitoring air quality in an area that is representative of 'upwind' and rural conditions.

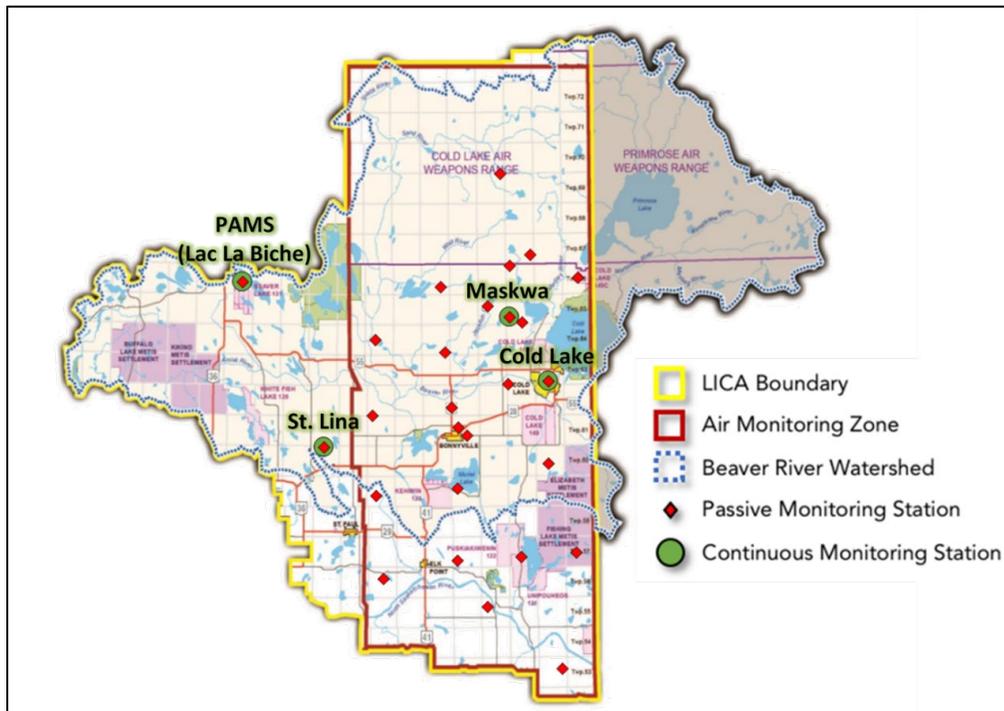


Figure 1: 2020 monitoring network overview

Emissions Sources: Recent compilation of emissions data and mapping show that there is very little industrial development in the part of the LICA area that is east of the current air monitoring zone boundary (see Figure 2). All major oil sands operations are in the north-central part of the zone; CHOPS activity occurs almost exclusively east of the western boundary.

Alternative Monitoring Methods: With the deployment of its first PurpleAir device in Cold Lake, LICA has joined several other monitoring agencies and organizations in using alternative, low-cost sensors to provide meaningful air quality monitoring data and information to the public.

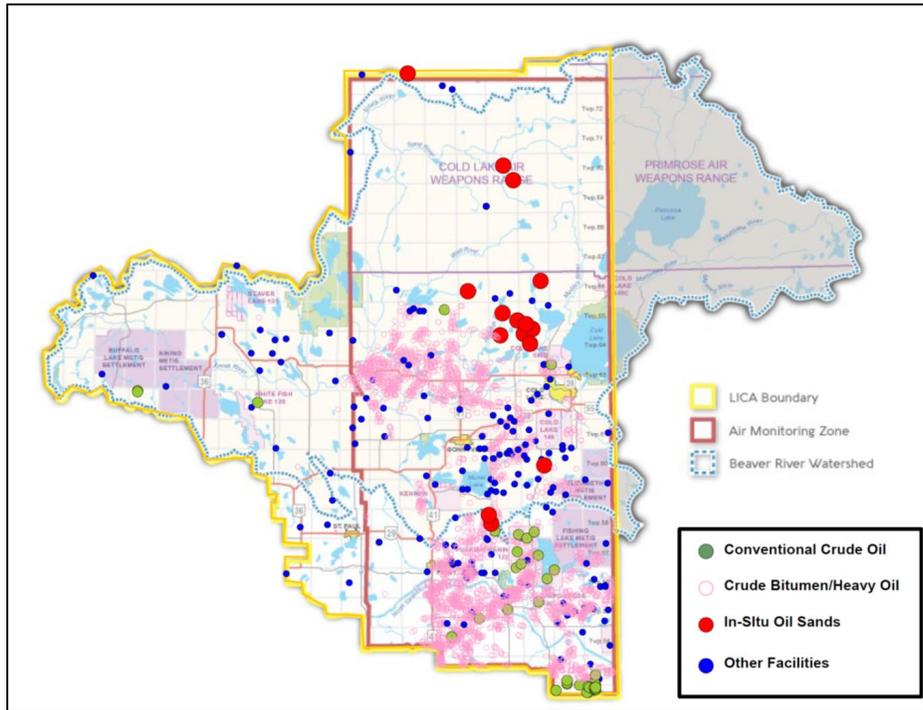


Figure 2: 2019 distribution of facilities in the LICA area

Synthesis:

Expanding the air monitoring zone to match the LICA Boundary, is a relatively low-risk scheme; LICA has been collecting ambient data outside of the air monitoring zone for over a decade. There are very few major emission sources in this part of the region. Redeployment of redundant passive air monitoring stations to the expansion area represents a nearly cost-neutral change to the regional monitoring program. A low-density passive network (6 x 6 TWP vs 3 x 3 TWP) would provide a development-appropriate level of monitoring in the area. Given that the most high-profile air quality events in the expansion area are likely related to particulate matter (forest fire smoke, harvest dust), LICA could engage smaller communities and settlements to install PurpleAir devices for continuous particulate matter monitoring. The community canister collection program could also supplement data needs for specific air quality concerns in the expansion area.

‘Harmonizing’ the boundaries creates a consistent narrative about where LICA carries out its business and better positions LICA to integrate monitoring and management efforts across different media.

Recommendation:

Expand the LICA Monitoring Zone to match the LICA boundary. *LICA is the Airshed Zone.*

- Relocate the 3 redundant passive air monitoring stations to the expansion area using a low-density array arrangement (e.g. 6 x 6 township grid).
- Deploy 3 PurpleAir to communities in the expansion area (St. Paul, Lac La Biche, + one TBD).
- Through outreach efforts, highlight these changes and the availability of data, monitoring results, and the community air canister sampling program.

Cost:

Passive relocation: \$250-350 per month for additional mileage and time.
 PurpleAir deployment: \$300 per unit.

Risks:

The risks of **not expanding**:

- Confusion caused by 1) multiple sets of boundaries for one organization, and; 2) ongoing air quality monitoring outside of the stated ‘air monitoring zone’ boundary.

The risks of **expanding**:

- Not being able to monitor all locations at the at all times. This is however a risk of any resource-limited monitoring network.
- Scope creep. This will have to be managed but is naturally limited by funding.