# Alberta Lake Management Society

## 20th Annual Workshop

**Healthy Watershed**
**Healthy Lake**
**Healthy Community**

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The purpose of the Society is to promote understanding and comprehensive management of lakes and reservoirs and their watersheds. We work to build understanding and awareness among Albertans for responsible management through programs and information sharing.

Our programs strive to increase awareness of water resources through the local monitoring of Alberta's surface waters and to foster a sense of stewardship in Alberta's watersheds. ALMS and its members are active across Alberta in providing support to individuals, local communities, educational institutions, governments and industry that are interested in lake and watershed management. The Society organizes an annual workshop at a different Alberta community each fall. ALMS is also widely recognized through its two community-based lake water quality sampling programs called Lakewatch and Alberta Water Quality Awareness Day (AWQA Day).

For more information or to get involved in lake monitoring please contact us!

www.alms.ca

780-702-2567

## Pigeon Lake Watershed Association

The Association is comprised of concerned residents and users of Pigeon Lake and its watershed who are working together to understand the lake and its needs and to advocate best practices.

The PLWA's Mission is to use the best methods available to study the lake and its ecosystems, communicate best practices to users, advocate effective policies by governments and regulators and take a leadership role in lake and shoreline cleanup.

PLWA has been established to understand impacts; both human and natural, on the lake and its watershed. The recent blue-green algae bloom, concerns about fish stocks, higher density real estate development and oil and gas operations in the watershed are all matters of interest to the PLWA.

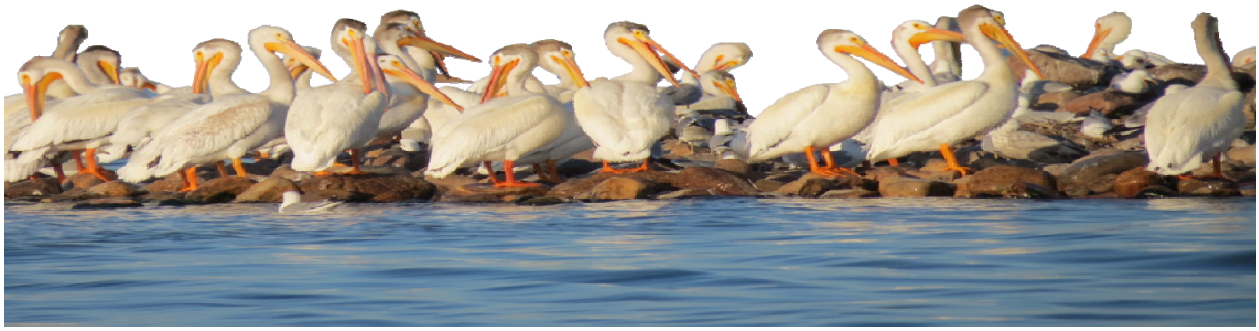
# Keynote Speakers

## **Chris Teichrib**, Alberta Environment and Sustainable Resource Development

### From Monitoring to Management, Working Towards Maintaining and Improving Water Quality at Pigeon Lake

Pigeon Lake is a large, popular recreational lake located in central Alberta. While data suggests the lake has always been productive, recent significant nuisance blooms of blue-green algae (cyanobacteria) have prompted stakeholders to seek options for the management these blooms and improvement in water quality. This presentation will discuss the history and evolution of water quality monitoring at Pigeon Lake and ongoing efforts to examine watershed and in-lake options to manage water quality. It will also be shown that lessons learned from Pigeon Lake are widely applicable to many other large, productive lakes within Alberta, arguably making Pigeon Lake an ideal "learning lab".

Chris Teichrib has been a Limnologist with Alberta Environment and Sustainable Resource Development for the past decade. He works extensively with multi-stakeholder groups across central Alberta to address issues of water quality in rivers and lakes. Chris has worked with the Pigeon Lake Watershed Association and other stakeholder groups in the area since 2004, providing science support for efforts undertaken by these groups.



## **Bob Gibbs**, PLWA Director for Pigeon Lake Watershed Management Plan

### Watershed Stewardship Group (WSG) approach to Watershed Management Planning

The PLWA is a watershed stewardship group (WSG) that has embarked on the development of a Pigeon Lake Watershed Management Plan (PLWMP). The intent of this presentation is to share learnings from the start-up phase of our WMP planning process. Pigeon Lake Watershed has unique social, economic and environmental characteristics that have driven plan priorities. The talk will outline:

- Why the PLWA embarked on the WMP
- Who is involved: Partnerships and Roles
- How we moved forward: Terms of Reference and Process
- What is the plan focus: BMP Topics
- How our Outreach and Engagement is rolling out

The talk will conclude with a discussion of considerations for resource-strapped Watershed Stewardship Organizations.

Bob has been living along Pigeon Lake for 40 years. The blue-green algae blooms starting in 2006/7 was a “watershed moment” for Bob. Since 2007 he has been active on PLWA committees and in 2011 stepped up to become a member of the PLWA Board of Directors, responsible for the watershed management plan.

Professionally, Bob Gibbs is a principal of Edmonton based EIDOS Consultants Incorporated with a dual specialty in Landscape Architecture and Environmental Planning. As a landscape architect Robert has advocated the use of indigenous plant communities, constructed wetlands, Bioswales, low impact development and soil nutrient using alternative management practices. As an environmental planner, Bob has conducted numerous environmental impact assessment studies and is currently developing a regional growth plan using Geographic Information Systems (GIS). Bob specializes in well-crafted planning processes that engage stakeholders and community leaders.

Bob enjoys learning experiences. Developing a WMP from scratch and working within the constraints of a cash-strapped NGEO has been an interesting challenge!

## Battle Lake Riparian Protection Plan

Mike Black & Paul McLauchlin, Battle Lake Synergy Group

The Battle Lake Watershed Synergy Group is composed of 50-60 members from the watershed community, oil & gas operators in the area and local First Nations. Protection of the Battle Lake watershed from development, in particular the effects of oil and gas development, is a major concern for many residents living in this area.

Battle Lake Watershed Synergy Group was established in 2005 to ensure effective and sensitive planning of oil and gas development in the Battle Lake watershed area through open and honest communication and planning between residents, the oil and gas industry and government agencies. Their mission is to provide an effective and proactive forum to allow Community, Industry and Government to communicate and share information respectfully and cooperatively and to aid in an integrated approach to developing and planning oil and gas activity in a manner that protects and preserves the Battle Lake Watershed.

Paul is the facilitator for the Battle Lake Watershed Synergy Group.

Mike has been a resident of Battle Lake for the past 15 years and is a founding member of the Battle Lake Natural Area Preservation Society as well as the volunteer steward of Mount Butte Natural Area. He is a regular attendee of the Battle Lake Synergy Group.

## PLWA Roles & Responsibilities in Lake Watershed Planning

Susan Ellis & Emile Beaudry, Pigeon Lake Watershed Association

The PLWA is presenting on the formal and information roles and responsibilities of the PLWA and the importance of a watershed association in watershed planning. The presentation includes some of the specific roles & responsibilities of the watershed association before planning, during planning, during implementation and on-going through the watershed management planning process, along with some of our learnings about what is easy and what is challenging.

From the age of 7, Susan Ellis enjoyed many summers at Pigeon Lake's Itaska Beach. She joined the communication committee shortly after a particularly bad cyanobacteria outbreak in 2007, joined the board in 2009 and has been President since 2010. Susan has a MA in Applied Behavioural Science, with emphasis on Leadership and Change Management. She has enjoyed a Human & Organizational Development consulting career to a wide range of organizations.

Emile has been a long-time PLWA Director and has enjoyed many years with his wife and family on Argentia Beach. Now the Vice-President and Secretary for the PLWA, Emile also owns and runs Tanks-A-Lot Ltd. one of Western Canada's leading companies in onsite water and sewage solutions.

## Association of Pigeon Lake Municipalities Role

Brian Waterhouse

This presentation talks about the steps APLM has taken to work with the Pigeon Lake Watershed Association to develop a management plan for Pigeon Lake. It will highlight the roles of the Municipalities and touch on the steps that the APLM have taken for in-lake project review.

Brian Waterhouse is the Deputy Mayor for the Summer Village of Sundance Beach and is serving his fourth term on council. His family has owned a cabin at Pigeon Lake since 1997. He also is Chair of the Association of Pigeon Lake Municipalities (APLM). He has been a member of the APLM for 9 years and chair for the past 3 years. In his spare time he enjoys spending time with twin granddaughters, golfing, fishing, and playing on the lake. He and his wife have cruised to many places throughout the world and are currently planning their 15$^{th}$ cruise.

## The Case for Banning Cosmetic Fertilizers

Dora Berry, Nature's Element

The presentation will provide a review of existing bylaws and legislation in North America restricting the use of cosmetic fertilizers. Why have these limitations or bans been established, how have they been implemented, and what are the recent results? Ultimately, why are cosmetic fertilizers used, when are they needed and what are the healthy-ecosystem alternatives?

Dora is a Conservation Biologist and Landscape Architectural Designer, combining her passion for the environment and applying it to create functional, aesthetic and sustainable landscapes. Dora created *Nature's Elements* in 2006 which provides specialized services in landscape architectural & environmental design to those who wish to beautify and appreciate their home landscape, as well to nurture the love of nature for children and adults.

Dora is a member of the Alberta Association of Landscape Architects and the Canadian Environmental Certification Approvals Board. She is a mother of two precious children, who are her inspiration in contributing to sustainable living.

## Buffer Design for the Canadian Prairies

Sharon Reedyk, Science and Technology Branch - Agriculture and Agri-Food Canada

The *Field Manual on Buffer Design for the Canadian Prairies* is a decision support tool that was created for non-regulatory adoption of stream buffers for cropland areas in the Canadian prairies. It incorporates a series of decision steps and is targeted for use by agricultural extension staff together with landowners. The manual allows users to determine critical areas for locating buffers along stream systems adjacent to cropland and identifies upland best management practices which should be considered in addition to assessing riparian buffer needs. The approach includes both landscape scale assessment and on-site assessment. Although the tool was initially designed for use in a non-regulatory framework, it was found to be useful as a means of granting exemptions for buffers in other regions of Canada that had adopted a regulatory approach to riparian area management. As such, the tool was modified for application in Atlantic Canada where both the physical and regulatory environments differ from the prairies. Under regulatory environments, this tool can help bridge the gap between regulators and land owners by providing a rational decision process for the assessment of the need for a buffer.

Sharon Reedyk graduated with a M.Sc. in geography from McMaster University in 1991. Over the past 20+ years, Sharon has worked on projects focused on developing water monitoring programs, assessing the feasibility of various lake restoration technologies and assessing the impacts of landscape disturbance on water resources. She currently works as a water quality specialist for Agriculture Canada where she assists the agriculture sector in addressing impacts of agriculture on water quality.

## Protecting Watersheds through Land Securement: A Proactive Approach

Juanna Thompson, Alberta Conservation Association

Securing ecologically sensitive land through outright purchase or donation is a powerful tool to conserve land within a watershed. Loss of habitat is the single greatest threat to biodiversity and as the population of Alberta continues to increase, there is ever increasing pressure on our natural environment. Discover the process of land securement within an environmental non-profit organization and the importance of protecting these natural spaces.

Juanna Thompson graduated with a B.Sc. in Environmental and Conservation Sciences from the University of Alberta in 2004. She has worked with Parks Canada, Department of Fisheries and Oceans Canada, Nature Conservancy of Canada and currently works as a biologist for the Alberta Conservation Association where she specializes in land securement and conservation site management. Living around lakes for most of her life, Juanna became passionate about land-use and development around lakes and has focused her efforts on increasing awareness of lake conservation to Albertans. Since 2011, Juanna has been a member of the Board of Directors with the Alberta Lake Management Society.

## Update and Results of Invasive Species Monitoring

Kathryn Wilson, Alberta Environment and Sustainable Resource Development

Aquatic invasive species (AIS) are one of the greatest threats to freshwater resources in North America. This presentation will focus on 1) environmental, economic, and cultural threats posed by aquatic invasive species; 2) highlights from an AIS pilot program conducted over the summer; 3) status of aquatic invasive species in Alberta; 4) existing AIS policy; and 5) developing a provincial prevention program.

Kate Wilson is the Aquatic Invasive Species Program Coordinator for Alberta Environment & Sustainable Resource Development. She has worked on aquatic invasive species issues and management for the past several years both in Idaho helping to implement a prevention program and in Florida during graduate school. She is excited to be involved in the development of a brand new prevention program to protect Alberta's freshwater resources.

## Unlikely Stewards: The Role of Beavers in Maintaining Freshwater Resources

Dr. Glynnis A. Hood, Department of Science, University of Alberta, Augustana

Although they are often considered a pest species, beavers have a remarkable ability to counter the effects of extreme drought, enhance shoreline habitats and provide a refuge for many wild and domestic species. My early research in east-central Alberta determined that ponds with beavers had 9 times more open water than those same ponds without beavers, even during record-breaking drought. Recently I have also found that not only do beavers actively increase volume-to-surface area ratios of ponds by almost 50%, their digging of foraging channels can increase average pond perimeters by over 575%. Some channels are 200 to 300 m long, which then increases the interface between the riparian zone and upland forests. Additional measures of basin circularity, bottom complexity and pond depths reveal other dramatic differences between ponds with beavers and those without. From an ecological perspective, beaver ponds appear to facilitate structural and functional connectivity for various taxa at landscape scales. This remarkable ability for beavers to manipulate water at landscape scales can also lead to conflicts, which require creative solutions. An ongoing research project has found that alternative management methods are providing a cost-effective means to control flooding by beavers, while still allowing both the wetlands and beavers to remain without further damage to valuable human assets.

Glynnis Hood is an associate professor in Environmental Science at the University of Alberta's Augustana Campus in Camrose, AB. Her research examines aquatic ecology and human-wildlife conflicts as they relate to habitat availability and wildlife management. Prior to joining the university in 2007, she worked for the better part of 19 years as a park warden with Parks Canada in parks ranging from the Rockies to the Subarctic and the Boreal Plains. Current research projects examine the influence of beaver-created landscapes on biodiversity, the role of adaptive management in reducing human-wildlife conflicts, and the ability of wetlands to withstand repeated droughts.

## Pollution Reporting with the SwimGuide.Org

Glen Isaac, Executive Director/Riverkeeper, North Saskatchewan Riverkeeper

Glenn Isaac will briefly summarize the importance and efficacy of the Swim Guide website and app (www.theswimguide.org) as a lake water quality education, awareness and advocacy tool.

In particular, Glenn will focus on the "pollution reporting" tool of the Swim Guide as a method of broadening the reach of lake water quality monitoring, engaging citizens in the stewardship of our lake waters and providing the touchpoint educating citizens on water quality issues and governance.

Glenn has a science and law degree from the University of Alberta. After a successful career in the pharmaceutical industry, Glenn focused his efforts on organizing charity projects with a focus on supporting the Edmonton community and providing clean drinking water to impoverished communities abroad. Glenn's travels with his wife, Carolynn, and starting a young family awakened him to the reality that we are all stewards of the watershed and global water supply- for current and future generations. The marriage of Glenn's support for charity projects and watershed stewardship was complete with the arrival of the newly licensed North Saskatchewan Riverkeeper to Edmonton. As the Riverkeeper, Glenn's connection to this watershed grows with his knowledge of the beauty and challenges of these waters.

The vision of the North Saskatchewan Riverkeeper is a watershed where we can all safely and enjoyably swim, drink and fish. Glenn works everyday towards this vision by informing, connecting and protecting the community and the watershed.

Today, Glenn and committed volunteers are in charge of the "hands on" activities of the North Saskatchewan Riverkeeper which include: monitoring the river, responding to citizen concerns and complaints, providing education and awareness on the watershed- like the Swim Guide app and website; providing recommendations, information and resources to members of the community interested in watershed issues and working with other water preservation groups and individual citizens on water-related public consultations and issues resolution.

## Monitoring for Cyanobacteria in Alberta's Lakes

Jessica Ponto, Alberta Health Services

Through collaboration with the Alberta Cyanobacteria Monitoring Program for Public Health, Alberta Health Services facilitates recreational lake water monitoring for cyanobacteria from May to September. The current health guidelines and protocol for issuing blue-green algae advisories will be discussed. The cyanobacteria cell count and microcystin data from 2013 will be presented, along with lessons learned and future directions for the sampling program.

In 2010, Jessica received her certificate in Public Health Inspection after graduating from the environmental health program from Concordia University College of Alberta. As an Environmental Health Officer for Alberta Health Services, her role is to coordinate the AHS provincial lake water quality monitoring program. Apart from this role, she also works on research projects related to a variety of environmental public health areas, including Legionellosis investigations, fluoride in drinking water and air quality, to name a few. Jessica is also pursuing her Master of Science degree from the University of Alberta's Department of Civil and Environmental Engineering, which focuses on the environmental health effects of unconventional oil and gas development.

## Swimmer's Itch in Alberta: Understanding Transmission Dynamics to Better Inform Control Strategies

Michelle A. Gordy, Lisa Kish, and Patrick C. Hanington, School of Public Health – Environmental Health

Swimmer's itch is an allergic skin condition that people may experience after swimming in freshwater lakes and streams. It is caused by exposure to the larval, free-swimming stage of a parasitic flatworm, called a trematode, which normally infects waterfowl or small mammals. Trematodes have several life cycle stages, and rely completely on having an intermediate molluscan host to support their larval development. There are many factors within the environment that may have an affect on transmission, including - but not limited to - water quality, changes in temperature, and human impact on the environment. In Alberta, we have a limited knowledge of what species are responsible for transmitting swimmer's itch and what

factors may be involved in limiting transmission.

The current goal of this project is to complete a species survey of the snails and trematodes across five high-use recreational lakes in Alberta and to collect important water quality information to help inform future experimentation and gain insight into the transmission dynamics of swimmer's itch. Our overarching goal is to contribute useful information to those involved in lake management to help in future control strategies.

## A Model Lakeshore Land-use Bylaw for Pigeon Lake

Judy Stewart, LLM

The Pigeon Lake Watershed Association wanted to create a model land use bylaw for development of lands within 800 meters of Pigeon Lake that could be used by summer villages and counties alike. They created a steering committee to work with a consultant to draft the model bylaw. The steering committee identified the land use issues that needed bylaw provisions to regulate and control certain human activities. They provided the shared community values of lakeshore users so that the model bylaw is reflective of those values. The presentation will describe the consultative process and the highlights of the model land use bylaw.

Judy Stewart is a teacher and lawyer who practices law in Cochrane, Alberta, primarily in municipal and water law. She is currently pursuing a Doctor of Philosophy in the Department of Environmental Design at the University of Calgary. Judy completed her Master of Laws at the University of Calgary and her thesis was about municipal tools to protect wetlands and riparian lands in Alberta. She promotes integrated air, land and water management in all aspects of her personal and professional life.

Judy is a well-known local politician, as she spent nine years on Cochrane town council-6 years as a counselor and 3 years as mayor. She is an avid volunteer, helping on local, regional and provincial watershed stewardship groups in diverse hands on activities, from tree planning to policy development and the creation of governance policy manuals. Two important provincial groups she serves on are the Alberta Water Council as an Alternate Director, and the Alberta Lake Management Society as Director. Regionally, she served on the Bow River Basin Council and the Alberta Low Impact Development Partnership for many years, and is currently a Director of the Calgary Region Airshed Zone. Locally, Judy is actively involved in the Cochrane Environmental Action Committee and that group's diverse watershed stewardship activities.

## Living by Water Homesite Consultation Program: Promoting Awareness and Education of Shoreline Ecology and Healthy Lake Practices to Shoreline Residents

Laura Edwards, Nature Alberta

Nature Alberta's Living by Water Project has been around since 1999. Since 2001, the Living by Water Project has completed over 550 consultations at 25 different lakes across the province. In the past two summers alone the program has doubled in size due to demand. During a consultation, a trained shoreline advisor visits shoreline homeowners on their property and works one-on-one with them regarding shoreline health, recreation and maintaining water quality. After the consultation, the shoreline advisor writes a homesite specific report for the homeowner. Nature Alberta's objective is to educate homeowners on lake ecology and their impact upon the ecosystem to foster a change in behavior. Through consultations we are a direct contact and source of information for residents regarding lake health and shoreline best management practices. Due to the success of our Homesite Consultation Program, we also plan to expand the program to include urban residents living next to storm water retention ponds and wetlands in Edmonton and Sherwood Park.

Laura has been working with Nature Alberta for two summers as a Shoreline Advisor with the Living by Water Project. She accepted the position for Program Coordinator of the Living by Water Project at the beginning of September. Laura has a BSc. (Hons) in Ecology obtained at the University of Alberta, where she completed an undergraduate thesis on *Sphagnum* moss. Laura is passionate about shoreline ecology and is comfortable with plant identification in Alberta.

## Water Council Recommendations for the Management of NPS Pollution and Riparian Areas

Steph Neufeld, Watershed Specialist for ALMS

With land and water planning being pushed to the forefront with the introduction of the regional land use planning process and continued work on development of Integrated Watershed Management Plans by Watershed Planning and Advisory Councils and Lake and Sub-basin Management Plans by stewardship groups, there was a need to address management and science gaps around non-point source pollution and riparian land. As such, the Alberta Water Council recently undertook projects in both these subject areas. I will discuss why the projects were needed, what management and data gaps were found and what recommendations were proposed to address these gaps. Because the riparian project is in its final stages of completion, recommendations are still considered draft.

Steph completed a Masters of Science degree investigating the effects of conversion of forests to agricultural land on instream biological communities and water quality in 2005. From there Steph worked as an Aquatic Biologist for a consulting company for several years where her responsibilities included biological monitoring and assessment of human development effects on lakes and rivers throughout Nunavut, B.C. and Alberta. Steph joined EPCOR as a Watershed Specialist in 2008. Her main responsibilities include facilitation of EPCOR's Watershed Protection Program and providing strategic direction to the program. This includes representing EPCOR on regional watershed planning committees to ensure safe and secure drinking water supplies and overall watershed protection. Recent collaborative activities include being on the committee for the development of Proposed Site-Specific Water Quality Objectives for the Mainstem of the North Saskatchewan River, the Integrated Watershed Management Steering Committee and the Water Quality Monitoring Planning Committee. She is currently co-chair of the Riparian Management Project team and just finished chairing the Non-point Source Pollution Team for the Alberta Water Council. Steph is a member of the Board of Directors for RiverWatch, the President of Alberta Lake Management Society and on the Advisory Council for the Watershed Toolkit Project in Alberta.

| **Lakedell Hall, Friday - September 27th** | |
|---|---|
| 7:30 - 8:30 AM | *Registration/Breakfast* |
| 1. Lake Eutrophication and Lake Management Planning: 8:30 - 10am | |
| 8:30 AM | ALMS Introduction - Programs, Direction, and the Workbook on Lake Management |
| 8:45 AM | Chris Teichrib, Limnologist ESRD - From Monitoring to Management, Working Towards Maintaining and Improving Water Quality at Pigeon Lake |
| 9:30 AM | Bob Gibbs, Pigeon Lake Watershed Association - Pigeon Lake Watershed Management Plan |
| *Networking Break* | |
| 2. Roles and Responsibilities in Lake Watershed Planning: 10:30 am - 12:00 pm | |
| 10:30 AM | Battle Lake Synergy Group / ERCB - Battle Lake Riparian Protection Plan |
| 11:00 AM | Susan Ellis/Emile Beaudry - Pigeon Lake Watershed Association Role |
| 11:30 AM | Brian Waterhouse - Association of Pigeon Lake Municipalities Role |
| *Lunch Break - Table discussions of roles and expectations in watershed plans* | |
| 3. Management Options: 1:00 PM - 2:30 PM | |
| 1:00 PM | Dora Berry, Nature's Elements - The Case for Banning Cosmetic Fertilizers |
| 1:30 PM | Sharon Reedyk, Agriculture and Agri-foods Canada - Buffer Design for the Canadian Prairies |
| 2:00 PM | Juanna Thompson, Alberta Conservation Association - Protecting watersheds through land securement: a proactive approach from a land trust perspective |
| *Networking Break* | |
| 4. Management Options and Emerging Issues: 2:30 PM - 4:30 PM | |
| 2:30 PM | Dr. Glynnis Hood, U of A Augustana - Beaver Management |
| 3:00 PM | Kate Wilson, ESRD - Update and results of Invasive Aquatic Species Monitoring |
| 3:30 PM | Glenn Isaac, N Sask Riverkeeper - Pollution Reporting with the SwimGuide.org |
| 4:00 PM | Jessica Ponto, Alberta Health Services - Blue Green Algae Monitoring |
| *Clean Lake Classic Cycle Event 4:30 PM - 5:30 PM* | |
| *Volunteer Appreciation BBQ & Bonfire at Pigeon Lake Provincial Park 6:00 PM - 8:00 PM* | |

| Lakedell Hall, Saturday - September 28th | |
|---|---|
| 8:30 - 10:15AM | *Hot Breakfast and ALMS AGM* |
| **ALMS AGM: 8:30 AM - 10:15 AM** | |
| 8:30 AM | Steph Neufeld - Welcome and Call to Order |
| 8:45 AM | Michelle Gordy, ALMS Scholarship Winner - Swimmer's Itch in Alberta |
| 9:15 AM | Arin Dyer & Patti Fish - Annual Report & Financials |
| 9:30 AM | Bradley Peter - LakeWatch Update |
| 9:45 AM | Jay White - Alberta Water Council Update |
| 10:00 AM | Election of Directors |
| *Break* | |
| 5. Changing Behaviors at Multiple Landscape Scales: 10:30 AM - 12:00 PM | |
| 10:30 AM | Judy Stewart LLM - A Model Lakeshore Land-use Bylaw for Pigeon Lake |
| 11:00 AM | Laura Edwards, Living by Water Program, Nature Alberta - Successes and challenges in changing behaviours of lakeshore residents. |
| 11:30 PM | Steph Neufeld, Watershed Specialist ALMS - Water Council Recommendations for the Management of NPS Pollution and Riparian Areas |
| 6. Lunch & Guided Field Tour: 12:00 PM - 3:00 PM | |
| 12:00 PM | Gone Green Farms: Connecting people to their food. |
| 12:30 PM | Darrly Fipke: Custom grazing operation using riparian fencing, off-site watering systems, and rotational grazing |
| 1:30 PM | Pigeon Lake Watershed Association: Grandview Summer Village Creek Restoration Project |
| 2:30 PM | Millet Fish and Game Association: Tide Creek Conservation Lands |

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