

PREPARED BY

Meghan Payne, Executive Director Kate Lovsin, Watershed Coordinator

MANY THANKS

The Lesser Slave Watershed Council is grateful for Water for Life partnership support provided by the Government of Alberta and for the financial contributions of local municipalities and industry partners!





\$20,000









Peavine Metis Settlement \$1,660



\$2,130

Elliott & Rosche Memorial Bursary

Nona Elliott \$500 This year, the LSWC created a bursary, the Elliott & Rosche Memorial Bursary, to honor two of our founding board members, Brian Elliott and Brian Rosche. The bursary of \$1000 is donation driven and will be awarded annually. A special thank you goes out to those who donated to make the bursary possible.



Miscellaneous Donations \$173

Lynn Smith \$50

Brian Gilroy \$25

OUR WATERSHED



MESSAGE FROM THE CHAIRMAN

Todd Bailey

Throughout the last year, our Board of Directors met for seven regular board meetings, an annual general meeting in October of 2020, and participated in a strategic planning workshop on November 5th, 2020. I, once again, commend the Board of Directors on the magnificent job transitioning to virtual meetings and their flexibility in dealing with the continued restrictions placed on all of us.

Through these challenging times, the LSWC continues to provide a strong, relevant voice for our watershed, both locally and provincially. I commend the hard work and dedication of the Board of Directors who volunteer their time to ensure the organization is achieving its goals and objectives. The diversity of experience and perspective of the Board of Directors and their continued commitment has been key to the success and longevity of the LSWC.

As we hopefully turn the corner of this pandemic and start to see lifting of social distancing restrictions, I'm looking forward to more in-person meetings again so we can hear the laughter and see the smiling faces around the table. Stay safe!

2020-21

BOARD OF DIRECTORS

Richard Simard (Fern Welch) Big Lakes County

Darcie Acton (Brad Pearson) MD of Lesser Slave River

Rebecca King (Joy McGregor) Town of Slave Lake

Brian Gilroy (Michael Long) Town of High Prairie

Jamie Bruha (Lisa Bergen) Alberta Environment & Parks

Todd Bailey, Chairman Swan River First Nation

Roderick Willier Sucker Creek First Nation

Pearl Lorentzen Member at Large Lynn Smith (Ken Noskey) Peavine Metis Settlement

Nicole St. Jean (Allison Moeller, Secretary) Forest Industry

Susan Nielsen (Duane Nichols ,Treasurer) Agriculture

Dean MacKenzie
Oil & Gas Sector

Shane Knutson (George Keay) Tourism & Economic Develop.

Tammy Kaleta, Vice Chair Tourism & Recreation

Cori Klassen Non-government Organizations

Nona Willier (Jeanette Willier) Cottage Owners



The LSWC directors contributed a total value of \$26,467.66 in kind and travel in 2020-21.

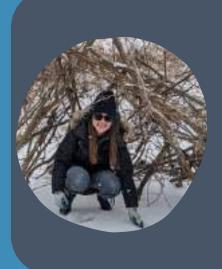
FROM THE EXECUTIVE DIRECTOR

Meghan Payne

As I reflect back on our last year, and the challenges we continue to deal with, I am very appreciative of our Board of Directors for their adaptability and willingness to transition to an "online" way of doing business. I sincerely miss seeing everyone around the board table each month and getting the opportunity to connect and engage with each other. Despite the challenges presented to us, I feel positive about our accomplishments over the past year and appreciative of the great partners and collaborators who continue to support the LSWC.

We actively engaged with watershed landowners and initiated 2 new watershed resiliency projects in 2020, with support from Big Lakes County and the Provincial WRRP program. The LSWC built staff capacity; I completed Environmental Farm Plan Technician training and look forward to working with producers to complete their EFP's and aid them in accessing funding opportunities. Our Water Quality Monitoring program grew with financial support from Cardinal Energy and Plains Midstream. We added metal parameters to 3 additional sites and initiated monitoring on LSL in January 2021. We were successful in obtaining support from the Federal Environmental Damages Fund and completed a riparian intactness and risk assessment for the West Prairie River. This project will help the LSWC and our partners to focus in on areas where restoration and conservation will help improve the river system's overall health. We also reached people in our watershed through online platforms like social media, YouTube, and I participated in my first podcast with our partners at PCBFA.

Sadly, we did not get as much face time with folks in our watershed and we dearly miss those opportunities. We look forward to post-Covid events and visits again soon!



The LSWC welcomed Kate Lovsin to our team as our Watershed Coordinator. Kate grew up in High Prairie, Alberta, taking an interest in the natural systems on her acreage and the surrounding area of Big Lakes County. After taking 2 years off from school, she pursued a B.Sc in Environmental Science at the UofA, completing her degree through the pandemic! She joined us in February of 2021 for a year long position while Alyssa Belanger is away on maternity leave. She is eager to help make a difference and guide others to a career in the environmental sciences.

SUMMARY OF ACHIEVEMENTS

April 1, 2020 - March 31, 2021

1. Maintain Good Governance

- Board strategic planning session & new strategic plan.
- Adoption of Board Governance policies.

2. Be a Convener & Collaborator

- Swan River Online Forum held in October 2020.
- Swan River Watershed Initiative (SRWI) Terms of Reference drafted.
- SRWI website started to share information and resources.
- Ongoing communication and collaboration with multi-stakeholder groups.
- Participation on Big Lakes County ALUS Project Advisory Committee. First two ALUS projects approved.
- Supported completion of two Environmental Farm Plans and applications to the Canadian Ag. Partnership (CAP) Grant Program.
- Supported completion of two Farm Water Management Plans and applications to the CAP program for water wells.
- One pre-project Riparian Health Inventory completed by Cows and Fish in summer 2020.
- Worked with the WPAC collective on provincial initiatives and projects.
- Feedback and comments provided as opportunities arise for the development of the Lesser Slave Regional Forest Management Plan.

3. Lead or Support Watershed Planning and Policy

- LS IWMP Implementation progress update complete and shared with watershed stakeholders.
- Engaged with partners to understand their implementation priorities and resources to support work.

 Provided policy examples to municipal government for consideration.

4. Support or lead monitoring and reporting

- Monitored 14 tributary sites 10 times between April and October.
- Industry support allowed the addition of metal parameters at sites on 3 rivers.
- 2017-2020 water quality data hosted on Mackenzie DataStream.
- Implemented year one of monitoring at two sites on Lesser Slave Lake.
- Supported an eDNA PhD project by collecting and filtering samples form Lesser Slave Lake at the Grouard Bridge and sending them to the University of Guelph.
- Hired Fiera Biological Consulting to complete a riparian intactness and risk assessment for the West Prairie River. Shared findings with stakeholders.

5. Promote education, literacy, and stewardship

- Increased social media following and engagement.
- Held a Watershed 101 Webinar and posted the recording to our YouTube channel.
- Three newsletters published, ten articles featured in local papers.
- Delivered the Little Green Thumbs Program across the watershed.
- Held a modified Kids Can Catch event to promote family outdoor recreation and safe angling.
- Elliott & Rosche Memorial Student Bursary established.
- Provided Green Acreage Guides and Living on the Shoreline resources.
- Distributed LSL Stewardship Handbooks across the watershed throughout Spring and Summer.

STRATEGIC PLANNING - A VISION FOR A NEW DECADE

Every successful organization is guided by a strong vision, mission and strategic plan that identifies objectives and outcomes. The LSWC has matured as an organization over the past 14 years of operation and our focus and scope of work has evolved with us. Originally planned for March 2020, the LSWC had to delay our facilitated strategic planning session until COVID restrictions allowed for us to meet in person, which ended up being November 5, 2020. Prior to the planning session, our Board of Directors and staff completed a detailed survey to gather information to shape our conversations and priorities for our "new" decade.

The group took this opportunity to review and update our original vision, mission and goal statements, as it was recognized from the survey results that they were out of date and could be simplified. With a clear vision, mission and goal statement, the LSWC then established 5 strategies to guide our work that align with WPAC roles and priorities for the LSWC.

LSWC Vision:

A healthy, resilient watershed that is valued and stewarded by engaged citizens and communities.

LSWC Mission:

The Lesser Slave Watershed Council works to improve and maintain a healthy watershed through education, planning and implementation of shared initiatives in support of communities and ecosystems throughout the region.

LSWC Goal:

A healthy Lesser Slave watershed.

LSWC Strategies

- 1. Maintain Good Governance
- 2. Be a Convener and Collaborator
- 3. Lead or Support Watershed Policy and Planning
- 4. Lead or Support Watershed Monitoring and Reporting
- 5. Promote Education, Literacy and Stewardship



SWAN RIVER WATERSHED INITIATIVE

Collaborating to Support Arctic Grayling

The LSWC is interested in supporting the ongoing stewardship effort in the Swan River watershed, as recommended in the Lesser Slave Integrated Watershed Management Plan. Many people have an interest in the Swan River watershed, including communities, governments, industry, nongovernment agencies. The Swan River watershed sustains Swan River First Nation (hunting, fishing, trapping), provides important aquatic habitat for Alberta species at risk (i.e., Arctic Graying), a diversity of upland vegetation that supports upland wildlife, forestry industry, oil and gas activity and recreation.

The Lesser Slave IWMP has several recommendations that pertain to the Swan River:

10.4.3 h ... At Swan River, maintain OHV trails and where possible, establish bridge crossings to reduce impacts to streambanks.

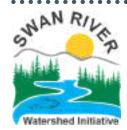
10.6.3 c ...to increase the availability of productive fish habitat through the restoration of stream connectivity, and to reduce sediment inputs to streams and downstream.

Swan River Watershed - Online Fall Forum

In October 2020, the LSWC invited stakeholders from across the Swan River watershed to an Online Workshop series aimed at sharing information about the Swan watershed, sharing work in progress, and fostering collaboration to initiate projects that will improve Arctic Grayling habitat. Thirty people connected throughout the course of the workshop. Participants represented the Swan River First Nation, Alberta government, forest and oil and gas industry, non-government organizations and consultants. The summary report from the forum, as well as the great presentations delivered by participants can be found on the SRWI website (information below).

In February 2021, the LSWC held an online meeting to follow up on the fall forum. Partners were asked to provide feedback on the action plan presented in the workshop summary and review a draft Terms of Reference that outlines the purpose, goals and objectives of the Swan River Watershed Initiative.

The LSWC recognizes Swan River First Nation's leadership and dedication to protecting and preserving the Swan River Watershed. Through support from federal grants, collaboration with local industry, and with support from a great technical team, they have completed and initiated many projects that support their overall goal of maintaining and improving the land and waters in the Swan Watershed.



SRWI Webpage: www.lswc.ca/swan_river

The LSWC has created an online space for the SRWI within the LSWC's website. When you visit, you will find information about: the Swan River, the partners involved in the SRWI, Arctic Grayling and barriers to habitat, and project reports from work done to date, as well as links to relevant resources.

WATER QUALITY MONITORING PROGRAM

In the spring of 2017, the LSWC began monitoring water quality at 15 tributary sites in our watershed. This program supports recommendations made in the Lesser Slave Integrated Watershed Management Plan (2018). The objectives of the program are to: collect baseline data; evaluate water quality condition in comparison to relevant federal and provincial guidelines, and existing historic data; and to establish site-specific water quality objectives when sufficient data becomes available (about 5 years). 2020 was the fourth year of the water quality monitoring program, funded by both industry and municipal partners.

This year, samples were collected by LSWC staff and volunteers at 14 of the 15 sites 10 times between April and October 2020, and sampled our 2 new lake sites 3 times from January to March 2021. Sampling efforts for a new sample site on the Lesser Slave River to follow in the coming year.

The data collected is summarized in a report by Palliser Environmental Services. The parameters measured include: temperature, dissolved oxygen, conductivity, pH, total suspended sediments, fecal coliform bacteria, total and dissolved phosphorus, nitrate, nitrite, and total nitrogen and metals at select locations.

Learn more and download water quality summary reports online at:

https://www.lswc.ca/water_quality_monitoring

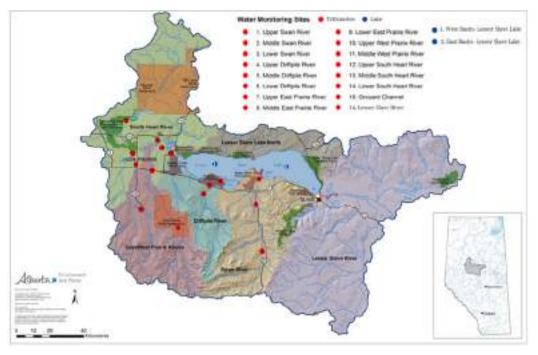


Figure 1. Map of the Lesser Slave Watershed with the LSWC's 16 Tributary Water Quality Monitoring sites and 2 Lake Monitoring sites. Flow data is obtained from Alberta Environment and Parks annually.

WATER QUALITY COLLABORATION

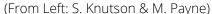


Swan River First Nation (SRFN) and the LSWC have been working together since 2017 to build a more robust data set for the Swan River. In addition to baseline parameters sampled at all 16 sites, SRFN covers the analytical costs for the monthly testing of metals, dissolved metals and trace mineral samples at 3 Swan River sites. SRFN has many environmental projects underway that support a healthy watershed and improve habitat for Arctic Grayling.



In order to share our water quality program results and reports on an easily accessible public platform, the LSWC has partnered with Mackenzie DataStream. Check out our 2017-2020 data set at www.mackenziedatastream.ca.









In January 2021, we kicked off sampling on Lesser Slave Lake at two sites. Special thank you to board member Shane Knutson, volunteer Shane Krupinski, and to local business owner, Stacey Monteith, for helping us get out on the ice to do winter sampling!

Thank you to our 2020 Water Quality Monitoring Program funders:









Peavine Metis Settlement

WEST PRAIRIE RIVER RIPARIAN INTACTNESS & RISK ASSESSMENT

The West Prairie River is the source water for the Town of High Prairie and parts of Big Lakes County. It flows north through the Town of High Prairie and joins the South Heart River, flowing into Lesser Slave Lake via Buffalo Bay. There are many land uses across the basin, including forest harvest, agriculture, oil and gas, roadways and cut-lines, and the Town of High Prairie. Past water quality monitoring completed by the LSWC has indicated some water quality challenges on this river, including high fecal coliform counts and high suspended solid loads when river flows are high.

So why do we care about the riparian area on this river??

Riparian areas are the "green bands" adjacent to lakes or rivers. They have great ecological, economic and social importance. They help to stabilize banks and reduce erosion, they improve water quality by trapping and preventing sediment and pollutants from entering the water, help manage high water volumes and velocities and improve surrounding land's ability to manage flooding and provide important habitat for 80% of species in Alberta. A healthy riparian area provides ecological goods and services that we all benefit from.

With support from the Federal Environmental Damages Fund, the provincial Watershed Restoration and Resiliency Program, and Municipal partners, the LSWC undertook a riparian area health assessment with Fiera Biological Consulting (FBC) to assess approximately 600km of riparian habitat in the West Prairie River sub-watershed, which includes McGowan Creek, Golden Creek, and the West Prairie River.

Fiera used satellite imagery and LiDAR data available from the Government of Alberta to analyze the health of the riparian area. The study measured the relative intactness of the riparian areas, which was graded on a scale measuring how intact and vegetated the area was, and the potential pressures these areas faced to determine the health scores for riparian areas in the system.

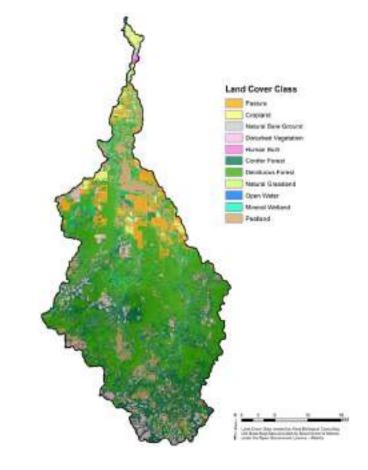


Figure 2. Map of the West Prairie sub-watershed showing the land use classes across the watershed (Fiera, 2021).

WEST PRAIRIE RIVER ASSESSMENT - WHAT WE LEARNED

Take-aways from this assessment include the proportion of riparian area of the subwatershed's relative intactness, depicted below in figure 3, pressures on existing riparian areas, and varying conservation and restoration scores across the sub-watershed.

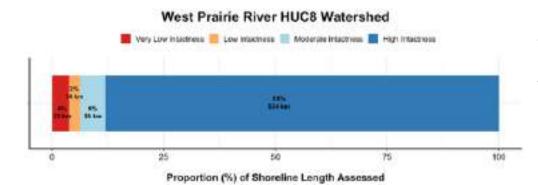


Figure 3. Graphic depicting the relative intactness of riparian area of the 600km of riparian habitat studied in this assessment by FBC.

Many of the pressures identified were human related, like agriculture, well sites, and roadways, but also included things like barren land caused by natural stream bank erosion during high flows. Recommendations from this assessment include conservation of high quality habitat, reduce flood risks by restoring impacted riparian areas, and manage the external pressures leading to degradation and damage of riparian areas. This assessment also provides important baseline data from which we can compare future riparian health.

Next Steps for the LSWC

The LSWC has been actively engaging with landowners across our watershed to improve riparian health since 2016. This assessment helps us target areas for restoration or conservation in the West Prairie area. The LSWC collaborates with municipal and NGO partners to support landowners in implementing projects that will conserve or enhance riparian and wetland health with the goal of a more resiliency watershed.

Learn More

Find the full Project report online at:

lswc.ca/riparian area assessments

You will also find a link to a video presentation (April 9, 2021) about the project by Dr. Shari Clare with Fiera Biological Consulting.



Figure 3. This image shows an area that has a poor riparian health score. There is severe erosion taking place, no natural vegetation present and bare ground that is susceptible to weed infestation.

The Covid-19 pandemic did throw a wrench in a lot of plans over 2020 and we missed out on great regular events like the High Prairie Gun and Sportsman Show, River Boat Days, the Slave Lake Chamber of Commerce Trade Show, holding workshops on invasive species and other watershed topics, taking kids out on field trips to local wetlands, our Kids Can Catch ice fishing event, and the opportunity to meet with people in the watershed throughout the summer to provide resources and engage with people who live, work and play around Lesser Slave Lake.

Partners spent

almost 680 hours working with the LSWC!





50 people

ATTENDED OUR WATERSHED 101 WEBINAR IN APRIL 2020

20 people

ATTENDED OUR AGM IN OCTOBER 2020



728 Facebook Followers



896 Twitter Followers



162 Instagram Followers

35 posters

ENTERED IN OUR CANADA WATER WEEK 2021 YOUTH POSTER CONTEST

39 families

ENTERED OUR KIDS CAN CATCH ICE FISHING CONTEST IN FEBRUARY 2021

The LSWC created our own YouTube Channel!
Look us up to watch our videos!

Despite the challenges, we still accomplished many great things and learned a lot about being adaptive to new challenges!

PROMOTING WATERSHED LITERACY

During a Pandemic

The majority of our regular classroom visits, presentations and field trips to local wetlands were cancelled as a result of the COVID-19 pandemic. The LSWC, along with our partners, had to get creative with program delivery and providing options that were safe, yet still engaging for students. Some presentations were able to be shifted to online delivery, while others needed to be revised.

To date, the LSWC is collaborating with partners to improve and create new virtual learning experiences and continue to adapt to whatever restrictions come our way.



April 2020 Watersheds 101 Webinar

2020-21

Watersheds are complex, wonderful places and there is so much information to share. Our Watershed Coordinator, Alyssa Belanger, worked with Laura Brandon with the LSFES to create and deliver a live webinar that covers the major watershed features, functions, and touches on what we can do to keep our watershed healthy and sustainable. You can find the recorded webinar on the LSWC's YouTube Channel.

Transitioning to Virtual Learning

In an effort to reach students during the COVID-19 pandemic, our watershed coordinator, Alyssa Belanger, created some short wetland and water quality videos. Generally, we are able to take grade 3 and 5's on wetland field trips where they can get their hands dirty and maybe their boots full, but since we couldn't bring them to the wetland, we created some videos that can be watched online or in-class.



CANADA WATER WEEK 2021









Canada water Week takes place during the third week in March each year and many organizations across the nation take the opportunity to engage their communities in learning about and celebrating water and watersheds.

In March 2021, we partnered with the Lesser Slave Forest Education Society (LSFES) and the Boreal Centre for Bird Conservation (BCBC) to promote watershed awareness stewardship by holding a youth poster contest. We asked youth to showcase the benefits and importance of wetlands in their posters and we were not disappointed! We received 35 amazing entries!

With fewer "in person" opportunities to get out in our communities, we engaged a broader audience during Canada Water Week 2021 by holding a watershed trivia contest through our Facebook page. Correct answers to our watershed trivia questions resulted in an entry into the draw at the end of the week for a gift card to a local greenhouse: Christie's Gardens and Greenhouses.

Poster artists from top to bottom: Jenna Koppang (Gr. 10 E.W Pratt), Alexis Davies-Hunt (Gr. 5 St. Andrew's Catholic School), Danelle Gacuya (Gr. 12 E.W Pratt), Renée Boucher (Gr. 6 École Héritage). Bottom middle: Jemma Hesse (Gr. 6 St. Andrew's Catholic School). Bottom left: Keirra Allan (Gr. 11 E.W Pratt).









Little Green Thumbs classroom gardening program celebrated its 7th year in the Lesser Slave Watershed in the 2020/21 school year. It is a program that is completely free to teachers! We provide all the necessary materials. Overall, the program was delayed as a result of the pandemic over the last year. Many teachers had to put their gardens on hold while dealing with the uncertainties of in person and online learning for much of the school year, while others were able to focus on growing a downsized garden or starting a vermicomposting kit to help get through



the school year. To date, we have 10 gardens in 6 schools across the watershed.
Unfortunately, we were unable to do any in class presentations to support the program this year because of the COVID-19 pandemic.

"Some students tried singing to the plants to make them grow faster!"

Teacher, Joussard School





"Students planted the seeds, they water them every other day. We are excited to see the flowers and the fruits."

Teacher, Joussard School

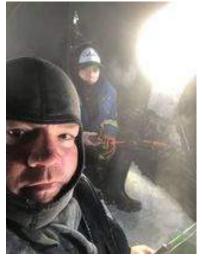




2021

The COVID-19 pandemic has affected a great deal of our plans over the last year. In lieu of our regular event held in Joussard AB, the LSWC made the best of a bad situation and put together 20 kids ice fishing kits with all of the essentials to promote ice fishing over family day weekend. Each kit had 2 ice fishing rods, fishing regulations, cloth gloves, hand warmers, an ice scoop, ruler, a small tackle box, pliers, and some goodies for the kids!

We asked families to send in photos of their families and tell us why they were eager to try ice fishing to be entered to receive an ice fishing kit. We had an overwhelming response from our local communities! We sincerely hope that next year, we will be back to our regular event with in person activities, fishing and fun!



Chris Conlon and his family ice fishing February 2020.



Amy Teale's family ice fishing February 2020.



Kristine Kay's family ice fishing February 2020.



Pictures on the left and right are photos taken by Amy Teale of her family ice fishing adventures in February 2020.



April 1, 2020 - March 31, 2021

FINANCIAL STATEMENT

	400	
NORTHWO AND ADDRESS	2021	2020
REVENUE		
Brian Elliott Memorial Donations	1,101	-
General Donation Income	20	4,250
Municipal Government Income	12,500	6,500
Non Government Grant Income	2,331	2,656
Other Government of Alberta Grants	200 C C C C C C C C C C C C C C C C C C	7,100
Alberta Environment and Parks Operational Grant	230,000	130,000
Federal Government Grant Income	35,228	
Revenue deferred from previous period	251,159	227,293
Revenue deferred to subsequent period	(238,682)	(251,159)
Water Quality Monitoring Program Revenue	32,248	29,476
	325,885	220,016
EXPENSES		
Administration	23	905
Advertising and promotion	3,087	5,970
Amortization	319	422
Donations	1,000	10,000
Education and outreach	8,741	11,778
GST Expense	3,715	1,873
Insurance	4,110	4,117
Interest and bank charges	165	109
Office related	9,460	11,735
Professional fees	2,100	2,100
Misc. Project Expenses	173	7,132
Office Rental	163,914	15,986
Repairs and maintenance		1,711
Riparian projects	59,350	969
Salaries and benefits	140,375	143,965
Stakeholder engagement	1,673	5,255
Telephone and internet	4,004	3,635
Professional development	6,611	1,070
Travel	102	1,653
Water quality monitoring	41,181	19,394
Watershed planning	12,171	14,966
100.00 (100.00 C) (100.00 (100	314,728	264,745
EXCESS(DEFICIENCY) OF REVENUE OVER EXPENSES	\$11,157	(44,729)

IN KIND CONTRIBUTIONS

The success of any non-profit organization is in the many partners and volunteers that come together with a shared vision and jointly work to achieve shared goals. The LSWC strives to do our best to track the time, cash, and in kind donations of all volunteers & partners throughout the year so that in addition to reporting on cash revenues, we can assign a dollar value to the overall "non-cash" contributions to our work.

Board of Directors

Time and travel associated with meetings, committees and participation in events. Travel was limited when compared to past years due to a shift to online meetings.

IWMP Implementation

Time investment of IWMP implementation partners: GOA staff, IWMP Steering Committee and Technical Advisory Team, Municipalities, First Nations, and other stakeholders.

Watershed Resiliency

In kind time of partner staff & producers, cash investment of producers, donations of materials for projects.



Water Quality Monitoring

In kind time investment of partners and volunteers.

Education & Outreach

In kind investment of program delivery partners, volunteers and other WPAC staff.



The 11 WPAC's in Alberta, Alberta Environment and Parks, and the Alberta Water Council have shared goals and objectives around watershed management in Alberta. The WPAC Executive Directors and Managers meet quarterly to discuss and work on provincial scale projects, engage with provincial partners and explore opportunities for collaboration. The 11 WPAC produce a WPAC Compendium that highlights annual collective achievements

2020-21 Investment to the WPAC Collective \$18,658.



CONTACT US

Phone: (780) 523-9800 Email: info@lswc.ca

Website: www.lswc.ca

6 @LSWC2012

P.O. Box 2607 4833-52 Ave

High Prairie, AB. TOG 1E0





@ablswc