

From The SHORELINE

Fall 2003 www.alms.ca

ALBERTA LAKE MANAGEMENT SOCIETY

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PRESIDENT'S MESSAGE

As part of my presidential duties, it has been my pleasure to represent ALMS at several functions over the past few months. ALMS has been asked to participate in a variety of exciting new initiatives including the Federal *National Watershed Stewardship Policy Discussion Forum* (Fisheries and Oceans Canada and the Land Stewardship Centre), Provincial *Water for Life Strategy* (Alberta Environment) and local *Volunteers in Motion* (Prairie Farm Rehabilitation Administration and Cows and Fish) as well as numerous Lake and Watershed Associations. Interestingly, the common theme to emerge from all of these initiatives is the use of a "watershed" management approach—that is, to look not only at the water of a particular basin, but at the entire watershed of a lake when considering impacts on the system. This integrated approach ensures that resource managers look at cumulative impacts on a water basin, and do not consider projects in isolation from others. My involvement with these projects has been tremendously rewarding and I believe that ALMS is being fully recognized and respected as a partner in these various initiatives.

Most recently, I had an opportunity to address 25 teachers from all over the Province that had been assembled by FEESA in an education institute called *Water in Alberta*. This initiative was part of the *Water for Life* strategy, the

purpose being to advance Albertans' awareness and understanding of water and motivate responsible action. The program was a seven-day professional development experience in July that addressed the needs of educating young Albertans about how we use, manage and sustain our water resources. The program brought together teachers and representatives of several water stakeholder groups (Alberta Agriculture, Canadian Association of Petroleum Producers, Alberta Agriculture, Food and Rural Development, Alberta Environment, Alberta Sustainable Resource Development, Ducks Unlimited, Trout Unlimited, EPCOR, Bow River Basin Council, North Saskatchewan Watershed Alliance, City of Calgary and City of Edmonton) to address how to advance public education and outreach on water topics and issues. On the last day, a "Water Education Forum" brought back the guest speakers and was facilitated by the consultants who facilitated both rounds of the Province-wide public outreach component of the Water for Life Strategy.

Jim Martin and his capable staff at both the Edmonton and Calgary FEESA branches did everything in their power to make this event as hands-on and fun as possible. A raft float trip down the Bow River was part of the fun on Friday evening. The teachers spent the weekend on the road touring the Elbow River Basin, a wetland restoration project at Frank Lake (a personal favourite of mine), an irrigation project near Lethbridge, the Oldman Dam, and a Cows and Fish case study, all while hearing from experts along the way. As an invited guest on behalf of ALMS, I was able to take in as much of the institute as my time would allow and I wished that I could have stayed for the entire time. As FEESA's education objectives are so close to our own, I can see potential partnerships developing in the future

between our two groups. I am looking forward to that!

Have a great Fall!

Jay White, M.Sc., P.Biol.
President, ALMS

LAKEWATCH 2003 SUMMER MONITORING PROGRAM

Alberta Lake Management Society, lake and community associations, and lake residents participated in the 2003 ALMS Lakewatch program. The program collects water quality information and water samples that are analyzed for basic chemical characteristics and trophic status.

In the five years (not including this year) since Lakewatch began as an ALMS program, data have been collected for 38 individual lakes and 48 lake-years in Alberta. Lakewatch has progressed remarkably well this year and added an additional 22 lake years to the dataset. The lakes for the summer of 2003 included: North Two Lake, South Two Lake, Chrystina Lake, Edith Lake, Atlantic Richfield Res., Touchwood Lake, Amisk Lake, Beaver Lake, Pine Lake, Pigeon Lake, Battle Lake, Sylvan Lake, Lac La Nonne, George Lake, Muriel Lake, Marie Lake, Moose Lake, Angling Lake, Kehewin Lake, Laurier Lake, Garnier Lake, and Frog Lake. This is the biggest program since Lakewatch began. The success of Lakewatch is due largely to support from Alberta Environment, the Lakeland Industry and Community Association and all the volunteers that make the program possible.

Results for the 22 lakes sampled in 2003 are being analyzed and compiled into reports as data are received from the Alberta Research Council's water



quality lab. This year's reports will focus on nutrient levels (such as phosphorus), water clarity and major ions. Analyses for heavy metals have also been added in some lakes this year.

For most Alberta lakes, phosphorus is often directly related to the green color seen in the water. Algae in the water thrive on phosphorus as a nutrient, therefore phosphorus is useful in

assessing the potential for algal growth and water quality. Algal populations gradually increase during the warm summer months and peak during late summer. Warm weather this summer has resulted in dense algal growth in some Alberta lakes. These dense algal growths will diminish as Fall weather returns.

Previous years' reports have recently been completed and reports for the last five years' lakes can be found on the ALMS website (www.alms.ca).

REVIEW OF WATER TREATMENT FACILITIES SET TO BEGIN

Edmonton ... Work will soon begin on a comprehensive review of water treatment facilities and water sources to ensure Albertans continue to have access to safe, sustainable drinking water supplies. The review is aimed at ensuring that the potential costs of any solutions can be more accurately identified in the provincial water strategy -- Water for Life -- that will be completed and released in Fall 2003. The Government of Alberta launched the review with a Request For Proposals on May 14. A total of 37 different proposals were received from 12 different engineering firms. Following a thorough evaluation process, contracts were awarded to an Associated Engineering/Golder Associates/ATAP Infrastructure Management Ltd. consortium to conduct the assessments of facilities in northern and southern Alberta, and a Stantec / EPCOR consortium to conduct the assessment of facilities in central Alberta. Municipalities and facilities included in the review will be advised on the specific details and timing of the assessments of their facilities in the next few weeks. This first phase of the review is expected to cost \$750,000 and be completed by the end of December 2003. The second phase will identify possible solutions for areas that may need upgrading to ensure their operations are sustainable at a high level. A copy of the draft Water for Life: Alberta's Strategy for Sustainability is available at www.waterforlife.gov.ab.ca

For further information, contact: Robert Moyles, Alberta Environment Communications, (780) 427-6267 Outside of Edmonton, dial 310-0000 for toll-free connection.

LAKELAND COUNTY PROCEEDS WITH MAJOR WATERSHED PROJECT

Located in northeastern Alberta, Lakeland County is proud to be involved in a major initiative to improve the Lac La Biche Watershed. This major project is aimed at providing a better understanding of Lac La Biche Lake and the whole Lac La Biche Watershed, with the ultimate goal of implementing policies and programs to enhance and improve the Watershed. The Lac La Biche Lake Watershed Steering Committee has been formed to oversee this exciting initiative and is comprised of representatives from Lakeland County and other key groups such as the Healthy Lake Committee, the Lac La Biche Fisheries Enhancement Group and the Lakeland Regional Health Authority.

This project commenced in the fall of 2002 with an intensive water sampling program of the Lake and its tributaries. The project will quantify the levels of various water quality parameters including nutrients, bacteria, algae, pesticides and pharmaceutical contaminants.

To undertake this 2 ½ year project, a highly qualified team of scientists have been assembled including, but not limited to, world renowned Limnologist Dr. David Schindler and Biologist Mr. Jay S. White. Many other University of Alberta scientists are also involved, including Dr. Alex Wolfe, Paleo-limnologist and Professor of Earth Sciences; Dr. Charles Wong, Professor of Chemistry; Dr. Suzanne Bayley, Professor of Biological Sciences; Dr. Rina Freed, undertaking post-doctorate research in hydrology; Dr. Cindy Paszkowski, Professor of Biological Sciences; and many graduate and post-graduate students from the University of Alberta.

From The

SHORELINE

September 2003

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From The Shoreline is the official newsletter of the Alberta Lake Management Society (ALMS), providing a forum for the communication and exchange of information and experiences relating to the management of lakes and their watersheds.

Editor: Théo Charette

Our goal is to publish *From The Shoreline* quarterly as Spring, Summer, Fall, and Winter issues.

Articles submitted for publication must be received no later than **one month prior the month of publication.**

Please address all articles and letters to:

Editor, *From The Shoreline*
Alberta Lake Management Society
c/o Department of Biological Sciences
University of Alberta
Edmonton, CANADA T6G 2E9

The opinions and advice expressed in the newsletter are those of the contributors and do not necessarily imply endorsement by the Society.

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Lakeland County recognizes the Lac La Biche Watershed as a vital resource to the community. Protection and enhancement of this resource is of paramount importance. It is further recognized that public participation in this matter is essential. To provide an opportunity for this, the public has been invited to several demonstrations by the County and the researchers, including a sediment coring demonstration.

The core-sampling program is an important component of the project which will provide historical lake data for time periods where there is no other source of data. This historical data will be compared with current sampling data, to give researchers an idea of how the lake has changed over the past century.

For more information about the core sampling component or about the Watershed project, call Mr. Barry Kolenosky, Manager of Public Services at the Lakeland County office at (780) 623-1747 or Mr. Zicki Eludin, Committee Chairperson, at (780) 623-4059.

**IMPORTANT
NOTIFICATION**

Introduction of new policy

On May 13, 2003, the Board of Directors passed by majority a resolution that will further recognise contributions to our quarterly Newsletter.

Newsletter contributors of at least one page per year will receive a free 1-year registration with the Alberta Lake Management Society (value of up to \$25). Contributions can be made by increments (quarter and half pages) adding up to one page over one year.

The purpose of this new policy is to thank contributors and encourage further submissions.

**COLD LAKE - BEAVER RIVER
WATER MANAGEMENT PLAN**

The Cold Lake-Beaver River Basin is located in the Cold Lake region of Northeast Alberta. It is a source of water supply for domestic, municipal, industrial, agricultural, irrigation, and recreational users. In 1985 the Cold Lake – Beaver River Water Management Plan was adopted to provide direction on the management of groundwater resources in the Cold Lake and lower Beaver River Basins. The Plan's intent was to provide an adequate quantity and quality of water to meet the long-term user requirements of the basin.

However, water resource management in the basin is a concern due to increased industrial development, population growth, and the associated increased water demand in the region. Additionally, the area has been experiencing a prolonged period of below-normal precipitation in the past 15 years, which has resulted in record low water levels in area lakes and record low stream flows, except high water records in 1996/1997. Given the above, it is appropriate to review and update the 1985 Plan to ensure it addresses current and future regional water needs.

Alberta Environment is committed to the protection and management of water resources in Alberta and recognizes the Cold Lake-Beaver River Basin as a regional priority. The department is initiating a process to update the 1985 Plan with other agencies that have an interest or mandate affected by the Plan, and in consultation with Stakeholders and the general public. The updated Plan, to be completed in December 2004, will strive to balance community, economic, and environment issues and values with government legislation, policy for the protection and management of water resources.

Major issues and concerns include:

- Groundwater availability for domestic and industrial use.
- Potential decreases in surface water level in local lakes, streams and wetlands.

- Potential for future increasing water diversions due to the increased industrial development and associated population growth in the region.
- Municipal water supply availability due to the low water levels in streams and lakes.
- Regional groundwater and surface water quality.
- Impacts of low water levels in lakes on recreational opportunities for users.
- Protection of the aquatic environment.

Several Environmental Impact Assessment (EIA) studies and water management initiatives are currently underway in the region. The information and data from these studies will be incorporated in the updated Water Management Plan:

- **Imperial Oil Resources Limited (2002)** - Cold Lake Expansion Projects – Nabiye and Mahihkan North EIA Study.
- **Orion EOR Project (2001)** - Blackrock – Hilda Lake EIA project.
- **AEC Oil & Gas (2001)** - Foster Creek Commercial Project Phase I & II – Cold Lake Air Weapons Range.
- **Canadian Natural Resources Limited (2000)** - Primrose and Wolf Lake (PAW) In-situ Oil Sands Expansion.
- **Imperial Oil Resources Limited (1998)** - Cold Lake (Mahkeses) Expansion Project
- **LICA- Water Use by Industry Subcommittee (2001)** - Groundwater use versus Cold Lake water use for industrial purpose.
- **LICA (2002)** - Elk Point Region Watershed Baseline Studies (Komex report).
- **Local Government Initiative (2002)** – Water for Life: Moose Lake Watershed Protection Initiative.

The framework to implement the Plan will include identifying roles, responsibilities, budget and funding, long-term monitoring needs and priorities. Each component of the project will need to be evaluated and monitored for its success, performance and compliance with the existing

legislation, regulations and standards. The completed updated Plan will guide regulatory decision-making by Alberta Environment in the years following adoption of the Plan.

For more information on the Cold Lake – Beaver River Water Management Plan, please contact Bob Savage, Planner, Alberta Environment, (780) 427-2267. Outside of Edmonton, dial 310-0000 for toll-free connection.

2003 ALMS WORKSHOP Understanding our lakes: preserving them for current and future use

September 26 – 27, 2003

(Friday and Saturday)

Lakedell Agricultural Society Hall

(Pigeon Lake)

Westerose, Alberta

You are invited to participate in the 11th Annual Workshop of the Alberta Lake Management Society (ALMS).

Our purpose is to bring together lake users, scientists, government and industry representatives, special interest groups and the general public to explore and discuss problems facing Alberta lakes and watersheds, and the technologies and management strategies available to restore and enhance them.

Our objectives are to promote understanding and better management of Alberta lakes and their watersheds.

What to expect:

- Presentation by Dr. David Schindler, leading aquatic scientist, on impacts and trends in lakes.
- Talks on drinking water quality and agricultural impacts on water.
- Presentations on fundraising, working with the media and with government, volunteer monitoring and other topics of interest to community associations.
- A banquet presentation by the "Nature Nut", John Acorn (<http://www.greatnorth.ab.ca/Acorn.html>)
- A forum to meet and share information with other professionals

and lake residents interested in lake and watershed management

- A relaxed and affordable workshop at a pleasant lake community

REGISTRATION FORM 2003 ALMS Workshop	
Alberta Lake Management Society	
Name:	
Organization (if relevant)	
Address (Village/Town/City, Province, Postal Code)	
Phone	Fax
Email	
Payment Category Fee	
() ALMS Member	\$60.00
() Non-ALMS Member	\$85.00
() Students	\$60.00

Due to space restrictions, attendance will be limited to the first 200 registrants (complete with fees) that are received. **To avoid disappointment, please register early!**

Please send the completed registration form to:

Alberta Lake Management Society,
Attention: Colleen Prather, Workshop
Registration,
c/o 4800 – 93 Avenue,
Edmonton, AB, Canada, T6B
2P8

**(make cheques payable to the
Alberta Lake Management Society)**

Non-Member and Student registrations receive a membership in ALMS valid until September 27, 2004.

Registration fees cover two days of presentations, coffee breaks, lunch each day and a Friday banquet (with cash bar).

Cancellation policy: 10% refund after Sept. 1, except for medical reasons.

For more information please contact: Colleen Prather (cmprather@creek.ca), (780)-490-5711, or visit our website at www.alms.ca for the latest workshop news.

NEXT NEWSLETTER DEADLINE

Submissions to the editor must be received by **January 30, 2004** to be considered for the Winter newsletter.

We welcome your letters, newsletter articles, event notices and suggestions for improving the newsletter.

Let us know what's happening in your lake neighborhood this year!

Editor