



Welcome to the new BLESS newsletter, to be published and distributed quarterly. The Directors of BLESS feel strongly that timely and effective communications with members, prospective members and the public is essential to the sustenance and growth of our organization. As we are a not-for-profit organization with very shallow pockets the newsletter will be distributed electronically whenever possible. It will be sent to all members with an email address and will be posted on our newly formatted website (www.bless.ab.ca). So, read on! If you have articles or comments on this newsletter please send them to News@Bless.ab.ca.

ANNUAL GENERAL MEETING

The BLESS 2006 Annual General Meeting took place on January 31st at Sir George Simpson School in St. Albert. There was a good turnout of members both old and new.

Treasurer Bruce Cameron reported on BLESS finances. Dan Stoker spoke about the River Edge Enhancement Project launched in 2005 and the BLESS 2005 Summer Nature Program. John Samson provided an overview of the conceptual plan for Lois Hole Centennial Provincial Park, a major BLESS initiative that began in 2005. Dave Burkhart summed up with the President's report on 2005 BLESS activities.

The Board of Directors is as follows, with positions to be determined at a Board meeting after the AGM.

Nicholas Batchelor	Stuart Loomis
Dave Burkhart	Bob Russell
Bruce Cameron	John Samson
Miles Constable	Jack Wiercinski
Lilo Engler	

Minutes and reports from the AGM can be found at:
http://www.bless.ab.ca/Events/AGM2006/AGM_2006.htm.

The human race is challenged more than ever before to demonstrate our mastery, not over nature but of ourselves.

-Rachel Carson (1907-1964)

A week following the AGM the Board met to determine who on the new Board would be elected to the Board positions. Dave Burkhart has graciously accepted the position of President, Stuart Loomis was convinced to be our Vice President, Bruce Cameron will continue his great performance of last year as the Treasurer and Nicholas Batchelor will continue to keep us organized as the Secretary. Of course, other work is done in a number of Committees, a meeting on March 4, 2006 filled out the Committee Coordinators with Miles Constable Stewardship and Monitoring, John Samson Park Plan, Dave Burkhart Communications, Nicholas Batchelor Programs and Projects (to ensure our programs and projects are coordinated, forms and reports filled in, etc.), Jack Wiercinski Membership, Nicholas Batchelor Fund Raising and Stuart Loomis Events.



Nicholas and Stuart at the AGM.

Planned projects and programs for the coming year combine a suite of our “standard” activities with new projects. BLESS will continue to be involved in the spring events “Springing to Life” and “Spruce Up the Sturgeon”, later in the summer there will be Earth Day.

Dan Stoker will be kept busy with hiring and supervising a student for the Summer Nature Center and continuing the REEP project focusing on planting trees along the river at Berrymore Flats.

Miles Constable will continue with Park monitoring for Alberta Community Development as well as designing and helping to conduct a first ever water quality monitoring project of Big Lake.

Stuart Loomis is kept busy with organizing our events including the Roy Financial Mayor’s Walk for Charity, the other events listed here as well as maintaining links with the North Saskatchewan Watershed Alliance. See article in this issue on the NSWA.

We will, of course also continue to monitor the progress of the West Regional Road and any impacts that construction may have on the surrounding river and wetlands. John Samson will continue to head up the committee working on a conceptual park plan in cooperation with Alberta Community Development.

BLESS LECTURE INTRIGUES LOCAL STUDENTS

Jack Wiercinski, March 2006

I had the great pleasure to sit in this week on a lecture delivered by BLESS director John Samson to NAIT’s biology students.

The earth will not continue to offer its harvest, except with faithful stewardship. We cannot say we love the land and then take steps to destroy it for use by future generations. Pope John Paul II, *Homily* in Monterey, California, Sept '87

Laurie Hunt, an instructor with NAIT's School of Resources and Environmental Management, invited BLESS to her classroom to talk to students about the history of the Big Lake area and to provide an overview of some of the multiple use concerns and management challenges for the natural area under its new provincial park designation.

Samson, the BLESS director heading up a committee that's developing a conceptual plan for Lois Hole Centennial Provincial Park, volunteered to deliver the lecture.

Hunt made a number of requests and provided information about student projects. She told BLESS that most of the biological science students enrolled in the NAIT Parks Management course were not familiar with the area. The students are in their second year of the two-year program. One of the student projects this term is to put together a parks management plan. The students are going to use the new Lois Hole Provincial Park land base for their area of study in developing their reports.

John started his lecture by zooming in on Big Lake from hundreds of kilometres above with Google Earth. He followed with well-balanced environmental and historical remarks about the area and the provincial park and the role BLESS has to play in its development.

It was quite a joy for me to see the real interest among students. His passionate and precise lecture (he is after all a physicist) mixed history, poetry and images in all the right proportions. With thought-provoking questions interspersed at appropriate points in the lecture he had the rapt attention of the audience. After the lecture he responded to many good questions from the students.

This worthy event required many hours of hard work in preparation. My congratulations to John for meeting with NAIT students and sharing with them his expertise and passion for the Big Lake area.

**IMPERIAL OIL RESOURCES
FLARE PIT REMEDIATION PROJECT IN THE BIG LAKE AREA.
Dave Burkhart, Feb 2006**

Visitors to Big Lake may wonder what the new oil- and gas-related activity around the north shore is all about. The following is a background and synopsis of the proposed activities as provided by David Slade from Imperial Oil.

Imperial Oil Resources sold its interests in the Big Lake area to Fletcher Challenge in 1997. Fletcher Challenge then sold to Dynamic Oil & Gas which recently sold to Sequoia Oil & Gas Trust.

Imperial Oil was obligated to remediate five flare pits associated with five active well-sites. They have conducted the necessary environmental assessments and have developed a remediation plan to address contaminants of concern associated with the flare pits, specifically petroleum hydrocarbons and salt.

Catch our newly formatted website at <http://www.bless.ab.ca>

Imperial Oil has proposed to remove contaminated soil at three of the flare pits (10-36-53-26 W4M, 06-01-54-26 W4M and 10-02B-54-26 W4M). This soil would be disposed of at a West Edmonton landfill. The three pits would be backfilled with clean subsoil and surface soils would be reclaimed to meet Alberta Environment reclamation criteria.

The other two flare pits would be treated on site by the means of bioremediation. The 10-35B-53-26 W4M site, which is located on agricultural land, would be remediated with an ex-situ biopile which will take approximately 2 years. Contamination at the 08-26-54-26 W4M site would be treated in-situ in a process that will also take approximately 2 years to complete.

Mr. Slade from Imperial Oil has stated once his company has met its obligations in cleaning up the flare pit sites, that Sequoia would assume any future liabilities associated with the lease. Stephanie Murphy from Sequoia Oil and Gas has stated Sequoia does not plan to assume any future liabilities associated with the flare pits.

For further information, contact::

David J Slade, Imperial Oil
dave.j.slade@esso.ca
403-237-4126
Cell: 403-813-8699

or Stephanie Murphy, Sequoia Oil and Gas
smurphy@sequoiatrust.com
403-770-6300

2005 SPILL DUMPS A MILLION LITRES OF SEWAGE INTO RIPARIAN AREA

by Dave Burkhart, March 12, 2006

BLESS members and directors who attended the photo monitoring tour of Big Lake last July may remember encountering construction workers and machinery working on a sewage leak at the north end of 215 St. near Big Lake.

The incident report submitted to Alberta Environment on July 27 2005 by the Alberta Capital Region Wastewater Commission (ACRWC), the entity responsible for the line that leaked, stated 1,100,000 litres of sewage had been released approximately 500 metres from Big Lake.

Sewage being pumped from Spruce Grove and Stony Plain had escaped from a hole in the sewage line running along the south shore of the lake. The leaking sewage eventually worked its way to the surface and then flowed overland into a forested riparian area. The leak was reported by a resident of the nearby farm at 9:00 p.m. on Friday July 22, 2005. The ACRWC report stated it was difficult to determine how much of the released sewage, if any, entered Big Lake.

Gord Thompson, professional engineer and general manager at ACRWC said the sewage line running along the south shore of Big Lake is gravity fed west of 231 Street. From there it is pressurized by the pumping station on the shore of Big Lake, at a line pressure of

The great end of life is not knowledge but action.
-Thomas H. Huxley

approximately 100 psi, to lift the sewage uphill to its next destination – an ACRWC treatment facility at 127 Avenue and 195 Street.

Mike Darbyshire at ACRWC said the Big Lake pumping station was commissioned in 1985. The station operates continuously 24 hours a day seven days a week. It is not manned or physically monitored on a regular basis but does have a SCADA (Supervisory Control and Data Acquisition) system that enables remote monitoring. There is an alarm system within the station that activates when doors are opened or wastewater is released. The facility has its own backup generator, regularly tested and maintained according to Darbyshire, to power the pumps and operate valves in the event power is lost in an emergency. The pumping station incorporates an overflow structure that can divert raw sewage directly to Big Lake. On a typical day the Big Lake pumping station moves roughly ten million litres of raw sewage uphill through the line between 231 Street and Edmonton.

Overnight on July 22, crews who were first on the scene shut down the pumping station to reduce the amount of sewage flowing from the hole in the force main. Intense rainfall later that night forced the crew to re-energize the pumps to cope with the increased inflow backing up the system.

Saturday morning, July 23, the same day the BLESS monitoring tour arrived on the scene, crews were making plans to dig a sump to contain the overland flow and use septic trucks to haul away any sewage the sump might accumulate. Around 3:00 p.m. Saturday, however, the flow suddenly stopped, likely from a blockage within the force main. A septic truck remained on standby through the night in the event the flow of sewage began again.

Sunday morning, the sewage entering the line was diverted to the old Spruce Grove lagoons on Century Road and efforts to repair the line began. Crews began excavating to find the source of the leak which was finally located on Wednesday, July 27th.

Brian Lacey was the investigator from Alberta Environment Compliance and Monitoring who responded to the incident. He visited the scene and said the sewage had been leaking from a hole in the pipe two- to three-inches long and approximately half an inch wide. The hole appeared to have been caused by corrosion that most likely began because of a tear in the plastic covering of the pipe, incurred when the line was first installed.

Repair crews welded a patch over the hole in the pipe, installed a sacrificial anode and repaired the outer coating. The line was pressure tested Thursday morning, July 28th and restored to service that afternoon. The ACRWC report stated it was not possible to recover the spilled sewage because of steep topography in the area. The report also said recovery would be disruptive to the riparian zone where the sewage ended up.

In a telephone interview, Thompson said another leak had occurred near the same location in 1992 but it had been caused by a different mechanism. In that case the pipe had shifted because of movement in the underlying thalweg and had developed a crack. A thalweg is the lowest longitudinal profile of a stream or valley. At the time, the crack was repaired, horizontal drains were drilled and the site was regraded.

Because of steep terrain, the section of sewage line in the area of the leak was originally installed by boring rather than trenching – the method employed to install the majority of pipe along the south shore of the lake. Most of the pipe in the line is "Hyprescon", a steel

cylinder with a concrete liner manufactured with high tensile wire wrapped around the outside and sprayed with a gunite covering.

The pipe that leaked is, however, different. That section of the line has steel pipe with a polyethylene jacket and is installed roughly 12 metres below the surface. Thompson said this is the only section of pipe along the south shore that was installed by boring.

Because it removes, for treatment elsewhere, the sewage from two growing municipalities that at one time flowed into Atim Creek, Thompson said the line is part of the solution to environmental degradation – in spite of the two leaks that have occurred over 20 years of operation.

Big Lake has a problem with nutrient loading. The west bay of the lake is designated by Alberta Environment as being eutrophic and the east bay is hyper-eutrophic. Thompson said the nutrient loading of the million litres of sewage released in the July 2005 spill was equivalent to a bag of fertilizer.

According to Thompson, the sewage line between Spruce Grove/Stony Plain and Edmonton has a capacity of 0.7 cubic metres per second and the ability to handle 60 million litres per day during high rainstorm events. ACRWC is able to divert sewage to the Spruce Grove lagoons whenever capacity is exceeded. They also have the ability to divert raw sewage directly into Big Lake at the pumping station if necessary. Thompson said the line installed in the mid 1980s is expected to have a life of 100 years.

When questioned about line maintenance, Thompson said the line is visually inspected annually. Slopes where the sewage line runs are checked for stability. The line is not normally pressure tested. He said leaks such as the one experienced in July 2005 cannot be identified by monitoring flow or pressure drops.

ATVS AN ISSUE IN LOIS HOLE PROVINCIAL PARK

Local environmentalists have recently spotted a considerable number of ATVs, snowmobiles and even SUVs driving across the ice and through the grass and reeds within the boundaries of Lois Hole Provincial Park, and along the Sturgeon River within St. Albert. Neither of these activities is allowed, the continual use of these machines in the Park and river have been reported to the RCMP and Alberta Community Development.



Photo courtesy of E. Blodgett

THE NORTH SASKATCHEWAN WATERSHED ALLIANCE

BLESS joined the NSWA several years ago when we were sent an invitation as part of their initial membership drive. The following is a brief on its purpose and activities.

The NSWA is a non-profit society whose purpose is to protect and improve water quality and ecosystem functioning in the North Saskatchewan Watershed within Alberta by:

- improving the community's ability to make informed decisions about the value of watershed protection and the integrated stewardship of land and water resources
- maximizing communication, relationships and partnerships among members and within the larger community
- promoting an approach to watershed management where a balanced system takes into account the interrelationship between cultural, social and economic desires and healthy watershed functioning.

INTERESTED IN BECOMING A MEMBER OR WANTING TO RENEW AN OLD MEMBERSHIP?

It's easy, just send us an email info@bless.ab.ca with the following information:

Name

Address

Single (\$10) or family (\$15) or volunteer (5 hours of volunteer work, great for students!)

Phone number

We will contact you and make sure we have all that we need, and arrange for payment.

Upcoming Events:

- April 15 AM – Springing to Life at the BLESS platform
- April 23 - Earth Day (come and visit us in Hawrelak Park)
- April 22 AM - Springing to Life at the BLESS platform
- April 29 - Snow Goose Festival Beaverhills Lake 10 am - 2 pm
- May ? – Spruce Up the Sturgeon, 10AM behind St. Albert Place
- May 2-5 Alberta's Environment Conference - Shaw Conference Centre, Edmonton. To register: www.environment2006.com.
- May 8-14 Environment Week on the Square. Churchill Square - downtown Edmonton.
- Roy Financial Mayor's Walk for Charity. June 17 – 10 AM Lion's Park, St Albert.
- June 5 - Alberta Water Quality Awareness Day. Register to participate - www.awaqa.ca
- June 10 - River Day in Rundle Park, Edmonton 10 am - 4 pm
- June 18 (Father's Day) River Edge Enhancement Project planting at Berrymore Flats Demonstration Site
- June 24/25 - Nature Centre Grand Opening. Little Log Cabin on Sturgeon R.



We're Looking for a Student

Lots of parents and children may already be thinking about warmer weather and maybe even summer holidays. If so, perhaps a lot of them will be thinking of visits to the Summer Nature Centre this June and July. It was such a popular place to visit last summer!

In preparation for another season, BLESS is currently in a search mode to find an individual to again 'make things happen' to the enjoyment of nature-loving visitors to the little log cabin on the shores of the Sturgeon River. Summer students have been exceptional in their efforts for quite a few years now to inspire, challenge and educate the hundreds upon hundreds of summer guests, big and small, that happen to stop by for a visit.

Having been a volunteer with BLESS at the Summer Nature Centre I dearly hope that we can find yet another keen young person, probably closing in on a university degree in a related



field, who wants to apply his or her talents to excite people about nature as it exists in St. Albert. We would really love to get someone local who shares our concerns for our green spaces, wildlife and waterways.

Please encourage someone you know who might be perfect for our summer program to send an email to tell us of their interest or to get more information. Email to info@bless.ab.ca

Dan Stoker
Volunteer with BLESS

Do you have a news-worthy item, an article, or an original photo that we could use? We publish once a quarter (March, June, September, December). The newsletter editor may be reached by email at: news@bless.ab.ca.

Climb the mountains and get their good tidings. Nature's peace will flow into you as
sunshine flows into trees.

John Muir