



# Insider

Volume X, Fall 2009

## Environment Week 2009

On June 6th, CEMA hosted its annual Family Fun Day and Community BBQ. Over 1100 community members attend the day-long event at the Oil Sands Discovery Centre. Residents of the Regional Municipality of Wood Buffalo learned about CEMA, their local ecosystem, and demonstrated their support for Environment Week 2009!

Once again, CEMA teamed up with the Royal Alberta Museum and their world famous Bug Room. Special guests included the largest lake trout, caught in 1958 in Lake Athabasca. Preserved goldeye, burbot, bull trout, walleye, sculpin, wood frog, and Canadian toad. A collection of Black Bear, Grizzly, Bison and Polar Bears' skulls were hits among the many children. Other exhibits included a Sandhill Crane, Great Grey Owl, Goshawk, Tundra Swan, Willow Ptarmigan, Red Fox, Badger, Skunk and fan favorite Wolverine.



This annual event showcases the importance of CEMA's continued community outreach and strong partnership building focused on community based stakeholders.

CEMA would like to thank the staff of the Oil Sands Discovery Centre, under the leadership of Nancy Dodsworth; The Royal Alberta Museum excellent educational staff including team leader Tom Thurston, Chris Jass, Peter Heule, & Mark Steinhilber; M & M Meats and Nicole Seaman. Most importantly CEMA would like to thank Ruth Kleinbud; Ann Dort McLean; Glen, Rosa and Michael Semenchuk; Christine Kenning; James Grant; Lynette Whalen; Andrew Rex; Heather Bartlett; Katherine Duffett and Elizabeth Lee.



Chris & Jimmy



World's Largest Lake Trout



Lynette, Andrew & Nicole

## President's Message

Now that summer has drawn to a close and we find ourselves half way between the days with the most and least amount of daylight, I sincerely hope CEMA members were able to take some vacation time, recharge your batteries and get ready for some very important discussions through the fall time frame.

I am pleased to report that your Management Committee representatives, participating in a Joint Review of CEMA with members from the Northeast Alberta Regulators Group, were very busy over the summer. These folks put their heads together for 11 days of face to face meetings and countless days of follow up research, review and recommendation development.



The results will culminate in a briefing and discussion at our September Board meeting.

Most folks will have already taken the opportunity to review the Joint Review Team Terms of Reference and more recently the briefing material that was uploaded on the website.

Allow me to remind you that the intent is not to reach a decision at our September meeting; but to ensure everyone understands the options being presented.

We are hopeful that the information you received will generate considerable discussion as it is very important to the future credibility of CEMA that we get this right. I thank you in advance for your engagement and commitment to the future of CEMA.

Have an outstanding autumn! *Rick*



We welcome your submissions!

The Insider is published by the Cumulative Environmental Management Association. For more information, please contact:

If you have any ideas for our publication or an article to submit for consideration, please send it in and we would be glad to include it.

Corey Hobbs  
 Communications Director  
 #214, 9914 Morrison Street  
 Fort McMurray, AB T9H 4A4  
 Tel: (780) 799-3912  
 Email: corey.hobbs@cemaonline.ca

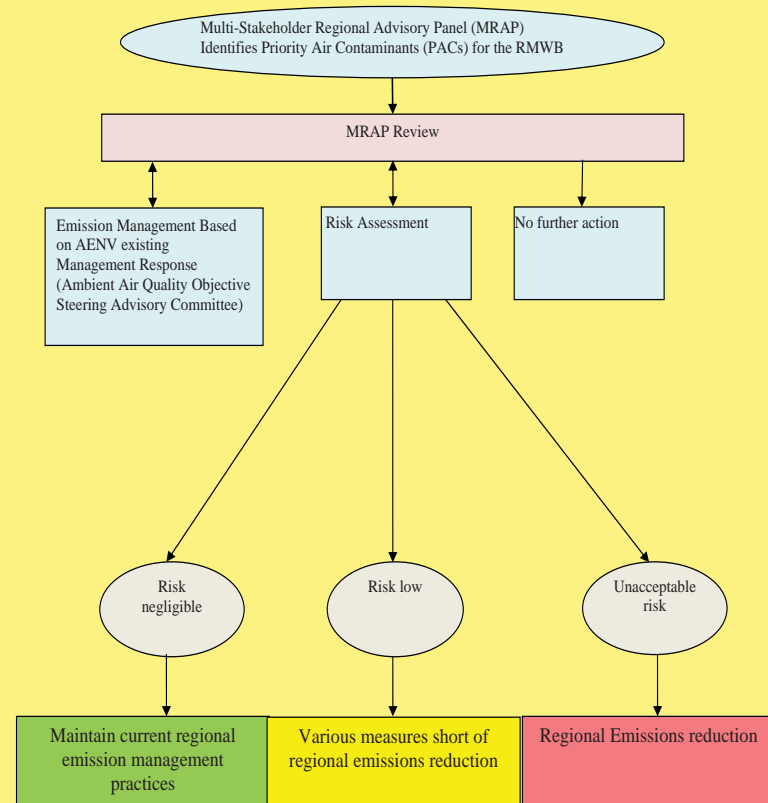
# Updates On Working Groups and Sub-Groups

## TMAC

The last few months have been busy as TMAC members have debated and unanimously agreed final details for the Air Contaminants Management Framework. This Framework provides a strategy to address the many complex issues surrounding management of some 1,400 individual air contaminants.

These diverse air contaminant components present individually as mixtures of two or more, which can impact human health, vegetation or wildlife. The proposed Framework, TMAC has submitted to CEMA recommends the formation of a multi-disciplinary regional advisory group (MRAP), with leading support from provincial government. The role of MRAP will be to identify priority air contaminants and determine their potential impact from existing knowledge with potential support from expert risk assessment, resulting in a decision tree, with 3 green-yellow-red categories of how each priority air contaminant may be best managed.

TMAC members have worked through difficult challenges in the development of this framework and believe they are tabling to CEMA a refined document which identifies the issues and provides a strategy for effective management of regional air contaminants which should satisfy all stakeholders.



On other fronts, TMAC is exploring potential collaboration with the Aboriginal Round Table (ART) to help effective communication of TMAC projects. Throughout the fall of 2009, TMAC will work to complete its few remaining projects, and will explore its future role within CEMA through discussion within its membership and with CEMA executive.

## NSMWG

The objective of NSMWG is to develop management plans to address potential issues related to NOX and SO2 emissions. Three Frameworks/Plans developed by the NSMWG are the Recommendations for the Acid Deposition Management Framework for the Oil Sands Region of North-Eastern Alberta (2004), Ozone Management Framework for the Regional Municipality of Wood Buffalo Area (2006) and the Interim Nitrogen (Eutrophication) Management Recommendations and Workplan for the Regional Municipality of Wood Buffalo Area (2008).

From the Interim Nitrogen (Eutrophication) Management Recommendations and Work Plan, two recommendations related to CLs for N are currently under consideration by the NSMWG. These are:

**Recommendation 10:** Critical and/or target loads for eutrophication related nitrogen deposition not be set at that this time due to the current low to moderate eutrophication risk levels in the region and the lack of information upon which to set such regional critical and/or target loads.

**Recommendation 11:** Use the existing nitrogen challenge experiments in the region and, as required, to establish additional experimental nitrogen application plots in the most sensitive regional ecosystem(s) to determine whether the adoption of European critical loads is valid and/or to establish region-specific critical loads.

The NSMWG has been tasked with the follow-up on Recommendation 11, due to the issue of nitrogen exceedances changing the ecology of ecosystems. The NSMWG invited a consortium of international university scientists, to put forward a resource proposal that would recommend how to develop critical loads for nitrogen in the Regional Municipality of Wood Buffalo. A workshop was held with the academic scientists to clarify the objectives and deliverables in the proposal. These materials are to be presented to CEMA for further discussion.

## TEK Advisory Committee

The Traditional Environmental Knowledge Advisory Committee is looking forward to the 2009 Coaching Workshop "Perspectives into Practice" to be held late October in Fort McMurray. This annual workshop will explore the interaction of Traditional Environmental Knowledge research with western science, focusing on the incorporation of TEK into the CEMA working group projects. The workshop is open to all CEMA members, but also extends the invitation to WBEA and RAMP. The results from the workshop will be used to inform future work with the TEKAC in regards to TEK incorporation.

The Community Orientation Project is currently underway with the participation of two Aboriginal communities. The project will provide insight into the history of Aboriginal people of Canada in the Regional Municipality of Wood Buffalo. The outcome from the project is anticipated to provide a regional Aboriginal orientation program for new residents and employees to RMWB.

# Updates On Working Groups and Sub-Groups

## SEWGW

SEWGW Developing a New Terms of Reference (ToR) for Approval by CEMA

Since SEWGW completed and forwarded its "Dialogue on Ecosystem Response Management System and Coordinated Access Management Strategies; Perspectives on a Further Refinement of the Terrestrial Ecosystems Management Framework" to government in July, 2009 it has gathered to consider what its mandate will be in upcoming years.

It is felt that with the completion of the Terrestrial Ecosystem Management Framework (TEMF), forwarded to government in June of 2008, SEWGW had completed its mandate to address the 17 RSDS issues it was originally assigned as its mandate. Upon receiving the response letter on the TEMF from government in September of 2008, CEMA forwarded a letter in October 2008 asking government to clarify our role and whether we could contribute further to address issues and recommendations highlighted in the TEMF.

The Dialogue document and attached information letter was prepared directly in response to a request by the Government of Alberta (GOA) to receive more information, following the TEMF, regarding:

1. The Management Response Trigger System, including revisiting the Natural Range of Variation (NRV) as it relates to modeling and the monitoring considerations, and

2. Access Management. Now that work on the TEMF is complete and SEWGW has addressed the requests made by government following the TEMF,

SEWGW has stepped back to consider their role in further work happening in the region, specifically with regards to the Lower Athabasca Regional Plan (LARP) and the work being conducted by the Regional Advisory Committee (RAC) to inform this regional plan. SEWGW still sees a role in pre-LARP and post-LARP planning but will need further direction and communication with government to clearly define this role. SEWGW has not yet received a response from government on the Dialogue document and attached information letter.

Look for the proposed SEWGW ToR at the September 23rd, 2009 General Members meeting where it will be presented for information and discussion.

## SWWGW & Sub Groups Updates

The Phase 2 Framework Committee (P2FC) is continuing work towards completing a recommendation for the Phase 2 Water Management Framework for the lower Athabasca River. With the recommendation due in December of this year, they are in the process of evaluating different management alternatives using the technical information supplied by SWWGW's task groups.

P2FC members participated in a two-day tour of the Peace-Athabasca Delta in early September, arranged by the committee's Wood Buffalo National Park representatives. The purpose of the tour was to better acquaint the P2FC members with the delta, including the study areas being assessed by the In-Stream Flow Needs Technical Task Group (IFNTTG).

The IFNTTG completed several studies over the summer, including the 2 year fish telemetry study and a study on dissolved oxygen levels in side channels and snags, of the lower Athabasca River.

They have an ongoing study relating to habitat of aquatic mammals in the delta, which will be completed in October.

The Socio-Economic Task Group (ETG) completed the field portion of the second phase of their Traditional Land Use Study during the summer months. The first phase of the study summarized available information on traditional land uses that could potentially be impacted by changes in water level in the lower Athabasca River. The second phase involved interviews with individuals from the First Nation and Métis communities in the region to fill in data gaps identified in the first phase. The information from both phases of the report will be used to support the P2FC in their decision making process.

The Water Requirements and Engineering Mitigation Task Group (WREM) has been providing information to the P2FC on estimates of water requirements and mitigation measures, and are currently working on refining indicators related to the amounts of storage needed, and the implications of various methods of achieving it. Once approved by SWWGW, the reports completed through the IFNTTG and ETG will be available on the CEMA website.

## CEMA

## Meeting Dates

**General Meeting**  
Dates: Sawridge Inn,  
in Fort McMurray

**Program Manager/Co-Chair/Management Committee Meetings:** Fort McMurray

**Management Committee Meetings:** Fort McMurray

September 23rd  
December 9th

October 20th

October 21st  
November 19th  
December 17th

\* Dates and locations are subject to change.

A complete list of Working Group meeting dates is available at

(780) 799-3947 | [www.cemaonline.ca](http://www.cemaonline.ca)

## Aboriginal Round Table (ART)

The Aboriginal Roundtable Youth and Elders Camp, from June 29 – July 4th in Anzac, united people together to initiate the process through greater awareness would be brought to the greater aboriginal community. This would provide the opportunity for the community to see the work that the ART is striving for in which the people may want to start working together with a common vision.

It was felt that this type of awareness required the right type of environment and with teachers from the local areas that would bring out the holders of this knowledge and also would instill pride in our people of the region. That is how the people of the land and the Elders were invited to the camp. This proved to be very successful and the teachers all want this type of camp to be an annual one for the region. We are all aware of how this type of camp may happen at the local level but this is the first one that brings the region together.

The group also felt that the need to raise the awareness of environmental issues and technical knowledge was required. The group went out to seek a partner that would provide these types of teachings. The group was fortunate to find an aboriginal group that was more than willing to take on this task. They went ahead to do this work without any compensation for their work except for their food. The ART camp in following one of their traditions, which is to feed all your visitors, were proud to offer this to their partners, the Indigenous Environmental Network(IEN).

The IEN as an aboriginal group were there to customize their teachings to the dynamics of the group. This can only be done through extensive knowledge about their work and the people that they are teaching. The environment proved to be the right stage to promote this type of work which sustains a non-threatening, comfortable, safe and friendly atmosphere that makes it ideal for learning.

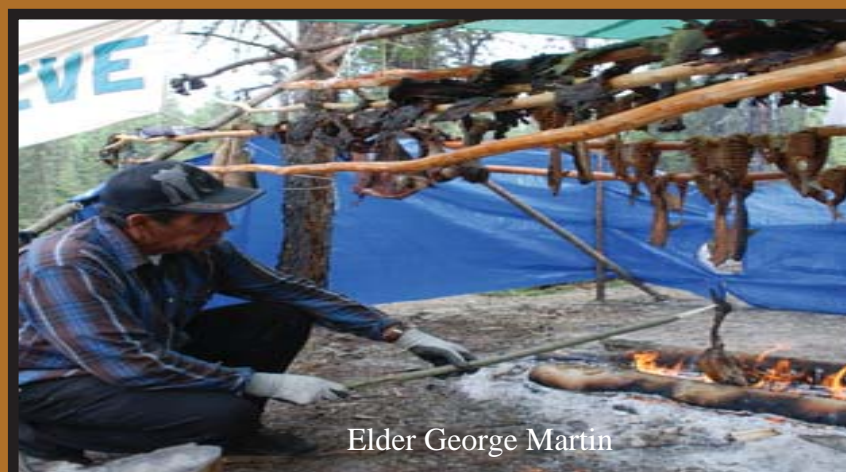
The ART and the IEN both agreed that the teachings would involve only, the very introductory level of training regarding environmental issues. The ART camp was a huge success and takes pride in being a pioneer to bring this type of opportunity to the Aboriginal people of this region where the Culture and Environmental issues take a priority.

The Camp dealt with the following specific goals:

- Reviving and retaining the Aboriginal Culture
- Teaching through the Elders
- Teaching through Aboriginal Environmental experts
- Working with CEMA to make this camp a success that will be an annual event for years to come
- Working with the Youth of the task group to assist with coordinating the camp and this involved:
  - i. Planning for the camp
  - ii. Coordinating the camp
  - iii. Implementing the camp
  - iv. Partnership at the camp
  - v. Plans for a yearly camp



Heather Bartlett



Elder George Martin

## CEMA News

### Staff News

In August, Alexis McIntyre, departed as the RWG Program Manager to attend University to complete her Masters Degree. Alexis was a member of the CEMA family for over a year and will be missed.



### Welcome Back Maggie

Margaret Luker returned to CEMA as SEWG Program Manager, after a year on maternity leave where she enjoyed time raising son Logan James Luker. Margaret and her husband Mike enjoyed it so much that they are expecting a little girl in mid-February. We all wish them congratulations!



### Happy 60th Birthday

On August 22, 2009, CEMA Executive Director, Glen Semenchuk, celebrated his 60th Birthday! The fun filled day included a BBQ, drinks and laughs with many of his family and friends!

When ask for a his diamond birthday wish..... Glen was quoted as says "Peace, Love, Joy and Happiness with in the CEMA Family."

### CEMA Softball Champs!

Members of the CEMA staff were the CHAMPIONS of the Fort McMurray Softball, "F" Division. After a gruelling 15 inning championship game, in the rain, under the lights, at the Thickwood softball pitch, the dream team were the best in the league for 2009! Congrats on a great season!



Andrew 'the tater' Rex; Alexis 'the can of corn' McIntyre; Heather 'the bunter' Bartlett & Kyle 'the K' Harrietha

### CEMA Staff & Positions

Glen Semenchuk	- Executive Director
Christine Kenning	- Office Manager
Bharati Naidu	- Executive Assistant
Lynette Whalen	- Bookkeeper
Andrew Rex	- Admin Assistant
Maragret Luker	- SEWG
Elizabeth Lee	- TMAC/NSMWG
Katherine Duffett	- SWWG
Kyle Harrietha	- RWG
Heather Bartlett	- RWG & TEK
Corey Hobbs	- Communications



Birthday Boy, CEMA Staff & Flat Stanley

## Updates On Working Groups and Sub-Groups

### Reclamation Working Group Hosts Workshop on Biodiversity at the Alberta Research Council

On September 9th and 10th the RWG hosted a workshop at the Alberta Research Council entitled "Biodiversity Reclamation in the Oil Sands Region: Current State & Next Steps." Biodiversity is prominent in regulation and regional strategies that govern the operations and closure of oil sands mines. The term "diversity" is heavily referenced in industrial approvals (21 times), the Regional Sustainable Development Strategy (1999), and the End Land Use Committee Report (1997) in the context of reclamation endpoints.

This workshop was attended by approximately 60 people including representatives from the Government of Alberta, the Government of Canada, Industry, Academia, Aboriginal Communities as well as experts from Australia and the United States. The workshop was chaired by RWG Co-Chairs Tanya Richens and Fred Kuzmic and the main topics addressed at the workshop were as follows:

1. Monitoring – what approach and at what scale?
2. How to ensure that planning in the oil sands with respect to biodiversity is in alignment with Government/Regulatory expectations.
3. Selecting appropriate indicators.
4. Retention of habitat patches as protected areas.

For the workshop the RWG invited experts that covered a wide range of expertise in reclamation work. Two experts from Australia were invited to deliver a session on their experiences with reclamation and biodiversity. The first speaker was Dr. Carl Grant, Environmental & Community Manager for WA Mining Operations with Alcoa of Australia, Nichols, Australian Environmental Management and Research Consultant, who delivered a presentation entitled, 'Linking Good Assessment and Good Practice Rehabilitation to Re-establish Biodiversity Following Mining.'



From Left to Right: Dr. Owen Nichols, Australian Environmental Management and Research Consultant; Dr. Carl Grant, Environmental & Community Manager for WA Mining Operations with Alcoa of Australia; Fred Kuzmic, RWG Co-Chair and Shell Reclamation and Research Team Lead; Tanya Richens, RWG Co-Chair and AENV Reclamation Approvals Coordinator; Buddy Dupuis, BWTG Co-Chair and Shell Environmental Specialist – Wildlife; and Elizabeth Crone, Associate Professor of Quantitative Wildlife Ecology at the University of Montana.

As well as our visiting experts there were also four presentations from those with expertise with the Alberta experience. Alberta Sustainable Resource Development (ASRD) representative Mr. Ted Nason delivered a presentation on Government of Alberta perspectives on biodiversity which included setting it in the global, national and provincial context, outlining Alberta Strategic Biodiversity Initiatives, and discussing Biodiversity and Oilsands Reclamation in particular. Buddy Dupuis, BWTG Co-Chair and Shell Environmental Specialist – Wildlife, delivered a presentation on 'Mining and the Importance of Biodiversity Reclamation as well as an overview of what led to this workshop being put together.

Dr. Brian Eaton, Program Manager with the Alberta Research Council (ARC) delivered a presentation on the biodiversity project that ARC has been conducting for RWG's Biodiversity and Wildlife Task Group (BWTG). The main goals of this project are to review ways of monitoring biodiversity in the oil sands region that specifically: allow an accurate representation of biodiversity; enable biodiversity to be measured over time at multiple extents/scales (reclaimed site, lease, region); use a Reference Condition Approach to evaluate the effectiveness of reclamation; allow a regional level assessment (intactness of species as well as sites in spatial context). And Deborah Simmons from SENES Consultants, with assistance from community coordinator Alice Martin, delivered a presentation entitled 'Biodiversity Traditional Knowledge in the Oil Sands Region' which is seeking to address aboriginal conceptions of biodiversity.

Following the presentation there was a lively panel discussion which included our two Australian guests, Dr. Carl Grant and Dr. Owen Nichols as well as Elizabeth Crone, Associate Professor of Quantitative Wildlife Ecology at the University of Montana and Dr. Jim Schiek, Executive Director of the Alberta Biodiversity Monitoring Institute.

On Day 2 of the workshop, under the guidance of Government of Alberta facilitator Rob Hagg, the participants broke out into four break-out sessions to address the questions put forward during the presentations the previous day. The RWG is in the process of developing a synthesis of the overall learnings of the workshop from the presentations and the workshop sessions and that report is expected in October 2009.

Over the next year, the RWG will be planning the development of a workplan to begin the process of developing a framework to address biodiversity. It will address broadly how to approach biodiversity assessment on the reclamation landscape, and recommend a pilot-scale monitoring program that incorporates both terrestrial and aquatic objectives and input from this workshop will be directly used to develop the workplan for the framework over the next year.

Many thanks are due to those who helped to organize the workshop including planning committee members Tanya Richens, Fred Kuzmic, Buddy Dupuis, Brett Purdy, Grant Klappstein, Theo Charette, Gillian Donald, Heather Bartlett, Kyle Harrietha, Andrew Rex, Carol Jones and Government of Alberta Facilitator Rob Hagg.

### Terrestrial Sub Group (TSG)

Terrestrial Sub Group (TSG) Insider Update – September 2009

The Terrestrial Sub Group is currently working to complete the 2nd Edition of the Guidelines for Reclamation to Forest Vegetation in the Athabasca Oils Sands Region (The Revegetation Manual) and has approved the second draft version of this manual at the most recent TSG meeting in early September. In addition to receiving many comments from the member organizations of RWG and TSG, the Sub Group has contracted a Technical Peer Reviewer to provide a scientific assessment of The Revegetation Manual. The TSG plans to submit the final manual to the general membership in December of 2009.

In addition to updating The Revegetation Manual, the TSG is charged with the production and continuing update of the Land Capability and Classification System for Forest Ecosystems in the Oil Sands manual (LCCS). As part of this process, the TSG has worked to verify the assumptions used in this system and has concluded that there is not a strong link between the LCCS and site index on reclaimed lands; the LCCS does however provide other information which is valuable to the process of reclamation upland sites. By way of the Management Committee of CEMA, the findings and recommendations of the Sub Group were provided to the Government of Alberta.

The Hydrocarbon Task Group of the TSG is in the process of finalizing the details of a research study to investigate petroleum hydrocarbons (PHCs) in mineral soil (Cg) located beneath peat deposits in the Athabasca Oil Sands Region to evaluate their potential for degradation and toxicity to plants and soil fauna. This project is a follow-up to earlier studies funded by HCTG on lean oil sands and tar ball toxicity and degradation and will provide data to support development of salvage and placement guidelines for soils containing indigenous PHCs.

The Best Management Practices Task Group (BMPTG) is entering the preparation phase of a draft document describing Best Management Practices (BMPs) Guideline for Soil Salvage and Placement for Oil Sands Mines in the Regional Municipality of Wood Buffalo. Since January 2009, the BMPTG has held eight meetings to discuss and evaluate the BMPs to incorporate into the guideline and expects to produce a finalized recommendation in early 2010.

The Plot Network Task Group is in the process of refining the objectives of the long term monitoring plot network and is evaluating the methods and protocols utilized on the network to ensure the data collected is supporting the objectives. The rationale defining the objectives and documenting the protocols of the plot network is underway and fieldwork for the 2009 season is to be completed in September.

The Forest Productivity Task Group is developing recommendations for improving upon the Timber Productivity Rating Table and Forest Resource Plan requirements of oil sands mine operators. A letter of support from the FPTG will be provided to RWG in late September for distribution to operators to provide an update on the timeline of the development of the recommendations. The FPTG is requesting that the improvements to the Timber Productivity Rating Table and Forest Resource Plan be completed after the submission of the 2011 Closure Plans.

### End Pit Lakes (EPLMTG)

The End Pit Lakes Modelling Task Group (EPLMTG) recently drafted an RFP to undertake Phase III modelling. The EPLMTG will be working with the world's leading model developers to significantly improve the functionality of our models and enable us to better predict the behavior of pit lakes. This RFP went out on September 18th and the winning bid will be selected in mid-October.

**We would also like to thank  
the Members, MC and  
CEMA staff for their assistance in this  
production.**

### Aquatics Sub Group (ASG)

The Aquatics Sub-Group is the amalgamation of the Wetlands and Aquatics Sub-Group (WASG) and the End Pit Lakes Sub-Group and it held its inaugural meeting on August 18th, 2009 and its first in person meeting on September 14th and 15th. At the August 18th meeting the ASG elected two new Co-Chairs: former WASG Co-Chair Christine Daly, the Wetland Reclamation Research Coordinator at Suncor Energy, and former EPLSG Co-Chair, Roderick Hazewinkel, from Alberta Environment. Many thanks to Xiaoying Fan from Suncor Energy for her work as Chair of the End Pit Lakes Sub-Group for the past two years.

At the September meeting the ASG was pleased to have a comprehensive series of presentations by CEMA Member Ducks Unlimited in which they gave an overview of their Western Boreal Program Overview, their work on Minimal Ecological Management and their background in working on the Hydrologic Design of Wetlands. ASG also had a presentation on risk assessment by Dr. Warren Kindziarski from the University of Alberta in the context of the work on the planned next edition of the Wetlands Manual.

The Technology Transfer Task Group (TTTG) of the ASG is planning its Technology Transfer session for the week of November 9th with leading oil sands researchers and this will kick-start a series of meetings to transfer research knowledge on wetlands into practical application for reclamation in the oil sands region.

ASG is in the initial stages of finalizing its plan for the next edition of the End Pit Lakes Technical Guidance Document (EPLTGD). A review of the previous edition was recently completed by CH2MHill and this document will form the basis for developing the Table of Contents and structure that will be put in place for the development of the next edition of the EPLTGD which is currently scheduled for completion in 2012. It is expected that the structure agreed to for the development of the EPLTGD will guide the development of the next edition of the Wetlands Manual as well.

### Rec Cert Task Group (RCTG)

The Reclamation Certification Task Group (RCTG) of RWG has recently finalized a Framework for Reclamation Certification Criteria and Indicators for Mineable Oil Sands which was led by Facilitator, Mike Poscente from Opabin Environmental. This Framework recommends that government and industry identify standards, criteria, and measures in advance of the certification process. This Framework received approval at the RWG on September 1st, 2009 and it is expected that the CEMA Board will vote on this Framework at the December General Meeting after an initial presentation in Fort McKay on September 24th.

The Closure Coordination Task Group (CCTG) of RWG recently had its mandate letter approved by the RWG and its mandate is to provide opportunities for oil sands companies and stakeholders to discuss and address closure coordination. Through a workshop, the CCTG will invite closure and reclamation teams to identify the main opportunities and challenges related to landscape integration and brainstorm on projects to address these challenges, expectations and opportunities. From this input, the CCTG will create and recommend a renewed mandate & workplan to RWG. The timeline for the current mandate includes a tentative date for a workshop of November 19th, 2009 with a renewed mandate letter and workplan to be presented to RWG on February 1st, 2010.