

# Lesser Slave Watershed Council 2010-11 Annual Report



Photo By: Ron Davis

*Created for the LSWC by:*

Meghan Payne, BSc.  
LSWC Executive Director



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*Pelicans on the South Heart River reservoir.*

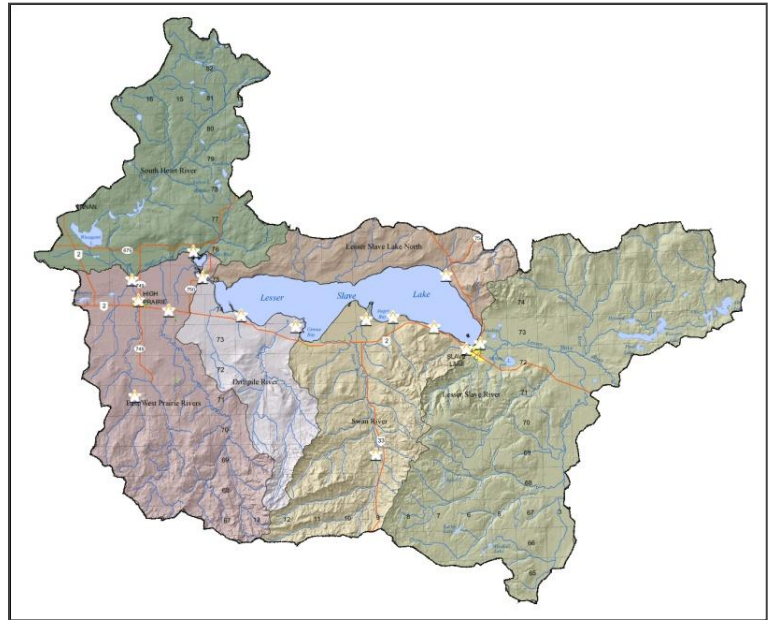
*Photo by Ron Davis.*



## Who is the LSWC?

The Lesser Slave Watershed Council is a non-profit group of volunteers who work with the provincial government to maintain the health of the Lesser Slave Watershed.

Members of the council are representatives from towns, municipalities, aboriginal communities, industries, cottage owners, non-profit organizations as well as recreation and tourism groups who have an interest in how the waters of Lesser Slave Lake and its tributaries are managed.



*A map of the Lesser Slave Watershed showing major sub basins and tributaries.*

In January of 2007 the LSWC was recognized by the Government of Alberta as the Watershed Planning and Advisory Council for the Lesser Slave Watershed under the *Water for Life Strategy*.

### Mission Statement

The Lesser Slave Watershed Council will be a proactive organization working towards the sustainability of the Lesser Slave Lake Watershed with regard to the economic, social and environmental health of the region and its citizens.

### Vision

"The Lesser Slave Watershed, including its lake and rivers, is a bond that brings communities together, is a part of each citizen's life, is a prime asset and renewable resource, and is a generator of economic development."

### Guiding Principles

- Be accountable to all stakeholders and citizens within the watershed.
- Work collaboratively with stakeholders and citizens to improve the health of the lake and its watershed.
- Share responsibility for the health of the lake and its watershed by involving communities and stakeholders in watershed management.
- Promote a better understanding of natural watershed processes and the interaction between land, water, ecosystem and human activities.

## LSWC Board of Directors

### Executive Board Members

Chair - Brian Elliott

Vice Chair – Murray De Alexandra

Treasurer – Guy L’Heureux

Secretary – Gordon Sanders



*LSWC Chairman  
Brian Elliott.*

### 2010/11 LSWC Board of Directors

#### Name:

Brian Elliott

Wilfred Willier

Rob Irwin (Karina Pillay-Kinnee)

Brian Rosche (Jeff Cummins)

Guy L’Heureux (Ray Dupres)

Vacant

Darlene Carifelle

Gordon Sanders (Lyndon Remple)

Vacant

Rod Burr

John Tchir (Michelle Keohane)

Wanda Watts (Robyn Kutz)

John Hallett (Bonnie Raho)

Sherrie Hay (Kelly Harlton)

Murray De Alexandra (Syd Caudron)

Neil Renneburg

Lynn Sandquist (Lorne Pratt)

Carl Chykerda

#### Sector/Organization Represented:

Member at Large

Town of High Prairie

Town of Slave Lake

MD of Lesser Slave River

MD of Big Lakes

First Nations

Métis Settlements

Forest Industry

Tournaments/Recreation

Alberta Environment

Alberta Sustainable Resource Development

Federal Government (DFO)

Environmental Non-Government Organizations

Tourism Operators/Groups

Commercial Fisherman’s Association

Cottage Owners/Country Residential

Agriculture

Oil and Gas Industry

The LSWC currently has 21 general members and one employee, our Executive Director Meghan Payne.

## LSWC Summary of Operations

From March 31, 2010 to April 31, 2011 the LSWC worked to deliver Water for Life goals in addition to our own goals and messages across the Lesser Slave Watershed. We also engaged other non-profit and non-government organizations. Our intention is to build partnerships which meet common goals of protecting and improving the health of our watershed.

On April 1, 2010 the LSWC obtained charitable Status under the *Canada Income Tax Act*. As a charitable organization we are eligible to apply for a wider range of grants and bursaries to supplement our operational and project budgets. We can now provide a charitable tax receipt to anyone who makes a donation over twenty dollars to the Lesser Slave Watershed Council.

The LSWC made progress on the recommendations laid out in the Lesser Slave River Water Management Plan Phase One which was approved by Alberta Environment on July 29, 2010. We have been focused partially on modifications to the existing regulation weir so that the needs of the aquatic environment, the Town of Slave Lake, MD of Lesser Slave River and the group of downstream industrial users are met.



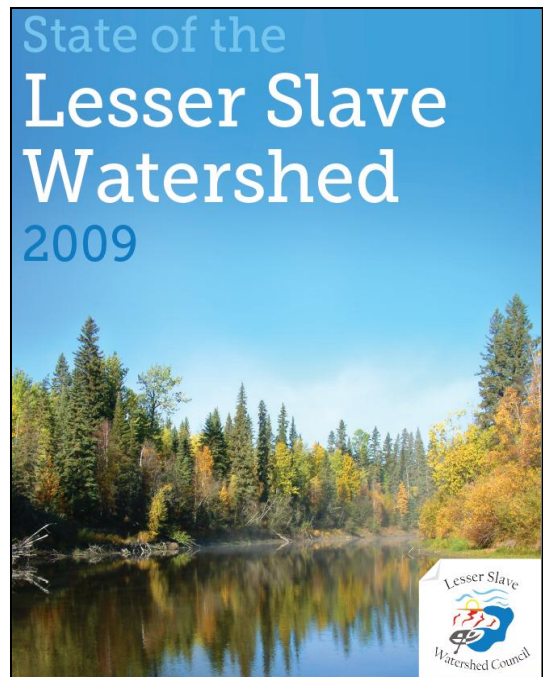
*Mother Duck and her ducklings captured on the East Prairie River by Meghan Payne*

## 2010 LSWC Projects

### LSWC State of the Watershed Report

The Lesser Slave Watershed Council, with contract services provided by Carson Forestry Services of Slave Lake, completed its first state of the watershed report. The report, *'State of the Lesser Slave Watershed 2009'* was completed at the end of March 2010. It is available to the public at the LSWC website ([www.lswc.ca](http://www.lswc.ca)). Print copies of the report are available at our office.

The purpose of this report is to assess the present state or health of the Lesser Slave Watershed based on existing data. As a part of Alberta's *Water for Life* strategy, all of the watershed planning and advisory councils in Alberta are working to report on the state of their respective watersheds. Healthy watersheds consist of multiple components and perform many functions that keep the ecosystem in balance. The broad and complex nature of interactions within these systems makes it nearly impossible to measure watershed health directly, or to measure every component of that ecosystem. Watershed health indicators can be a measure of a single parameter, otherwise known as a metric (eg: water temperature, *E. coli* concentration, dissolved oxygen), or an index that incorporates a number of metrics or measured parameters (eg: the River Surface Water Quality Index or the River Flow Quantity Index).



This report also identifies data gaps so that Alberta Environment and the LSWC can work together to gather this key information for future planning and state of the watershed reporting. Examples include completing a wetland inventory; assessing the health of riparian lands; and collecting more water quality and fish population data (especially for the major tributaries of Lesser Slave Lake).

To better assess our watershed, the Lesser Slave State of the Watershed report considers each major sub-watershed: the South Heart River, the East and West Prairie Rivers, the Driftpile River, the Swan River, Lesser Slave Lake North, and the Lesser Slave River; the Lesser Slave Lake itself is considered as a sub-watershed. The report includes a geographic description of the entire watershed. As well it highlights some of the local stewardship and environmental groups active in our area.

In the future the LSWC will move to an interactive online state of the watershed platform. The Southeast Alberta Watershed Alliance was the first WPAC to try out this web based system that is hosted by the Alberta Water Portal. The web based system is live and interactive. Any part of the watershed can be viewed from a click on the map. The indicators available for that area will appear and the user can see the health score for that particular area. The Bow River Basin Council has also moved to a web based State of the Watershed reporting system and the other WPAC's in the province will be moving to this system as well down the road.

## Tributary Water Quality Monitoring 2008-10

In the Summer of 2010 the LSWC, in partnership with Alberta Environment completed the field work component of a tributary water quality project. This project was initiated in 2007 because of concerns about the surface water quality in the Lesser Slave Watershed. The public expressed a number of concerns with regard to the water quality of the LSL.

These concerns include:

- *An increased occurrence, intensity and duration of algal blooms.*

Water quality data collected by AENV show that the lake has very high levels of algae relative to other lakes in Alberta and can be categorized as hyper-eutrophic based on the chlorophyll a levels.

- *Potential adverse effects of various activities on the health of the aquatic ecosystem in the lake.*

The intensity and extent of various agricultural and industrial activities and the shoreline development raise concerns about the preservation of a healthy fishery and sustainability of future development in the watershed.

- *Potential adverse effects of various activities on the drinking water supply.*

The approval of a feedlot operation near Mission Creek and its potential effects on the lake as a drinking water source has brought public concerns. Potential deterioration of source of drinking water quality and potential health issue related to contaminated drinking water are a major concern to the Town of Slave Lake.

The goals and objectives of this project are:

- To determine loadings of nutrients and some contaminants of concern to the lake during critical flow periods: high stream flow in spring and summer runoff and low stream flow in fall.
- To document the influence of the tributaries and major activities in the watershed on the water quality of the lake.
- To address surface water quality concerns identified by the public and WMC.



- To identify specific water quality problems that may exist that impairs the health of the aquatic environment or the beneficial lake water uses by the public, municipalities and the industry.
- To distribute important water quality information to stakeholders around the watershed and the general public so that they are aware of any water quality issues.

With funding from Alberta Environment and support from the monitoring branch the LSWC was able to collect samples at 16 tributary sites across the watershed as well as at effluent discharge sites in 2007.



*11 of the 16 tributary sampling locations are shown on this map*

Tributary samples were taken at three different times of the year with different flow regimes and runoff profiles. Spring runoff sampling was completed in 2008, and in the autumn of 2008 fall base flows were sampled. The LSWC had to wait until 2010 to sample a summer storm runoff event because of the dry summers in 2008 and 2009. The purpose of waiting for a significant summer storm event was to capture runoff from the landscape after agricultural chemicals and pesticides had been applied to the fields.

Now that the samples and stream flow data have been collected the LSWC has hired Aquality to complete a technical report that analyses the data and compares it to previous water quality work done in our watershed. The report will also compare samples taken at different times of the year. This report will be available in fall 2011. The LSWC will be offering water quality presentations to interested groups. We will be distributing this report to our stakeholders and the general public since water quality is very important.



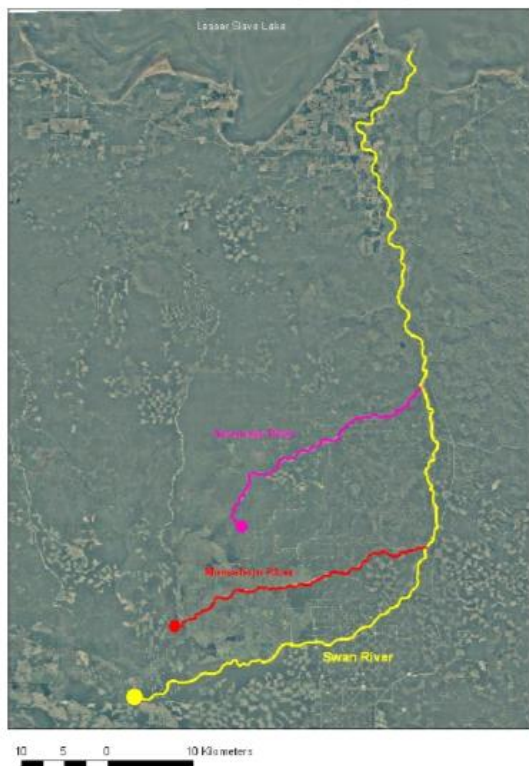


*Meghan Payne (left) collects a sample from the West Prairie River. LSWC volunteer Hilary Payne (right) labels and prepares the sample jars and arranges them in the storage cooler.*

## Swan River Aerial Assessment

The Swan River and its tributaries are major sources of water that drain into the southern part of Lesser Slave Lake. The lack of documentation of the current health status of riparian areas on this river system are an obstacle hampering the sustainable management of the river, and indirectly, to the management of Lesser Slave Lake.

2010 Swan River Videography Flight Route



The LSWC, with financial support from Alberta Environment hired Walker Environmental to carry out this project with assistance from the Alberta Conservation Association. We used aerial videography to broadly quantify the health of the Swan River riparian habitat with respect associated land use. The scoring was based on the lotic riparian health assessment scorecard developed by Cows and Fish (Fitch *et al.* 2001 and Ambrose *et al.* 2004). On the final DVD you can see live right and left bank health scores as you move along the reach of the river.

The information was intended to enable regulatory and community groups to make informed decisions regarding the development adjacent to the river.

The majority of the riparian area in those portions of the river system that were videotaped was classified as Good (88% of the total length of all the river videotaped) with lesser proportions identified as Fair (5%) or Poor (7%). Most of the areas with Poor rankings were located in the lower Swan River in the agriculturally developed white zone.

For more information about this project or the other aerial riparian assessments that the LSWC and ACA have completed please contact our office.



*Contractor  
George Walker of  
Walker  
Environmental  
seen here  
capturing the  
video used for the  
assessment from  
the helicopter.*

## Lesser Slave River 2D Modeling and In-stream Flow Needs Program

To address our mission statement, the LSWC has identified numerous strategies within our business plan. Strategy 2.4 of the strategic business plan states:

*“To determine the in-stream flow needs value for the Lesser Slave River.”*

The LSWC realizes that sufficient information must be collected to develop an informed water conservation objective for aquatic environments within the Lesser Slave Watershed and particularly the Lesser Slave River. The intention of this study project is to continue development of year-round predictive relationships between flow in the Lesser Slave River and riverine habitat. An in-stream flow needs scoping study for the Lesser Slave River recommended a two-dimensional modeling approach using River2D (<http://www.river2d.ualberta.ca/>) because of its capability to address: complex back-waters; islands; and, surface ice. Results from the hydraulic models will be used by the LSWC to assess change in quantity and quality of fish habitat or mesohabitat under varying flow conditions in the river. Alberta Environment is also in support of the in-stream flow needs projects in the Lesser Slave River because any water management decisions made at the weir will impact the rest of the river. Adequate information is required to make these decisions.

In the Lesser Slave River Water Management Plan for the Lesser Slave River developed by the LSWC and AENV one of the key recommendations is to provide a minimum flow of 6 cubic meters per second of flow into the Lesser Slave River at all times. This is an interim value because the actual IFN value for the river cannot be determined until all of the related in-stream flow needs studies and work have been completed and assessed. To date, River2D hydraulic modeling has been completed on Segment 2 of the river. Alberta Environment had

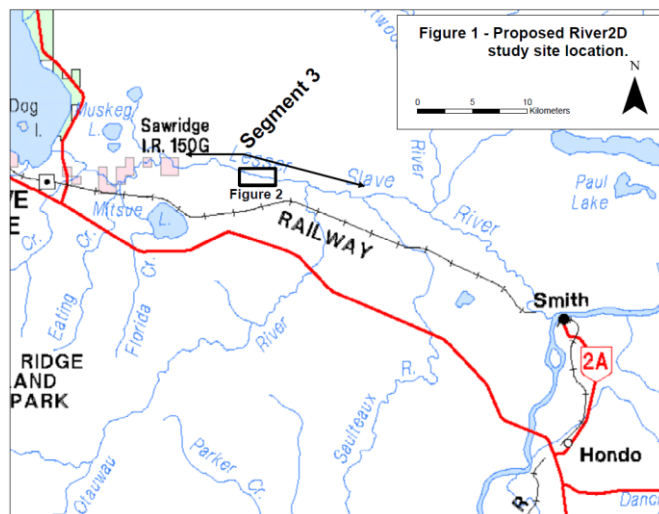


Figure 1. Map showing segment 3 of the Lesser Slave River.

completed a water quality model for the Lesser Slave River based on flow and samples taken which is another piece of the work required to develop an IFN value for this river.

The Lesser Slave River flows east from Lesser Slave Lake for approximately 75 km before entering the Athabasca River. To alleviate flooding around Lesser Slave Lake, the Lesser Slave River was altered through construction of a fixed-crest weir with fish ladders and eight meander cut-offs. This Lesser Slave Lake Regulation Project was completed in 1984.

The weir and cut-offs are located in segment four of the river and affect water levels in the lake by:

- a) reducing the range in water level fluctuations from 3.5 to 2.7 meters;
- b) reduce mean lake level;
- c) reduce frequency and duration of high and low water levels in the lake.

The Lesser Slave River has complex fish movement patterns with fish moving to and from the lake; inflowing tributaries; and Athabasca River. There are known Walleye, Northern Pike, Arctic Grayling, Mountain Whitefish, Burbot, Goldeye, shiners and suckers in the river. Oxbow habitats likely have important links to pike spawning. The lake also provides unique fish spawning and over-wintering capabilities. The Lesser Slave River contributes significant amounts of oxygen in winter to the Athabasca River, dilutes effluents, is a source of drinking water and is used for industrial and irrigation purposes.

The Lesser Slave River has been broken into five river segments for in-stream flow needs study based on: the weir's presence; increased flow from the Saulteaux and Driftwood rivers; changes in channel gradient and fish habitat; and the presence of artificial cut-off meander bends for the purpose of river straightening and flood alleviation. The proposed project will

focus on Segment 3 of the river. It will establish a study site that is representative of mesohabitat within that segment (Figure 1).

Golder Associates Ltd. was hired on as the contractor to complete this study for segment 3. During the winter months the scope of the study had to be revised due to unsafe ice conditions during the winter field work time frame. This change of scope is discussed in detail in the complete project report. The technical report also discusses the study site in more detail, shows maps of the surveying and results of the modeling and includes both summer and winter photos of the study area. To obtain a copy of this report of the report from the segment 2 work please contact the LSWC office.

## Lesser Slave River Water Management Plan

The Lesser Slave River originates at the outlet of Lesser Slave Lake, and flows in an easterly direction for 72 km to its confluence with the Athabasca River. Flows in the Lesser Slave River are impacted directly by water levels in Lesser Slave Lake. In 1983, a fixed-crest weir and eight cutoff channels were constructed in the upper reach of the Lesser Slave River. The intent of the Lesser Slave Lake Regulation Project was to reduce the severity of flooding of low-lying areas around the lake.

After approval by the stakeholders around the LSWC table and a public consultation process, the LSWC submitted its phase 1 Water Management Plan for the Lesser Slave River to Alberta Environment in September 2009. One main purpose of the document is to address the issue of low water levels at the regulation weir. A second purpose is to maintain sufficient flow in the Lesser Slave River to protect the aquatic environment as well as provide water for downstream users. The plan also addressed the problem of siltation at the mouth of the river which can restrict flow from the lake to the weir and into the river.

The WMP makes the following recommendations in the plan:

1. A minimum flow of  $6\text{m}^3/\text{sec}$  be maintained in the Lesser Slave River to protect water supplies for municipal and industrial uses, including effluent dilution, and to maintain concentrations of dissolved oxygen above water quality guidelines at the mouth of the river.
2. To ensure that a minimum flow of  $6\text{m}^3/\text{sec}$  is maintained in the Lesser Slave River, the LSWC recommends that AENV take the lead role and responsibility for implementing the operational response procedures outlined in the water management plan.



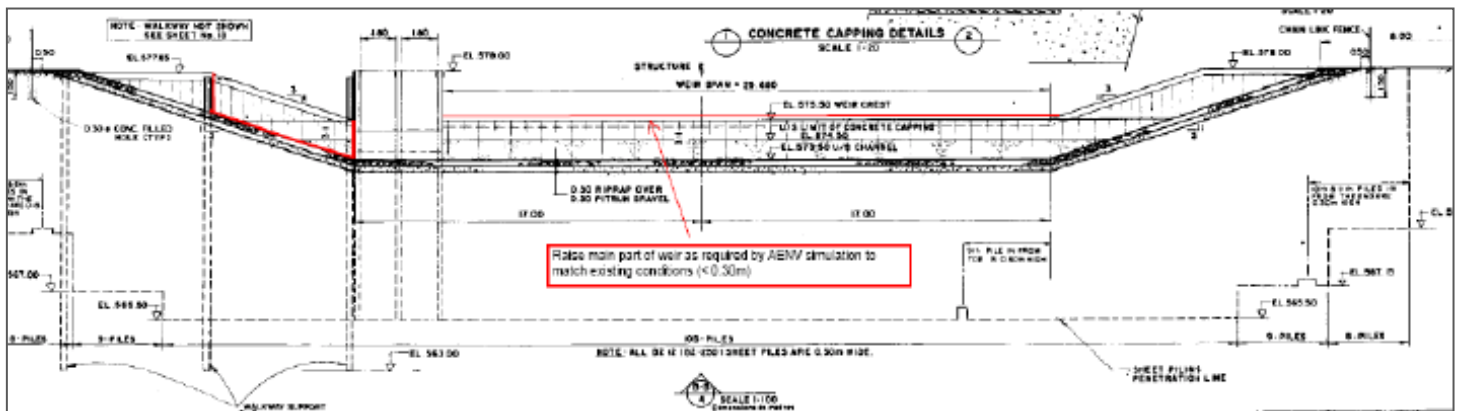
3. The Lesser Slave Watershed Council recognizes the need for a navigable channel to be maintained in the Lesser Slave Lake outlet so that commercial and recreational marine craft can access the lake from the public boat launch and private marina located in the Lesser Slave River above the weir. The Watershed Council recommends that Navigable Waters Canada consider the specific navigational needs in these waters within the context of its overall legislative responsibility for the protection of the public right to navigation and the protection of the environment.
4. To ensure protection of the river aquatic environment in the long term, the LSWC recommends the IFN work program currently in progress be completed as outlined in the plan.
5. The Lesser Slave Watershed Council recommends that a permanent water quality monitoring station be established on the Lesser Slave River. The Lesser Slave is currently the only major watershed in the province that is not part of the long term river network (LTRN). The development of a River Water Quality Index for the Lesser Slave River would provide a measure of the effectiveness of watershed management efforts to improve the health of the watershed.

In the spring of 2010 Alberta Environment Hydrologists came up with a design to make modifications to the existing weir to ensure that the minimum flow of 6 cubic meters per second can be maintained year round to meet the needs of the aquatic environment as well as the downstream users. When designing the modifications Alberta Environment used the following governing criteria: nominal discharge of 6cms at lake elevation; 575.5m (priority); minimize impact on lake levels (priority); no releases below lake elevation of 574.5m; and maintain flood flow capacity.

Three options were looked at to modify the existing structure: gates, notches, or a channel. Gates were one of the options but not the most favorable for the following reasons: more costly construction, requires operator, can seize or break if not used frequently (requires maintenance), reduce flood capacity, damage from ice jamming, damage or plug from drift wood, but this design would allow for controlled releases.

The notch or channel option was better for this scenario due to less costly construction, there is no onsite operator required, little to no maintenance needed, increase flood capacity, and there will be better fish passage velocities; but there will be no control over releases.

This design will provide slow enough velocities for small fish to pass upstream and the rocks in the channel will provide areas for fish to rest while travelling upstream past the weir. An additional 0.26m will also be added to the top of the weir to offset the additional flow in the new channel.



Blueprint design showing the new channel on the left (north) side of the weir and the additional 29cm on the top of the weir structure.

Alberta Environment also used the hydrologic and hydraulic model developed for the Lesser Slave Watershed in 2008 has 40 years of historic climate and water level data to ensure that these changes are not going to have any long term impacts on lake levels. The model was also used to run one scenario where lake levels were lower than average. One scenario explored higher than average lake levels. A third scenario examined comparing the gated culvert option to the proposed channeling design.

Alberta Environment has the LSWC's support in moving forward with the modifications to the Lesser Slave River weir as well as Fish and Wildlife, Department of Fisheries and Oceans and the group of downstream users. Alberta Infrastructure who is going to be doing the physical work on site is ready to proceed as well. The construction was scheduled for March 2011 because lake levels would be low enough to divert the water long enough for construction.

While going through the process of First Nation Consultation Alberta Environment encountered difficulties when the Sucker Creek first Nation filed an appeal on the Alberta Environment approval for this project. This put the project on hold until there is an official appeal hearing where Sucker Creek and the Department of Environment can discuss the issues and an official decision will be made. There is no set date for this hearing as of August 2011 and there is no foreseeable construction date as the lake water levels have risen. This makes it difficult to divert water away from where the new channel will be constructed.

The LSWC continues to pressure for action on this project. We have been told that the approvals are valid for 5 years so when conditions are right for the project to proceed there will be no roadblocks.

You can find a full version of the Lesser Slave River Water Management Plan at [www.lswc.ca](http://www.lswc.ca)

## Education & Outreach Activities

### Lesser Slave Forest Education Society

The LSFES is a group committed to forest focused environmental education and is led by a dedicated group of volunteer representatives from industry, schools and government who share a common goal of environmental stewardship. Educational programming is developed and delivered by professional Forest Educators.

In June 2010 the LSWC donated \$10,000 to the Lesser Slave Forest Education Society to help them with their operations of contributing to wetland and watershed related educational programming. The water related educational programs done by the LSFES accounts for about 25% of their activities. The LSWC is very glad to be a partner in helping deliver Water for Life messages to youth in our watershed.

In the Summer of 2010 LSWC Executive Director Meghan Payne joined the other LSFES instructors to educate grade 3's and grade 5's about wetlands, water quality, and freshwater ecosystems.

Everyone had a great time on these field days while they are learning about the "Marsh Monsters" who live in our ponds, swamps and wetlands or while they act as lab scientists to test the pH and dissolved oxygen at the water quality station. But don't forget the spruce bog and all of its unique features, plants and animals. There is much to learn in the bog.



*These grade 5 girls are identifying the marsh "monsters" they collected.*

*LSFES instructor Cori Klassen explains why having good quality water is important for people as well as plants and animals.*

All of the programming offered by the LSFES is based on the Alberta curriculum. Rather than the teachers delivering this unit in the classroom, the LSFES classroom presentation followed by the field trip covers the entire unit in a fun and hands on way.

The LSWC is involved only in the water and watershed related portions of the programming. However, the LSFES offers curriculum based environmental education for all grades.

For more information about the LSFES visit their website at [www.lsfes.org](http://www.lsfes.org)

## Royal Bank BBQ and Respect our Lakes Day



*RBC staff and LSWC board member Gordon Sanders serve up some delicious watershed burgers.*

As a way to celebrate the RBC's Blue Water Project funding granted to the LSWC to raise public awareness about the LSWC; we decided to hold a fund raising and awareness BBQ at the Slave Lake Branch on July 16th, 2010. We saw many friendly faces throughout the day. The burgers were free but we asked patrons to consider donating to the LSWC. We handed out many information packages. We also were interviewed by the local newspaper to explain the project. Thanks to the generosity of the people who visited us that day we received about \$500 in donations.

The following day, July 17, 2010, was the Alberta Sand Sculpture Championships at Devonshire beach. The LSWC partnered with a few of our friends to deliver some watershed messages to the crowds on the beach that day. The LSWC has all kinds of beach toys to give out to the kids who came to see us thanks to the RBC Blue Water funds we received.

Cori Klassen with the LSFES joined us with all kind of fun activities and games for the kids to play. The fishing game was definitely a hit. Chris with AB Parks had a casting competition going among the fisherman.



*Chris with Parks shows a young fisherman how to play the fish ID game. It was a hit with the kids.*

Candace Flynn with Alberta Environment as well as some of the ladies from our local SRD office joined us on the beach with all kinds of information related to the Respect Our Lakes program. ROL is a joint program between Alberta Environment and Sustainable Resource Development. It consists of local level partnerships



with a background of regulatory backstops to promote shared stewardship. ROL acts as an “umbrella” for information resources available to Albertans regarding our lakes. ROL is working to increase respect for our lakes by promoting education resources and simplifying the information search. If you would like to learn more about Respect Our Lakes Day you can visit their website: <http://environment.alberta.ca/03036.html>.

Overall our two days in Slave Lake were a success and the LSWC would like to take part in more community events in the future to encourage watershed stewardship and to raise our profile among local residents.

### SARDA Education Day

The Smoky Applied Research and Demonstration Association based in Falher, AB requested our help in hosting a water education and fun day for all of the kids at the Nampa school . Meghan spent the day at the Nampa Golf course helping the kids catch marsh monsters and then identify which aquatic species they are. We found a lot of fresh water shrimp in the creek at the gold course.

Other groups of students learned about riparian ecosystems, life cycles, and plants and animals. Meghan also taught the group from Nampa about water quality and tested the water quality at the golf course with the kids using and ALMS water quality testing kit. Our mini field trips were finished off with a hot dog roast and special "dirt and worms" cake for desert.

### Canada Water Week 2011



2011 marks the first year of Canada Water week across our nation. To celebrate the LSWC created some fun contests for our watershed. Kids across the area completed coloring and poster contests that represented "Healthy Rivers, Living Lakes".

The adults were engaged in a photo contest for the LSWC 2012 Calendar. LSWC executive Director Meghan visited several classes of elementary school kids to give out shirts and other prizes for participation and talk to the youth about our watershed. Snacks and refreshments were enjoyed at the LSWC office during our open houses as well. Stories about Canada Water Week were featured in our local newspaper. The LSWC looks forward to celebrating again next year.

## Building Partnerships

### Cows and Fish and the High Prairie Riparian Action Team

The Alberta Habitat Management Society (Cows and Fish) and the High Prairie Riparian Action Team are working actively in our watershed to improve the health of riparian areas of Lesser Slave Lake and its tributaries. The High Prairie RAT is made up of members from several organizations including: Alberta Beef Producers Association, Alberta Environment, Alberta Environmentally Sustainable Agriculture, Alberta Sustainable Resource Development (ASRD), Cows and Fish, Ducks Unlimited Canada, Fisheries and Oceans Canada, Municipal District of Big Lakes, Peace Country Beef and Forage Association, Smoky Applied Research and Demonstration Association and the LSWC.



The RAT team works with local land owners and producers to improve the health of the riparian areas on their property. Projects may include exclusion fencing, riparian pasture management, grazing plans, and education for the land owners to understand the function of a riparian area. Cows and Fish are involved in each project from the beginning. Each site has a riparian health inventory or riparian health assessment completed by a Cows and Fish technician. Once the project is complete another assessment is done a few years later to ensure that the project is a success. These before and after assessments are valuable in showing that the cows and fish methods are successful in improving riparian areas.

A riparian health inventory is a detailed inventory that thoroughly examines vegetation, soil parameters, and hydrology of the area. Riparian health inventory is used by riparian resource management professionals to capture benchmark data, examine details of the plant community and structure, and for monitoring purposes. It is a very important tool for examining the health of watersheds, collecting baseline information, and for evaluating the impact of management changes over time.

In the Lesser Slave Watershed the RAT has many successes. Although each project impacts a small riparian area, the results spread by word of mouth popularity encouraging others to adopt best management practices on their own property. The RAT team operates on grants used to purchase materials for fencing supplies, as well as solar watering systems used for demonstrations to encourage producers to look into getting their own systems.

### Before and After project photos



*South Heart River site. Before project (left) in 2004 with a severely degraded riparian area. After (right) livestock were moved off of riparian area and it was allowed to recover (2009).*

*- photos courtesy of Cows & Fish*

#### **Cows and Fish Riparian Training - August 11th and 12th 2010**

Cows and Fish's Kerri O'Shaughnessy instructed a two day Riparian Health Workshop in High Prairie for a group of people working in our watershed to improve riparian health. The workshop included topics such as: Riparian Health 101 Refresher, Lotic riparian health assessment, Lentic riparian health assessment, Riparian Plant ID, and Riparian Management & Best Fit Discussions.

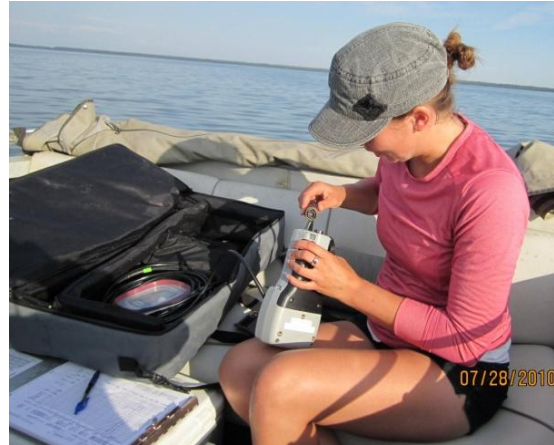
The second day applied the knowledge we learned in the field and participants worked through an example of their own project/demonstration site or similar pasture management situation. Via hands-on learning and application of grazing management strategies, stocking rates, and realistic management options, participants worked through real (or realistic) grazing management situations. All participants thoroughly enjoyed the workshop, especially the field trip and the LSWC is proud to be able to fund opportunities like this for watershed stewards in our area.

The LSWC will continue to support the work of the High Prairie Riparian Action Team and Cows and Fish and we will be seeking out opportunities to partner on projects in the future.

## Lakewatch with ALMS

During the Summer of 2010 ALMS Lakewatch technicians visited our watershed several times to test water quality in Snipe Lake and Fawcett Lakes. The Lakewatch Program is a community water quality testing program offered to concerned Albertans who interested in collecting detailed information about their local lake or reservoir. ALMS technicians assist local volunteers to test the lakes 5 times during the summer, collecting important physical data such as water

temperature, clarity and pH. Once all the data is collected ALMS will produce a water quality report for the lake. This includes recommendations that both educates lake users and guides water restoration and management efforts.



*ALMS Lakewatch tech Emily preparing her equipment before sampling at Snipe Lake.*



*Marty Payne, LSWC Volunteer took Emily out in his boat on Snipe lake several times over the summer to collect samples.*

*Thanks Marty!*

This was a great opportunity for the LSWC to build a partnership with ALMS and evaluate the water quality of a couple of the smaller lakes in our basin. This water quality data will let us know that health of Snipe and Fawcett Lakes. Then we can take action to maintain or improve water quality in the future

ALMS provided the expertise and equipment for sampling and testing. The LSWC arranged for a local volunteer to take them out on their boats to collect the samples. We would like to thank the Lakewatch technicians Emily and Brad and our volunteers with the boats including LSWC member Marty Payne for his trips out to Snipe Lake.

The water quality reports for Fawcett and Snipe Lakes will be available on the ALMS website as soon as they are complete.



## WPAC Summit 2010

### ***Article From: WPAC Summit Paper, A Focus on Collaboration - Conclusions from the 2010 WPAC Summit***

At this year's annual Summit, held in the Cypress Hills and hosted by SEAWA (South East Alberta Watershed Alliance) and Milk River Watershed Council Canada, Watershed Planning and Advisory Councils (WPACs) gathered to inform each other about their current initiatives and to discuss opportunities to improve their ability to collaborate on common activities and challenges.

Sixty-five participants attended the Summit, representing staff and board members from Alberta's 10 WPACs, consultants, non-governmental organizations and representatives from the Government of Alberta. Presentations by each WPAC revealed their unique approaches and priorities. Each reported their efforts to prepare their State of the Watershed Report, to develop a Watershed Management Plan and to provide watershed stewardship education and awareness programs. David Marshall, Executive Director of the Fraser Basin Council, gave the keynote presentation that focused on "The Power of Collaboration," and the important role his organization plays facilitating multi-stakeholder discussions around difficult issues in the Fraser basin and elsewhere.

While recognizing the uniqueness of each organization, the visioning session focused on identifying common challenges. Also discussed was how Alberta's WPACs may be able to improve working together more effectively and efficiently to achieve their individual goals and priorities. Conference participants identified three major areas where they faced common challenges:

1. Funding
2. raising awareness of WPACs and their role in watershed assessment and planning among the public and watershed stakeholders
3. common standards, especially around issues of assessment (indicators, methodology and reporting).

After a presentation by Michael Henry, Abells Henry Public Affairs, on different approaches used by organizations with similar mandates to organize themselves to meet common goals, participants suggested they were supportive of the network model currently used by WPAC Executive Directors and Managers. It was suggested that it may be time for greater involvement by Board Chairs.

While there was a desire to expand the roles and responsibilities of this network and to collaborate on more things more often; participants were cautious of adding complexity and cost. We wanted to be respectful of the time asked of their volunteer Chairs. To conclude, participants charged the WPAC network of Executive Directors and Managers to quickly come up with recommendations on how to move collaborative efforts forward for discussion with each WPAC's Board.

The Honourable Rob Renner, Minister of Environment, closed the Summit by saying that government is very aware of the challenges facing Albertans in water management. Renner says he is committed to working with WPACs and other advisory bodies and planning authorities to ensure the province can manage growth in a sustainable manner. He suggested that the challenge is to consider all available options. He suggested we engage stakeholders in a way that does not imply that ideas generated through discussion will automatically lead to policy, but instead to shift the conversation away from emotions and interests towards a debate based on facts and logic.

Renner reported that the Department of Environment, in its 2010-11 budget, secured and distributed funding for WPACs for two years ending March 2012. He suggested that the department is considering funding models for WPACs beyond 2011-12, and that these will need to go through the standard budgeting process.

The Minister described the Cumulative Effects Management System as having the potential to reduce unnecessary bureaucracy and streamline decisions by allowing local decisions to be made in the context of managing human activity on the landscape.




*Honourable Rob Renner, Environment Minister giving closing comments with WPAC Summit Co-Host Bob Phillips of SEAWA looking on*

In 2011 the LSWC and the Athabasca Watershed Council will be hosting the WPAC Summit in Slave Lake, AB.

## Funding and Supporters


The LSWC Would like to acknowledge and thank everyone who donated and supported us in 2010.

### Thank you to our donors:

<b>PennWest</b> Exploration	\$32,500.00		\$3,000.00
Roland Michener School	\$1,000.00		
Royal Canadian Legion High Prairie	\$200.00	General Public	\$475.00

We would also like to acknowledge  for their \$7,000 grant for our fishing line recycling program.

The LSWC also thanks  for a \$3,000 grant to support education and outreach in the watershed.

The LSWC gratefully acknowledges Alberta Environment for their continued operational and project funding and we look forward to moving  into the future with our partners.

## 2010-11 Financial Statements

<b>Revenue</b>	<b>2011(\$)</b>	<b>2010(\$)</b>
Grant Income	64,081	386,954
Donations	38,477	1,050
Interest INcome	129	156
Other Revenue	130	90
Revenue Deferred from previous period	326,943	1278,008
Revenue deferred to subsequent period	(208,582)	(326,943)
	<b>\$211,178</b>	<b>\$188,315</b>
 <b>Expenses</b>	 <b>2011(\$)</b>	 <b>2010(\$)</b>
Administration	1,371	1,521
Advertising and Promotion	4,150	2,237
Amortization	712	366
Bank Charges an Interest	104	2
Insurance	4,300	4,162
Office related	12,538	4,654
Professional Fees	1,550	1,805
Project Expenses	76,325	99,745
Office Rental	5,024	4,490
Telephone and Utilities	2,849	3,015
Travel - staff and board	13,449	7,977
Wages and Benefits	80,543	56,518
	<b>\$202,915</b>	<b>\$186,492</b>



Address:  
#204, 4723 - 53rd Ave.  
PO Box 2607  
High Prairie, AB T0G 1E0

Phone: 780 523 9800  
Fax: 780 523 9801  
Email: [info@lswc.ca](mailto:info@lswc.ca)  
Web: [www.lswc.ca](http://www.lswc.ca)