

2021

# Summer

Newsletter



**LICA**  
ENVIRONMENTAL STEWARDS



# Regional Air Quality



## Wildfire Smoke & Poor Air Quality



The Air Quality Health Index or AQHI is a scale designed to help you understand what the air quality around you means to your health. It is a health protection tool that is designed to help you make decisions to protect your health by limiting short-term exposure to air pollution and adjusting your activity levels during increased levels of air pollution. The AQHI is reported as a number from 1 to 10. The higher the AQHI number, the greater the health risk and need to take precautions. Health messaging provides advice for limiting exposure to air pollution and adjusting outdoor activity levels when air quality is poor.

Stay informed about outdoor air quality conditions, plan your outdoor activities, and manage exposure to outdoor air pollution by downloading the Air Quality Health Index (AQHI) Canada app. The app informs users of the level of health risk associated with local

outdoor air quality. The app provides hourly AQHI readings and daily forecasts for all AQHI communities across Canada.

LICA currently determines the AQHI at the Cold Lake South station in the City of Cold Lake, the St. Lina station in the County of St. Paul, and the Tamarack Station (formerly Maswka) near Marie Lake. *Information about health risks and ways to limit exposure during times of poor air quality can be found [here](#).*

*“Stay informed about outdoor air quality conditions, plan your outdoor activities, and manage exposure to outdoor air pollution by downloading the Air Quality Health Index (AQHI) Canada app.” -M.Bisaga*

*Image: The Jessie Lake shoreline and the Town of Bonnyville seen through a smoky haze on July 15, 2021 (M. Bisaga)*



# Wildfire Smoke & Poor Air Quality

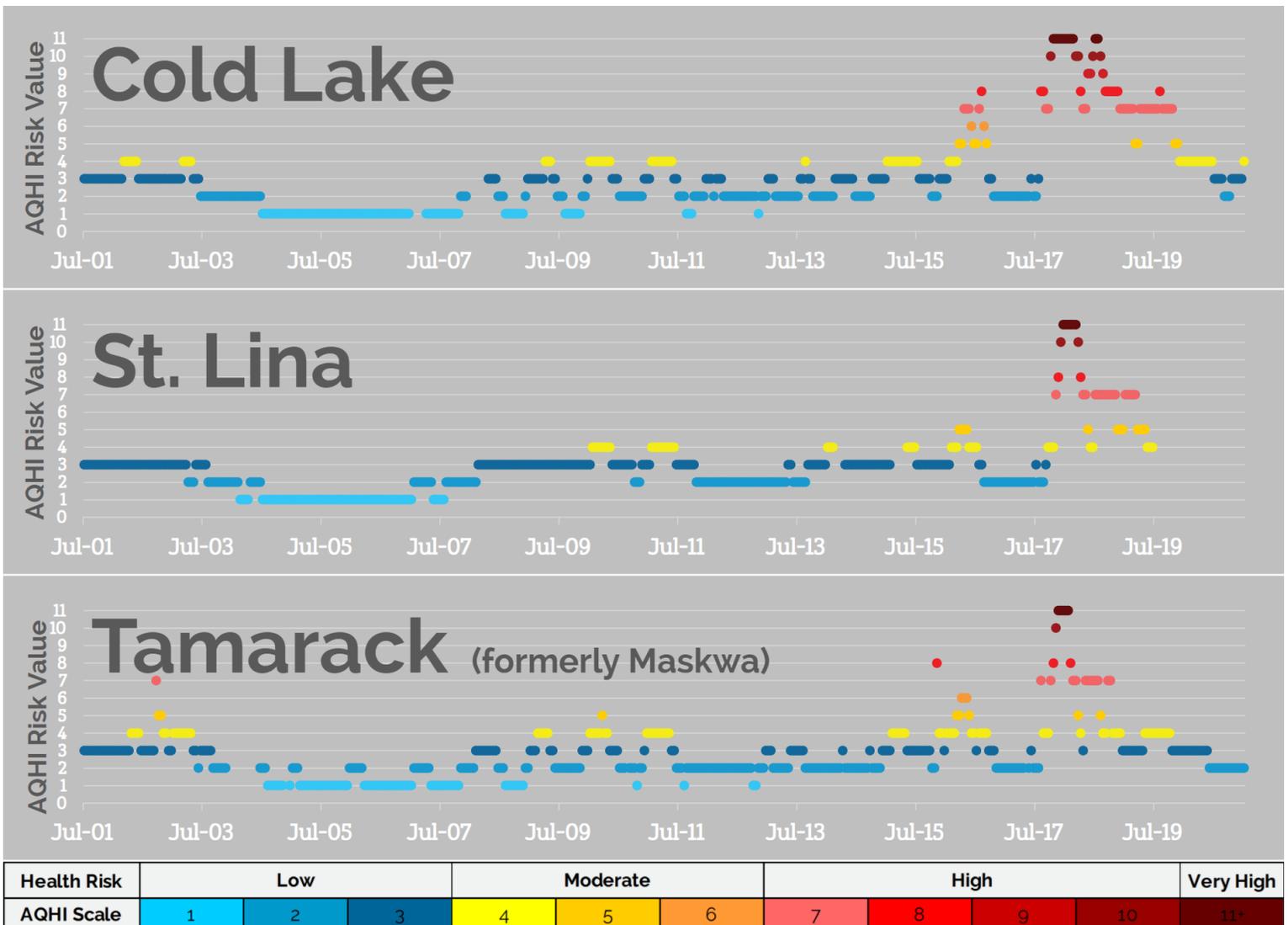


(cont.)

Starting in mid-July, smoke from several wildfires burning in British Columbia and northern Saskatchewan was carried into the LICA region and other areas of Alberta; this caused poor air quality and reduced visibility at times. The poor air quality was the result of elevated values of fine particulate matter from these distant wildfires.

The impact of the smoke was observed region-wide and registered at all of LICA's AQHI-capable monitoring stations. This figure presents data up to July 20, 2021; although it's difficult to predict smoke movement because of the rapidly changing wildfire situation, air quality and visibility issues caused by wildfire smoke are expected to be commonplace this summer due to the pervasive hot and dry conditions across much of western Canada.

The following charts show the dramatic change in air quality caused by the arrival of wildfire smoke.





# Community Project



## Community Hub Rain Garden



Areas that are converted from natural landscapes for development purposes such as roads, parking lots, and buildings, are less able to manage runoff. Natural landscapes are designed to help manage droughts, floods and water quality by appropriately absorbing and cleansing runoff. Low impact development is a comprehensive approach for runoff management that harnesses natural management capacities, while supporting development needs. Rain gardens are one low impact development method that help manage runoff.

LICA has partnered with the MD of Bonnyville and the Alberta Low Impact Development Partnership (ALIDP) to develop a Community Hub Rain Garden next to the Shaw House at Vezeau Beach on Moose Lake. Funding for the project was provided through the Watershed Restoration and Resiliency Program with the Government of Alberta.

Rain gardens are specifically designed and constructed to support runoff management by

primarily functioning to manage water quantity. They deliver a similar range of environmental benefits as ponds and wetlands, while avoiding the challenges of standing water (e.g. mosquitoes). The design directs water, in our case from the roof of the Shaw House, into the depressed planting bed of the garden where it is retained, stored, and slowly released.

All plants in the garden are specifically chosen and placed to support ecological objectives (such as food for pollinators), and to be as self-sustaining as possible, with no need for fertilizers or watering. In this rain garden, there are shrubs, perennial (re-grow each spring) flowers, perennial grasses and a temporary cover crop. All of the plants are tolerant of a wide range of moisture levels, with a few at the garden inlet that can take advantage of extra moisture. Native plants, those that naturally occur in this region, were used when possible, which helps support local pollinators and biodiversity.

Image: *The Community Hub Rain Garden next to the Shaw House at Vezeau Beach on Moose Lake.*



## Community Hub Rain Garden (cont.)



Weeding requirements are decreased by tightly placing plants, in consideration of their growth potential; using cover crops to fill in the gaps; and using edging to prevent establishment of unwanted plants (i.e. Kentucky Bluegrass, the typical grass used for lawns). Rain gardens are also esthetically pleasing, and they help cleanse water runoff before entering receiving water systems, such as Moose Lake.

A Community Hub Rain Garden is constructed at a public location and is used to educate about rain gardens and their benefits, and to inspire landowners (private, government and commercial) to develop rain gardens on their own properties.

The rain garden is still being developed and it may take a year or two for the perennial plants to become fully established. Signage and edging will be installed by the end of the summer and the fence has been placed to prevent damage by deer, particularly through the winter.

For more information on rain gardens and other low impact development methods, please visit <https://alidp.org/> or check out their rain garden educational videos on YouTube.



# Meet Our Board



## An Interview with Duane Zaraska



At LICA, we are grateful for the continued support of our volunteers, especially our board members. While they are often working behind-the-scenes to ensure LICA is running smoothly, we feel our board deserves to share the spotlight with us! In this new segment of our newsletter, we will be sharing interviews with board members so you can get to know them better and inspire you to join us in volunteering for local organizations in our community. *Without further ado, meet Duane!*

### **What sector do you represent on the Board of Directors?**

I represent the Metis citizens of Region II of the Metis Nation of Alberta.

### **Where did you grow up? If you are not from the Lakeland region, how long have you been here? What made you choose the Lakeland region as your home?**

I grew up as a young child in the city of Edmonton but throughout my childhood kept a close connection to family and the Lakeland Region. My families have been in the area since the 1700's and early 1900's on my father's side. I moved out to the area in 1980 and completed high school in St. Paul, Alberta and then again returned to Edmonton to further my education, secure employment, and raise a family. All the while staying closely connected to the Lakeland. After



longing for the Lakeland I returned to the area in 2006. I've always enjoyed the Lakeland for all its beauty and the great abundance of outdoor activity that I enjoy, including camping and fishing. I also enjoy long bike rides to enjoy our diverse landscape in the area.

### **What got you interested in the environment?**

The environment has always been of great importance to me and the sector that I represent; the Metis

from Region II Metis Nation. Being involved helps us contribute to sustainment of the environment and voice our concerns in regards to the environment while also allowing our traditional knowledge and land use information to be incorporated into information we provide for the community and stakeholders.

*"I've always enjoyed the Lakeland for all its beauty and the great abundance of outdoor activity..." - D. Zaraska*

### **Tell us about your history at LICA – when did you get involved and what positions did you fill? Why did you become a board member?**

I have been involved with LICA since 2014 when I was appointed by Region II Metis Nation of Alberta to sit as the Region II representative on the Board of Directors. I remain a part of the great board today. In the past, I was part of the Airshed and Water Committees when they were a separate committee. As well, I was a member of the Education & Outreach Committee from 2014-2018 and now again joined the committee in 2020 as Chair of the E&O Committee. I am also a member of the LICA Governance Committee and the ad-hoc Boundary Change Advisory Committee. I do enjoy all my involvement and really like participating and advocating for the importance of a sustainable environment. Its why I stay involved.



## An Interview with Duane Zaraska (cont.)



*"I hope and do believe that we can balance the economy and the environment with the work of LICA and responsible industry in the area."*

*- D. Zaraska*

**What qualities do you think are important for a great volunteer?**

A good volunteer to me is a person who stays committed to the organization and follows their Vision, Missions and Goals. A volunteer for LICA would be a person who knows and cares about the state of our environment and helps achieve environmental goals. Must be a strong advocate for a clean, safe and sustainable environment.

**What do you hope for the future of the environment in the Lakeland region?**

It is my dream and hope that the environment will be sustained in the Lakeland region. I hope and do believe that we can balance the economy and the environment with the work of LICA and responsible industry in the area. This balance can be achieved and we can keep our environment healthy so it can be used and enjoyed for many years to come.

**If you had to live the rest of your life as a plant or animal native to Alberta, what species would you be and why?**

If I was to live out my life as an animal in the Region it would be an Eagle for a couple of reasons. Because of my heritage the eagle is of great symbolic importance to the Metis Culture. Although the eagle can soar high in the sky it is very connected to the earth. The Eagle also symbolizes Strength, Vision, and Wisdom. Because the eagle can fly and travel a considerable distance, it would allow me to take in the vastness and diversity of the Lakeland area; the forested areas, the open fields, the untouched natural areas, the streams, rivers, lakes and overall majestic beauty of the Lakeland area.



# Summer Student



Meet Stephanie Sitkowski



My name is Stephanie, and I am LICA's 2021 Summer Student. I am currently working towards my BSc in Conservation Biology, and I graduated from Lakeland College last year with my diploma in Wildlife and Fisheries Conservation. I grew up playing in the Sheep River, catching minnows and frogs and splashing around in the mud. It took me some time to decide what direction I wanted in life, and about 3 years ago I learned I could turn one of my biggest loves into a career. By sharing my love for the environment with others in our community, I feel that I can help others value the importance of protecting it. Conservation through education is something I have become very passionate about, and through my role

at LICA, I have had the chance to do just that. I am spending my summer under the guidance of some amazing mentors, teaching youth and adults within the Lakeland region about the importance of clean air and water in the environment around us. As a new member of the community, I am consistently awed and inspired by the enthusiasm I encounter in the Lakeland Region, and am encouraged by how many kids I've met who are just like me when I was their age. I am proud to be part of an organization that is helping to facilitate appreciation and care for the environment; it gives me hope for a brighter future for our planet.



*"By sharing my love for the environment with others in our community, I feel that I can help others value the importance of protecting it." -S. Sitkowski*

# Upcoming Events

August - September

More events for August and September are being planned! Please check out the LICA website or email [outreach@lica.ca](mailto:outreach@lica.ca) for more information on committee meetings, additional workshops and more.

August 4, 2021  
Creek Watch Monitoring  
6:00PM-7:00PM

August 21, 2021  
KOLB - Moose Lake Shoreline Cleanup  
10:00AM-12:00PM

August 6, 2021  
Chamber of Commerce Chili Cook-Off  
12:00PM-2:00PM

August 21, 2021  
Creek Watch Monitoring  
11:00AM-12:00PM

August 9-13, 2021  
Young Water Speaks Traveling Art  
During LICA business hours

September 1, 2021  
Creek Watch Monitoring  
1:00PM-2:00PM

August 9-13, 2021  
LICA Children's Programs  
At the Bonnyville Library

September 2, 2021  
Vermicomposting Workshop  
Cold Lake Library 6:00PM-7:00PM

August 10, 2021  
LICA Open House  
4:00PM-7:00PM

September 16, 2021  
KOLB Information Night  
7:00PM-8:00PM

August 20, 2021  
Sandy Beach Shoreline Cleanup  
10:00AM-12:00PM

September 23, 2021  
LICA Board Meeting  
9:00AM-12:00PM

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Thank you for your support!



**LICA**  
ENVIRONMENTAL STEWARDS

Alberta Environment  
and Parks