



CSEB Newsletter Bulletin SCBE

VOLUME 67, ISSUE 2, 2010

CSEB Website http://www.cseb-scbe.org

Webmaster: Shawn Martin • Email: shmartin@eba.ca

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UBC co-op student to Metro Vancouver

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NATIONAL EXECUTIVE 2010

President: Brian Free (2010) (Work) 780-427-7765; (Fax) 780-422-5120 (E-mail) bfree@cseb-scbe.org

1st Vice-President: Anne Wilson (2010) (Work) 867-669-4735; (Fax) 867-873-8185 (E-mail) anne.wilson@ec.gc.ca

2nd Vice-President: Vacant

Secretary/Treasurer: Karen March (2010) (Work) 902-453-3115; (Fax) 902-454-6886 (E-mail) kmarch@dillon.ca

Newsletter Editor: Gary Ash (Work) 780-930-8666; (Fax) 780-483-1574 (E-mail) gash@golder.com

Past-President (Webmaster): Shawn Martin (Work) 403-203-3305 Ext. 843 (E-mail) shmartin@eba.ca

Membership: Gary Ash (Work) 780-930-8666; (Fax) 780-483-1574 (E-mail) gash@golder.com

•Term of Directorship

REGIONAL DIRECTORS

Atlantic: Patrick Stewart (2014) (Work/Fax) 902-798-4022 (E-mail) enviroco@ns.sympatico.ca

Québec: Vacant

Ontario: Wendy Thomson (2012) (Home) 905-723-9217 (E-mail) wendy@exworld.org

Manitoba: William Paton (2010) (Work) 204-727-9783; (Fax) 204-728-7346 (E-mail) patonw@brandonu.ca

Saskatchewan:

Alberta: Joseph Hnatiuk (2014) (Work) 403-524-1147; (Fax) 403-524-1148 (E-mail) hnaj@shaw.ca

Sheri Dalton (2012) (Work) 780-479-9262; (Fax) 780-474-1933 (E-mail) sdalton@concordia.ab.ca

British Columbia: Vacant

Territories: Anne Wilson (2010) (Work) 867-669-4735; (Fax) 867-873-8185 (E-mail) anne.wilson@ec.gc.ca

REGIONAL CHAPTERS

Newfoundland & Labrador Contact: Pat Ryan (Home) 709-334-2962 (E-mail) patrickr@mun.ca

Atlantic Chapter Contact: Pat Stewart (Work/Fax) 902-798-4022 (E-mail) enviroco@ns.sympatico.ca

Ontario Greater Toronto Area Chairperson: Wendy Thomson (Home) 905-723-9217 (E-mail) wendy@exworld.org

Manitoba Contact: Douglas J. Ramsey (Work) 204-988-0512; (Fax) 204-988-0546 (Cell) 204-792-3492 (E-mail) dramsey@seacorcanada.com

Saskatchewan Chairperson: Robert Stedwill (Home) 306- 585-1854 (E-mail) rjstedwill@live.ca

<u>Vice-chair: Jeff Hovdebo</u> (Work) 306-780-8107; (Fax) 306-780-8722 (E-mail) Jeffery.Hovdebo@dfo-mpo.gc.ca

Alberta
Contact: Sheri Dalton
(Work) 780-479-9262; (Fax) 780-474-1933
(E-mail) sdalton@concordia.ab.ca

British Columbia - Pacific Chapter

Chair: Vacant

Secretary: Diane Urban (E-mail) durban27@shaw.ca

<u>Treasurer</u>: Jeff Matheson (Work) 604-685-0275; (Fax) 604-684-6241 (E-mail) jmatheson@eba.ca

Membership: Vacant

Chapter Webmaster: Ajay Pradhan

Territories
Contact: Anne Wilson
(Work) 867-669-4735; (Fax) 867-873-8185
(E-mail) anne.wilson@ec.gc.ca

CSEB NEWSLETTER 2010

Vol. 67, Number 2 Summer 2010

The Canadian Society of Environmental Biologists Newsletter is a quarterly publication. The Newsletter keeps members informed of the Society's activities and updates members on the current affairs and advances in the field of environmental biology. This publication draws together the widely diverse group of Canadian environmental biologists through a national exchange of ideas. Members are invited to contribute papers, photos or announcements that are of a national biological and environmental interest. Letters to the editor are welcome. This is a volunteer non-profit organization and we rely on your participation to make the newsletter a productive forum for ideas and discussion.

All business correspondence, changes of address, undeliverable copies and membership applications should be sent to: CSEB National Office, P.O. Box 962, Station F, Toronto, ON., M4Y 2N9. Editorial correspondence: Gary Ash, Editor, e-mail: gash@golder.com

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LE BULLETIN de la SCBE 2010

Vol. 67, Numéro 2 Éte 2010

Le Bulletin de la SCBE est une publication trimestriel de la Société Canadienne des Biologistes de l'Environnement. Le Bulletin informe les membres des activité de la Société sur événements courant ainsi que les progrès qui font en sciences de l'environnement. Par un échange d'idées au niveau national, cette publication intéresse un groupe très diverssifié d'environnementalistes Canadien. Les membres sont invités a contribuer des articles, photos (noir et blanc) ou des messages qui sont d'intérêt nationale en sciences biologiques et environnementales. Les lettres à l'editeur sont bienvenues.

Tout la correspondence d'affaires, y compris les abonnements, les changements d'adresse, les exemplaires retournés et les formulaires: CSEB National Office, P.O.Box 962, Station F, Toronto, ON, M4Y 2N9. Les lettres à l'editeur: Gary Ash, Editor, courriel: gash@golder.com

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The Canadian Society of Environmental Biologists



CSEB OBJECTIVES

The Canadian Society of Environmental Biologists (CSEB) is a national non-profit organization. Its primary objectives are:

- to further the conservation of Canadian natural resources.
- to ensure the prudent management of these resources so as to minimize environmental effects.
- to maintain high professional standards in education, research and management related to natural resources and the environment.

OBJECTIFS de la SOCIÉTÉ

La Société Canadienne des Biologistes de l'Environnement (SCBE) est une organisation nationale sans but lucratif. Ses objectifs premiers sont:

- de conserver les ressources naturelles canadiennes.
- d'assurer l'aménagement rationnel de ces ressources tout en minimisant les effets sur l'environnement.
- de maintenir des normes professionnels élevés en enseignement, recherche, et aménagement en relation avec la notion de durabilité des ressources naturelles et de l'environnement, et cela pour le bénéfice de la communauté.

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NATIONAL News

PRESIDENT'S Report

Submitted by Brian Free, CSEB President

There is no shortage of disheartening news in the media about the environment.... The leaking oil well off the Louisiana coast is a major disaster that will have serious impacts on the regions' sea life and coastal ecosystems for a long, long time. Not all is doom and gloom, however. As I was out for a walk with some friends during my lunch hour today, one of them - a biologist, of course - pointed out a peregrine falcon as it quickly flew by. It was nice to be reminded of the success story in the recovery of this endangered species... at least for now!

I am gratified to see the strong rate of renewal of memberships this year. As a voice and network for Canadian biologists, CSEB continues to serve a very useful role for our professional community. Let your colleagues know that you're a CSEB member and direct them to our website for more information.

Planning for the annual meeting this fall in Toronto is well underway. We've received some good input from members, with suggested topics ranging from invasive species and habitat restoration to regulatory issues, such as federal environmental assessment and new Ontario legislation related to toxics reduction and water conservation. If you would like to contribute in any way to conference planning, please get in touch with me directly!

Whether you are busy in the office or in the field or travelling with family on vacation, I hope you have a very enjoyable summer!

Brian Free President bfree@cseb-scbe.org

CSEB LETTER to CEAA

Peter Sylvester, President May 6, 2010 Canadian Environmental Assessment Agency Place Bell Canada 160 Elgin Street, 22nd Floor Ottawa, Ontario K1A 0H3

Dear Mr. Sylvester:

I understand that there is a "7-year review" of the Canadian Environmental Assessment Act (CEAA) underway. I am writing to learn more about this review.

The Canadian Society of Environmental Biologists is a nonprofit society, whose primary focus is to further the conservation and prudent management of Canada's natural resources based on sound ecological principles. Members are professionally trained biologists and biology students. CSEB currently has over 200 members, found throughout the workforce and in all Canadian provinces and territories. We believe that the federal environmental assessment process is a very important safeguard for the environment and we wish to participate in the CEAA review.

Please provide me with details concerning this review, including the nature of the review, current status, opportunities for stakeholder and public input, timelines and important dates, and any documents or other information that will help inform our comments.

Thank you. Sincerely,

Brian Free President, CSEB bfree@cseb-scbe.org (780) 427-7765

RESPONSE:

Canadian Environmental Assessment Agency Agence canadienne

sment Agency d'évaluation environnementale

President

Président

160 Elgin St., 22nd floor Ottawa ON K1A 0H3 160, rue Elgin, 22º étage Ottawa ON K1A 0H3

MAY 1 2 2010

Mr. Brian Free President

Canadian Society of Environmental Biologist

PO BOX 962

Toronto ON M4Y 2N9

Dear Mr. Free:

Thank you for your interest in the upcoming review of the Canadian Environmental Assessment Act (the Act).

The seven-year comprehensive review of the provisions and operation of the Act is a statutory requirement to be undertaken by a committee of Parliament. The legislation requires that this committee will begin its work in June 2010 and shall submit its report within one year. Therefore, this review is not led by the Canadian Environmental Assessment Agency or the Minister of the Environment. The review has not yet begun, and we do not know how the committee intends to proceed.

It is likely that review will be conducted by the Standing Committee on Environment and Sustainable Development. You may wish to consult their web site to learn of any announcements:

(http://www2.parl.gc.ca/CommitteeBusiness/CommitteeHome.aspx?Cmte=ENVI &Language=E&Mode=1&Parl=40&Ses=3).

I appreciate your interest and support of environmental assessment.

Yours sincerely.

Peter Sylveste

JOINT ENGO LETTER TO CANADIAN SENATE

June 1, 2010

Honourable Senators Parliament Buildings Ottawa, Ontario K1A 0A6

Re: Save Canada's environmental laws – do not accept the gutting of environmental assessment through the budget bill

Honourable Senators:

We represent fourteen conservation and community organizations working at the national level and in regions across Canada, who are concerned about the future of environmental assessment. We are writing to request that, as members Canada's Parliament soon to review Budget Bill C-9, the *Jobs and Economic Growth Act*, you stand firm to defend Parliamentary tradition by refusing to pass the Budget as it stands, with non-budgetary measures buried inside it. If the Bill is approved at third reading by the Commons in its current form – merely in order to avoid an election and in spite of the objections of all opposition parties representing a majority in that House – we ask that you use your unique position within our system to defend Parliament's prerogative and the public's right to a full, proper, and separate legislative consideration of the provisions aimed at weakening environmental assessment contained in the Bill. We ask that the Senate sever these – parts 19 and 20 – from the Bill.

The provisions in parts 19 and 20 are clearly aimed at gutting the *Canadian Environmental Assessment Act* ("*CEAA*"), which requires environmental assessments for development projects such as tar sands mines, oil and gas pipelines and nuclear power plants. These provisions have nothing whatsoever to do with the Budget, and have no business being there. The changes include:

- Allowing the Minister of the Environment to avoid doing detailed environmental assessments on large projects by breaking the
 projects up into smaller pieces in a major move that undoes the Supreme Court of Canada's recent decision that this is illegal.
- Exempting a host of major projects from environmental assessment, paving the way for projects to go ahead that may cause significant environmental damage, without any thought at all given to the mitigation of those risks.
- Handing over public panel reviews for pipeline and nuclear energy projects among the most environmentally problematic projects of all from the Canadian Environmental Assessment Agency (which has specialized expertise in environmental assessment) to the National Energy Board and Canadian Nuclear Safety Commission (which have little experience in conducting environmental assessments),

CEAA and its regulations were developed only after years of public and stakeholder review, including review by the Environment Minister's own multi-stakeholder Regulatory Advisory Committee. Any one of these changes, proposed to be made without any public or stakeholder consultation, would represent a significant setback for sustainability and environmental protection. Combined together, they set environmental assessment practice back many years at just the time when Canadians are more conscious than ever about the need for rigorous environmental protection.

By burying these significant changes to environmental assessment deep within a towering, 900-page budget bill, the government has deliberately sought to bypass the will of Parliament, which set out a legal requirement for a comprehensive seven-year review of *CEAA* that is slatted to begin by June 2010. Hiding these significant changes from the serious Parliamentary and public scrutiny they require is harmful to the principles of good and transparent government, and every member of Parliament – whether in the Senate or in the other chamber – should be prepared to stop this end-run around democratic process. It happened in last year's budget with amendments to *CEAA* and the *Navigable Waters Protection Act*, eliminating thousands of assessments aimed at ensuring development is sustainable. You should not permit it to happen again.

We strongly believe that it is undemocratic for the government to gut environmental assessment law through the budget process. We therefore urge the Senate to separate Parts 19 and 20 – the environmental assessment provisions – from Bill C-9 with the direction that these amendments be set aside for consideration in the upcoming comprehensive seven-year review of the *Canadian Environmental Assessment Act*, which is required by *CEAA* to begin by June. This review is the best forum to develop legislative proposals to reform *CEAA* to ensure that it is effective in addressing key priorities such as climate change and the protection of the environment. We would be pleased to meet with you or your staff to discuss our request for you to help protect Canada's environment by stopping Canada's environmental assessment law from being undermined. The government's proposal, if passed by the Commons, is one that clearly requires the sober second thought that your chamber is constitutionally intended and entitled to carry out. We look forward to hearing from you.

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Sincerely

Josh Paterson, Staff Lawyer West Coast Environmental Law Vancouver, British Columbia

Jamie Kneen, Co-Manager MiningWatch Canada Ottawa, Ontario

Brian Free, President

Canadian Society of Environmental

Biologists

Carolyn Campbell, Conservation

Specialist Alberta Wilderness Association

Calgary, Alberta

Roberta Frampton Benefiel,

Vice-President

Grand Riverkeeper Labrador, Inc. Happy Valley-Goose Bay, Labrador

Northern Branch of the Steelhand

Society of BC

Terrace, British Columbia

Pat Moss

Friends of Wild Salmon Smithers, British Columbia

Kindly direct responses care of: Josh Paterson Staff Lawyer West Coast Environmental Law 200-2006 W 10th Ave Vancouver BC V6J 2B3

tel: 604-684-7378 fax: 604-684-1312

mail: jpaterson@wcel.org

John Sinclair

Resource Conservation Manitoba,

Winnipeg, Manitoba

Peter Karwacki, President Les amis de la riviere Kipawa

Ottawa, Ontario

J. Denys Bourque, R.P.F. Les Intendants du Madawaska Saint-Jacques, Nouveau-Brunswick

Skeena Watershed Conservation

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Jennifer Rice

T. Buck Suzuki Environmental

Foundation

Prince Rupert, British Columbia

Dieter Wagner

Douglas Channel Watch

Terrace, British Columbia

Julia Hill

North West Watch

Terrance, British Columbia

cc: Prime Minister

Minister of Finance Minister of the Environment

Minister of Natural Resources

Parliamentary Secretary to the Minister of Finance

Parliamentary Secretary to the Minister of the Environment

Parliamentary Secretary to the Minister of Natural Resources

Leader of the Official Opposition

Leader of the New Democratic Party of Canada

Leader of the Bloc Québécois Leader of the Green Party of Canada

Clerk of the Standing Committee on Finance (House of Commons)

Standing Committee on Environment and Sustainable Development (House of Commons)

Clerk of the Standing Committee on Environment and Sustainable Development (House of Commons)
Official Opposition Critics for Finance, Environment & Energy, Natural Resources and Aboriginal Affairs

NDP Critics for Finance, Environment, Natural Resources & Energy, Fisheries & Oceans, and First Nations,

Métis and Inuit Affairs

Bloc Québécois Critics for Finance and Environment

This letter has been reformatted to fit more efficiently in the newsletter*

REGIONAL News

BRITISH COLUMBIA News

Visit with Dr. Tom Northcote

Submitted by Gary Ash, CSEB Member

On our travels back from Vancouver this month, my wife Evelyn and I stopped off to visit Tom and Heather Northcote at their home in beautiful Summerland BC. Dr. Northcote, who retired as a professor at UBC, is one of the founding members of CSEB (formerly Canadian Society of Wildlife and Fisheries Biologists), and a long-time supporter of CSEB. Tom is a limnologist and fisheries scientist with over 325 refereed publications, as well as numerous papers published in the CSEB quarterly newsletter over the years. He also was a guest editor for the 2007 Vol. 64 Issue 1.CSEB Newsletter/Bulletin entitled "Limnology - The Publicly unknown Science of Inland Waters: Overviews on Some of Its Important Topics."

Arriving at the Northcote residence in mid afternoon, we had an enjoyable chat sitting on their patio overlooking Heather's lovely garden and a panoramic view of Okanagan Lake (Photo 1).



Photo 1: View from Northcote's patio

We sat on the patio and enjoyed some fresh cherries and reminisced with Tom and Heather about Tom's work and early years of the CSEB (Photo 2). Later we enjoyed a glass of Tom's local vintage wine (well maybe it was more than one glass!).



Photo 2: Left to right - Heather, Tom and my wife Evelyn

While Heather prepared dinner, Tom took us up to the high trestle over nearby Trout Creek (Photo 3), which provided a spectacular view of the surrounding orchards, hills, and view of the lake.



Photo 3: Gary Ash and Tom Northcote at Trout Creek

We enjoyed an excellent BBQ dinner with Tom and Heather, who had invited us to stay the night, which allowed us to sample some more of Tom's wine.

It was extremely enjoyable to be able to catch up with Tom and Heather, and to enjoy their fantastic hospitality. We look forward to hopefully seeing them again when they plan to travel to Edmonton in late October.

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ALBERTA News

Submitted by Brian Free, CSEB President

Spring rains produced an optimistic outlook that we would enjoy some relief from the dry conditions we've been experiencing over the past few years. However, intense, summer rains have recently produced severe flooding in southern Alberta and Saskatchewan. It seems we can never get the right balance.... increased variability due to climate change?

Also related to weather, it appears that our past winter produced sufficiently cold temperatures at the right time and for the right duration to knock back the population of mountain pine beetle that has been spreading through our pine forests in the western part of the province. This will be good news for our forest industry.

Following up on my report in our Spring newsletter, Syncrude has been convicted in the death of more than 1600 ducks that had landed in the oilsands company's tailings pond in April 2008. The judge concluded that they did not do enough to ensure their deterrent system was deployed to scare away approaching waterfowl. Syncrude was found guilty of charges under both provincial and federal legislation. We still await sentencing. It will be interesting to see what implications this conviction will have over the long term.

And further to the report on the status of Alberta's grizzly bears, the Government of Alberta has recently designated this species as "threatened." This classification means that the species is likely to become endangered if limiting factors are not reversed. A suspension of the grizzly bear hunt will continue, but other sources of mortality, such as train traffic in the mountain parks and habitat modification throughout the grizzlies' range, will be more difficult to deal with.

In other wildlife news, the Cadomin Cave, an interesting and popular feature of Whitehorse Wildland Provincial Park near Hinton has been closed until further notice. There is concern that a fungal disease, known as white-nose syndrome, could be introduced into the cave's bat population. This disease has wiped out many bat colonies in the United States and eastern Canada. The fungal spores can be carried by people, even biologists!

If any other Alberta members would like to contribute to this quarterly Alberta report, please contact Brian Free or Gary Ash. I'm sure there are many more stories to tell!

SASKATCHEWAN News



Proposed Amendments to *The Wildlife Habitat Protection Act*

Reprinted from Saskatchewan Government Website

The Government of Saskatchewan has embarked on a modern, science based approach to evaluate and manage ecological values on Crown land designated under *The Wildlife Habitat Protection Act (WHPA)* in the southern surveyed portion of the province. *The Wildlife Habitat Protection Act* protects approximately 1.4 million hectares (3.5 million acres) of Crown land by preventing significant alteration, while allowing compatible traditional uses, such as grazing. Initially passed in 1984, *WHPA* was designed to conserve wildlife habitat. When lands were originally identified for protection, they were primarily assessed for importance as habitat for big game animals. Since then, emphasis has shifted to consider additional ecological values such as rare or endangered species.

This current review and approach considers a range of modern tools to manage conservation values on land beyond Crown ownership. As part of the new land management approach, *WHPA* is proposed to be updated to include ecological, social, and economic values, in addition to wildlife habitat.

It is also proposed that the penalty provisions be increased so that they provide an appropriate deterrent to those who would negatively impact these lands. In the case of an individual, fines go from a maximum of \$2,000, and up to \$200 a day for each day or part of a day the infraction continues, to a maximum fine of \$100,000, and up to \$100,000 a day for each day the infraction continues. In the case of a corporation these fines go from a maximum \$50,000 and \$5,000 per day to a maximum \$500,000 per day.

At the same time *The Conservation Easements Act* is also being amended to enhance its use by Environmental Non Government Organizations, increase the penalty provisions and enable a new type of easement, the Crown Conservation Easement. These new easements will enable the Crown to place appropriate restrictions on lands prior to sale to ensure protection of the ecological values of land is maintained through time, regardless of land ownership.

The review of lands designated under *WHPA* will use a newly-developed Crown Land Ecological Assessment Tool. This computer model is being used to assess and identify lands that have a low ecological value and can be sold

outright, lands that have a moderate ecological value and may be sold subject to a Crown conservation easement to protect that value, and lands that have a high ecological value that will be retained by the Province and managed under revised provisions of *WHPA*.

Once completed, this approach may be applied to other unprotected Crown lands in southern Saskatchewan that have not already been assessed for their ecological value. However, it is important to note that the majority of lands currently protected through *WHPA* will continue to be protected either through a Crown conservation easement or by remaining within the Act. In addition any lands protected under other legislation or policies are not going to be considered in this approach and will remain protected. For example, Provincial Parks, Ecological Reserves and Fish and Wildlife Development Fund Lands will not be included in this approach.

This new program seeks to balance the protection of natural ecological values with the desires of potential purchasers, who are often long term lessees and stewards of the land who have expressed interest in acquiring these lands that at present are not generally available for sale.

Results-Based Regulations

Saskatchewan is adopting a new, results-based model for environmental regulation that will improve protection of the environment, while promoting innovative new tools in environmental management.

The current regulatory regime was developed in the early to mid-1970s to address industrial point source pollution and unregulated resource harvest. The regulatory toolkit consisted almost entirely of prescriptive legislation and regulations that directed agency inspections and enforcement when contraventions were identified.

» November 30, 2009 - Government of Saskatchewan Enhances Environmental Protection

Environment Minister Nancy Heppner introduced a new act and amendments to two others that will significantly boost environmental protection in Saskatchewan, while also encouraging responsible economic development in the province. http://www.gov.sk.ca/news?newsId=1428d01c-cd97-42ce-9dc7-79e078b08af7

» Saskatchewan Environmental Code Information Session January 2010

The following link will take you to the presentations and information provided at the Saskatchewan Environmental Code Information Sessions in January 2010: http://www.environment.gov.sk.ca/Default.aspx?DN=d78a4799-5842-4c3c-83ad-db71d9610170

Setting the Stage for a New Framework

On November 30, 2009, Environment Minister Nancy Heppner introduced to the provincial legislature a proposed new act and amendments to two others. *The Environmental Management and Protection Act*, 2009, along with amendments to *The Environmental Assessment Act* and *The Forest Resources Management Act* set the stage for the adoption of a results-based environmental regulatory framework for Saskatchewan.

The technical summary documents listed below for each piece of legislation provide a detailed description of how the ministry proposes to amend the acts.

The Forest Resources Management Act
The Environmental Assessment Act
The Environmental Management and Protection Act
News release on proposed new and amended acts.

Next Steps

The Ministry of Environment will move forward on a number of initiatives, including:

- Developing a Saskatchewan Environmental Code that will provide for standards and practices that will set the framework for improved environmental management;
- Reorganizing the ministry to better deliver the requirements of results-based regulation;
- Providing an electronic platform for environmental information and program delivery, including webbased environmental applications, compliance and reporting. This will facilitate a streamlined application process and transparency in the ministry's reporting and collaborative decision-making processes; and
- Continuing to engage the public and stakeholders in consultation as the design and implementation of the new regulatory framework are developed.

The Ministry of Environment contracted with Clifton Associates Ltd. of Regina to provide a comprehensive review of environmental regulation in Saskatchewan. The ministry has reviewed the Clifton Associates report and recommendations. You can find the ministry's response at http://www.environment.gov.sk.ca/adx/aspx/adxGetMedia.aspx?DocID=8a0c7468-37a4-45f6-82e1-95d4302b7793 &MediaID=1586&Filename=Ministry's+Response+Apr il+2009.pdf&l=English

The Consultant's Report

Clifton Associates was asked to provide a review of Saskatchewan's environmental regulation, including:

- Reviewing the current regulatory model:
- Undertaking a review of the current legislation;
- Benchmarking Saskatchewan's regulatory frame work against current models in other jurisdictions (Ontario, Manitoba, Alberta and British Columbia);

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- Undertaking a consultation process; and
- Providing a recommended implementation plan.

The final Clifton Associates report can be found at http://www.environment.gov.sk.ca/adx/aspx/adxGetMedia.aspx?DocID=06c78dfc-cbce-4a32-b16d-47a1a052dfd3&MediaID=1584&Filename=Report+and+Recommendations+February+2009.pdf&l=English

Feedback from Round 2 Consultations

In May and June 2009, the Ministry of Environment held a second round of consultations on the results-based environmental regulation initiative, engaging representatives from a wide range of industry, professional, community and non-governmental groups. The goals of the second round of consultations were to provide an overview of the general direction the ministry is proposing for the implementation of results-based regulation and to generate discussion of the policy directions of proposed amendments to The Environmental Management and Protection Act, 2002, The Environmental Assessment Act and The Forest Resources Management Act. You can find a copy of the feedback report at http://www.environment.gov.sk.ca/adx/aspx/adxGetMedia. aspx?DocID=9309edc3-f4ed-4924-82dd-466b8f5edcec&M ediaID=1956&Filename=Round+2+Stakeholder+Cosultati on+Report+September+2009.pdf&l=English

The policy considerations paper that was distributed to stakeholders can be found at http://www.environment.gov.sk.ca/adx/aspx/adxGetMedia.aspx?DocID=c38aa7a5-5877-4097-afb2-8211e0bb6779&MediaID=1690&Filename=Consultation+Backgrounder+-+May+2009.pdf&l=English and the PowerPoint presentation that was used at the consultation meetings can be found http://www.environment.gov.sk.ca/adx/aspx/adxGetMedia.aspx?DocID=0c49b2d9-4986-47c8-93ef-58c08863caf9&MediaID=1691&Filename=MOE+Consultations+Round+2.pdf&l=English

Feedback from Round 1 Consultations

As part of the review of the current environmental regulatory framework, Ministry of Environment staff and consultants held 18 meetings with 74 stakeholder organizations during the fall and winter of 2008. You can find a copy of the feedback report at http://www.environment.gov.sk.ca/adx/aspx/adxGetMedia.aspx?DocID=6560a431-4e8a-4884-8680-26a2aa87f792&MediaID=1563&Filename=Stakehold er+Consultation+Report+January+2009.pdf&l=English

Feedback from You

We are interested in hearing what you think are the significant issues, challenges and solutions as we move forward to develop a results-based environmental regulatory framework. Send your feedback to RBRFeedback@gov.sk.ca

MANITOBA News

Water Supply Is Putting Canadian's Health And Economy At Risk

Submitted by Dr. W. Paton, CSEB Manitoba Regional Director

In a recent press release from The Canadian Press, a group of "high-ranking civil servants from several departments" have been studying national water issues and warn "murky information about the country's water supply is putting Canadian's health and economy at risk." This conclusion appeared in an unpublished federal report. Some quotes as published in the Brandon Sun were:

"As Canadian freshwater comes under increasing stress, decisions about this natural resource will need to be made with a more complete understanding of its availability and how that is expected to change over time."

"Decisions are currently being made with incomplete information on some of the most fundamental aspects of water availability."

For those involved in freshwater quality and aquatic biology issues on the Prairies, these are not new revelations. Last summer we had yet another major cyanobacterial bloom in Lake Killarney south of Brandon. This bloom was accompanied by a major fish-kill, which is usually a winter phenomenon when oxygen limitation arises under the ice.



The major organism present in the bloom was *Aphanizomenon flos-aquae*. Indeed, this bluegreen is the most common bloom organism in the shallow alkaline lakes in southern Manitoba.



In December, I returned from a half-sabbatical in Scotland where most of my time was spent at the University of Stirling and the University of Dundee. At the new University of Stirling, I was housed in the Department of Environmental and Biological Sciences. This was a truly interdisciplinary environment with a wide spectrum of biologists, geologists and physical geographers with some excellent integrated undergraduate courses. I was visiting with Drs. Andrew Tyler and Peter Hunter. Andrew's speciality is remote sensing and his work from a specially equipped aircraft in Britain and Europe has, I think, even more significance for Canada with its huge spatial scales. Using this aircraft system, extensive distances can be covered and the technology allows determination of algal composition of blooms, stressed trees in forests, etc. (Davids and Tyler, 2003; Tyler et al., 2006; Hunter et al., 2008a; Hunter et al., 2008b). The federal and Manitoba governments have committed to cleaning up Lake Winnipeg. What better way to be able to assess continually the status of such a large water body?

My time at the University of Dundee was spent in the laboratory of Dr. Geoff Codd. Geoff has a very impressive research output on the cyanobacterial toxins, their identification, localization, quantification and impacts on humans, livestock and wildlife. His group has also evaluated several drinking water treatment techniques and their effect on removal of cyanobacterial toxins. More recently, he has been examining the production of the analogue of the essential amino acid alanine, B-methylaminoalanine (BMAA). This amino acid is produced by many blue-green genera and has been linked to human neurogenerative disease (Metcalf and Codd, 2009). Most importantly, it can also accumulate in the food chain. A very thorough and fascinating account of the linkage of cyanobacterial BMAA to amyotrophic lateral sclerosis, Alzheimer's and Parkinson's disease can be found in a recent symposium article (Bradley and Mash, 2009). This recent research follows up on original studies on the neurological health of the Chamarro people of Guam and its linkage to the blue-green Nostoc which is symbiotic with the indigenous cycads. The Chamarro people made flour from the cycad seeds, which also contained *Nostoc* and BMAA.

The other valuable knowledge acquired at the University of Dundee was that the southern prairie blue-green *Aphanizomenon flos-aquae* does not produce a peptide microcystin-like liver toxin but rather cylindrospermopsin

(an alkaloid) and a saxitoxin (alkaloid) nerve poison related to the shell-fish poisonings toxins produced by marine blue-greens. In the event at Lake Killarney last summer, the government officials measured microcystin LR and not surprisingly found levels well below the World Health Authority Guideline. Experts in Scotland were very surprised to know that the lake is also the drinking water source for the town. The level of water treatment would not remove the cyanobacterial toxins, and indeed, the techniques used may enhance toxin release from the bacterial cells.

For a number of years, there have been occasional publications that link blue-greens with waterfowl "botulism" (McLeod and Bondar, 1952; Murphy et al., 2000).

The group at Dundee have been able to detect blue-green toxins in the feathers of dead flamingo in Africa. This would be interesting to follow up when we have the next outbreak of waterfowl "botulism" in Western Canada.

References

- W.G. Bradley and D.C. Mash (2009). Beyond Guam: The cyanobacteria/ BMAA hypothesis of the cause of ALS and other neurodegenerative diseases. Amyotrophic Lateral Sclerosis (Supplement 2):7-20.
- C. Davids and A.N. Tyler (2003). Detecting contamination-induced tree stress within the Chernobyl exclusion zone. Remote Sensing of the Environment 85: 30-38.
- P.D. Hunter, A.N. Tyler, N.J. Willby and D.J. Gilvear (2008a). The spatial dynamics of vertical migration by *Microcystis aeruginosa* in a eutrophic shallow lake: A case study using high spatial resolution time-series airborne remote sensing. Limnol.Oceanogr. 53(6):2391-2406.
- P.D. Hunter, A.N. Tyler, M. Presing, A.W. Kovaco and T. Preston (2008b). Spectral discrimination of phytoplankton colour groups. The effect of suspended particulate matter and sensor spectral resolution. Remote Sensing of the Environment 112:1527-1544.
- J.A. McLeod and G.F. Bondar (1952). A case of suspected algal poisoning in Manitoba. Can. J. Publ. Hlth. 43:347-350.
- J.S. Metcalf and G.A. Codd (2009). Cyanobacteria, neurotoxins and water resources: Are there implications for human neurodegenerative disease? Amyotrophic Lateral Sclerosis (Supplement 2):74-78.
- T. Murphy, A. Lawson, C. Nalewajko, H. Murkin, L. Ross, K. Oguma and T. Mcintyre (2000). Algal toxins– Initiators of Avian Botulism? Environmental Toxicology 15(5): 558-567.

UPCOMING SYMPOSIA / WORKSHOPS

Arctic Grayling Symposium and Workshop 2011: Our Conservation Challenges and Opportunities.

June 7-9, 2011. Grande Prairie Regional College, Grande Prairie, Alberta. For further information, please contact JPONeil@golder.com. Information will also be available at www.tucanada.org later this fall. Deadline for Abstracts for Presentations is October 15, 2010.

Please send abstracts to Michael.G.Sullivan@gov.ab.ca.

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ONTARIO News

Best Practice Guideline for Aggregate Rehabilitation Project: Extracting the Benefits for Species At Risk and Rare Habitats

Excerpted from the Ontario Aggregate Resources Corporation website

Whether managing existing operations or planning the rehabilitation of pits and quarries, there are a wide range of opportunities for the aggregate industry to contribute to the conservation and enhancement of Canada's wealth or wildlife, our 'biodiversity.'

The advent of the new provincial *Endangered Species Act* has sparked interest in the consideration of species at risk, in addition to rare species and rare habitats, in rehabilitation projects. Sites slated for closure, in addition to abandoned sites, may represent assets in the natural landscapes because they can be used to establish and/or to recreate habitats for species at risk and other more common wildlife.

This report offers a series of best restoration and management practices for rehabilitating former aggregate sites to achieve the goal of maximizing the biodiversity value (including species at risk) while minimizing maintenance cost. The recommendations are outlined within the context of the latest developments in recovery planning and implementation for species at risk, best management practices and ideas that the industry or its related clients may be able to follow or to build upon.

The full report is available at www.toarc.com/publications_rehabilitation.asp

Province Intervenes to Prevent Quarry Development, Responds to Community Concern for Groundwater Conservation

Adapted from http://www.tedmcmeekin.com

On April 13, 2010, the Ontario Minister of Municipal Affairs and Housing issued a Ministerial Zoning Order (MZO) under Section 47 of the *Planning Act* to freeze the zoning of 154 hectares of land in the former Town of Flamborough. As a result, St. Mary's Cement Inc. is prohibited from using these lands for a proposed major quarry development.

The MZO comes after concerns about the potential impact on groundwater raised by Hamilton City Council, the Halton Regional Council, local Medical officers of Health and countless citizens potentially impacted by the development.

"Today is a watershed day for our community and a fitting tribute to the enormous community-based leadership that articulated the case against the proposed St. Mary's Quarry so very well," said MPP Ted McMeekin."

With the MZO, the zoning on the land shall remain 'Rural and Conservation Management' in perpetuity and ONLY those uses consistent with this designated zoning will be permitted. This ensures the long-term protection of groundwater resources in this sensitive area.

"Our community came together and stood shoulder to shoulder in the fight to stop the quarry," said McMeekin. "In so doing we have not only protected the water resource we hold sacred but also the environmental heritage of this area."

The community-based opposition to the quarry was led by FORCE, Friends of the Rural Community and the Environment.

"This is a joyous day for our communities," said Graham Flint, Chair and Spokesperson for Friends of Rural Communities and the Environment (FORCE). "We thank Ted for his tireless efforts to champion our cause at the provincial level and applaud the McGuinty government for hearing and responding to the very real concerns of our local municipalities and citizens about this massive open pit mine proposal. Now our drinking water, the air we breathe, the fragile natural features in this area, our way of life and the roads we use to work, live and play will be protected."

"It's clear that at every stage of the fight to protect our community, FORCE has been a force to be reckoned with. FORCE was able to combine sound research with the ability to articulate the justness of their cause in a compelling manner. I am very proud of FORCE, its leader Graham Flint, and our entire community for the responsible way the battle on this critical issue has been waged," added McMeekin.

For further information contact

Ted McMeekin MPP 905-690-6552

Canadian Environmental Assessment Act (CEAA) Review

The CSEB have been actively involved directly and indirectly with Canadian Environmental Network (RCEN) regarding recent issues; these include Bill C-9, the omnibus budget bill, 2010-11, that included changes to the Canadian *Environmental Assessment Act* (CEAA). The proposed changes may have consequences for the way environmental assessment is conducted in Canada. For example, the changes would allow the Minister of Environment to avoid doing (have done) detailed environmental assessments on large projects by breaking the projects up into smaller pieces.

In the near future, (autumn 2010, if it happens), the CSEB plans to be actively involved in the 7-year review of the CEAA. In that regard, the CSEB board would like each of you to give serious thought on how you would like the proposed CEAA to look. We will be asking for your input. Thank you for your anticipated contributions.

OUEBEC News

An EIS on a Future Uranium Mine in **Northern Quebec**

Submitted by Claude Delisle, CSEB Member

An Environmental Impact Statement (EIS) on a future exploration project by Strateco Resources is underway in Northern Quebec. A production phase is also expected afterward and another EIS will be necessary for this second phase. This will be the first uranium mine in Ouebec.

The sources of impacts were identified and analysed together with the determination of the mitigation measures and the residual impacts. All these results were presented by the promotor May 25 and 26, 2010, in Mistissini and Chibougamau, Québec during public consultations hearings. The Provincial and Federal committees (Comex and Cofex-South) were presented together with representatives of the Canadian Nuclear Safety Commission. CNSC is Canada's nuclear regulator and responsible for the licensing, compliance and enforcement of the uranium mining industry in Canada.

This coming fall, an official Public hearing will be held on this first phase advanced exploration project by Strateco Resources Inc.

More information including the EIS are available on the CEAA web site www.ceaa-acee.gc.ca under the James Bay and Northern Quebec Agreement-Matoush exploration project.

NOTICE of CSEB CONFERENCE

The CSEB is currently planning its AGM and conference to be held in the Toronto area this fall. Possible topics for discussion include the following:

- Biodiversity (This is the International Year of Biodiversity), Invasive species, Ontario's Endangered Species Act, habitat enhancement for species at risk

 Ontario environmental legislation
- - Toxics Reduction Act Green Energy Act Ontario's Water Opportunities & Water Conservation Act
- National issues
 - 7 year review of the *Canadian Environmental Assessment Act*, the new Boreal Forest Agreement

And many more....

If you are interested in helping out with the conference planning, please contact Brian Free at b.free@cseb-scbe.org

Please check the cseb-scbe.org website for further information.

ATLANTIC News

Sandy Pond Alliance Takes Fight to Federal Judge

Submitted by Pat Ryan, Past-President (1992-96, 2004-05) CSEB

The Sandy Pond Alliance took its fight against the destruction of Sandy Pond in Long Harbour to a federal judge. Sandy Pond has been slated to be used as a tailings pond for the development in Long Harbour. The alliance says realistically it may be too late to save Sandy Pond, but they are ready for that challenge.

They posed the question of when a lake is no longer a lake at a news conference. They say the answer is when a lake is handed over to a mining company to be used as a toxic dumpsite. The group's lawyer, Owen Myers, says they filed an application in federal court against what they call a loophole in DFO's regulations to allow this to happen. Myers says it's contrary to everything else in the act, which centres around conservation and preservation. He calls it a sketchy scheme to simply save the company's money.

The Director of the Alliance, Ken Kavanaugh, says this is about more than just Sandy Pond. He says it's about every other lake in Canada, and they are pushing the message right across the country.

Natural Resources Minister Kathy Dunderdale is defending the use of tailing ponds in the mining industry. She says sometimes, the most efficient and effective way of storing tailings from mines is in ponds. Dunderdale says any kind of economic development leaves a footprint on the environment, whether you cut a tree or erect a building. She says the environmental assessment process decides whether or not the environmental impact of a project outweighs the economic benefits. Dunderdale says while man-made containment is more costly, it's also believed to be more environmentally-friendly and is preferred by some provinces. She says that's not necessarily the safest option for the environment.

Source: VOCM Newfoundland and Labrador, June 4, 2010

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TERRITORIES News

Submitted by Anne Wilson, 1st Vice-President, CSEB

Greetings to all from Yellowknife! We definitely live in interesting times, and the saying that "the only constant is change" comes to mind. Even as the concept of climate change is still being debated, there are changes to the Northern ecosystems that seem to support global warming as a reality. New species are moving north, including pests, and species which have adapted to the harsh terrain and climate are dropping in numbers and moving towards or onto the endangered lists. The plights of caribou and polar bears, and the loss of sea ice are well publicized. Over the past 60 years, average temperatures in the NWT have warmed by 2° C and that trend is continuing. On a personal level, I can't say that I miss the weeks on end of -40°C winter temperatures, but the price tag seems to be there in the form of invasive species (leaf miners, magpies), an earlier start to the forest fire season, and an increase in precipitation and extreme events. And for those interested in studying and documenting ecosystems, climate change can affect the natural variability which must be measured and defined, and used as a yardstick against which project-related environmental changes are assessed. Can we "get it right" when the background is a moving target? This is something that proponents and regulators wrestle with in the North, where costs of monitoring are high, logistics are difficult, and data gaps are common.

There has been further activity on several projects that are undergoing environmental assessment or development, and yet more is on the horizon.

Project Updates: Mining:

- In the NWT, the Prairie Creek Mine Project environmental assessment has moved forward with the submission of the Developer's Assessment Report (DAR). Given the location of the project within the surrounding Nahanni National Park, there is a lot of scrutiny being given to this proposal.
- The Fortune Minerals NICO cobalt-gold-bismuth-copper project has been issued a new challenge in the form of a request from the Tlicho Government to the Mackenzie Valley Environmental Impact Review Board for a ruling to place the environmental assessment in abeyance while road access/tenure is settled. Once the Board has ruled on that issue, the EA will either proceed or be postponed.
- We are still awaiting release of the Giant Mine Remediation Project DAR is expected in April. The project includes the containment of 237,000 tonnes of arsenic trioxide dust currently stored underground. Minewater will need to be managed and discharged in perpetuity, and a new aspect of the project is a diffuser to discharge treated effluent into Yellowknife Bay. Further field work is underway this summer to assess discharge locations.

- No further word on Tyhee NWT Corp.'s Yellowknife Gold Project with respect to submission of their DAR.
- De Beers is moving ahead with the EA for the Gahcho Kué Diamond Project, with workshops scheduled for fall. We are told to expect the release of the Developer's Assessment Report in the last quarter of 2010, at which time the Environmental Impact Review process will resume. This project has some interesting aspects around partially dewatering a lake, mining the ore beneath it, then backfilling two of the three pits and rewatering the lake at closure.
- Avalon Rare Metals Inc. has submitted their project description
 and permit applications for development of their rare earth
 and metals property in the Thor Lake area of the NWT
 (just north of the Hearne Channel of Great Slave Lake). An
 underground operation is proposed, along with a processing
 plant and tailings management area near Thor Lake. A
 hydrometallurgical processing plant is proposed to be located
 at the old Pine Point Mine site, and to use its old tailings
 pond. Extraction of rare earths from the ore is complex, with
 extensive steps using various reagents and processes.

Information on current projects undergoing assessment is available from the Mackenzie Valley Environmental Impact Review Board site at http://www.mveirb.nt.ca/.

- The three active diamond mines (Ekati, Diavik, and Snap Lake) in the NWT continue operations, and have submitted their annual aquatic effects and other reports to the regulators.
 Work is underway to review and revise the Snap Lake monitoring program as appropriate, and this will occur in conjunction with the water licence renewal process.
- Some of the closed or inactive mines continue to do environmental monitoring under the Water Licence and MMER-EEM, including North American Tungsten Ltd.'s Cantung Mine, the Lupin Gold Mine, Giant Mine, and the Con Mine.

In Nunavut, information for environmental assessments can be found on the public registry at http://ftp.nirb.ca/ and includes the following active projects:

- The environmental assessment for the AREVA Resources Canada Inc. Kiggavik uranium property is underway, and will proceed to scoping in the near future.
- Agnico-Eagle Ltd. has purchased the Meliadine Lake gold property from Comaplex Minerals, so that assessment is on hold until AEM decides how it wants to approach development of that property.
- Newmont Mining Corp. is proceeding to develop the Doris North gold project and working concurrently on a project description for a regional development of the adjacent Hope Bay area deposits.

- No movement on other mining projects, including the base metal properties held by MMD Minerals at High Lake, Ulu, Lupin and Izok Lake. Sabina Silver Corp. is revisiting the Preliminary Economic Assessment of their resource at the proposed Hackett River Mine (lead, silver, copper, lead, and gold), and will re-evaluate the Pre-Feasibility Study which was started in 2007.
- Baffinland Iron Mines Corp. is expediting production of their Environmental Impact Statement, and continuing further exploration work to add to inferred resources for two other deposits in the area.
- Meadowbank is undergoing an environmental assessment for an expansion of the airstrip which extends into the adjacent lake.
- Meadowbank is the only operating mine in Nunavut at this time, and has been in production since February. As with the NWT mines, annual reports and monitoring reports have been submitted to the regulators and are under review.

Hydroelectric:

Taltson Hydro Expansion: With the completion of hearings and all submissions in hand, Mackenzie Valley Environmental Impact Review Board will prepare a Report of Environmental Review with their decision.

Oil & Gas:

Following the release of the Joint Review Panel's report on the Mackenzie Gas Project, regulators have released their interim response to the recommendations made by the Panel. Governments propose to accept or accept the intent of 87 of the 115 recommendations within their respective jurisdictions. The Governments have taken no position on the 60 recommendations directed to the National Energy Board nor the one recommendation directed to the Government of Alberta. The Governments propose not to accept the remaining 28 recommendations within their jurisdiction, 21 of which were determined to be outside the scope of the JRP's mandate as per the Environmental Impact Statement Terms of Reference for the MGP.Further information can be found online at http://www.ec.gc.ca/bpgm-mgpo/default.asp?lang=En&n=B554E5F9-1.

Municipal:

Municipal field work is underway at several communities across the North in order to identify reasonable performance standards for wastewater systems. This will involve comprehensive characterization of representative Northern systems in order to evaluate performance, as well as collection of sampling data from a number of other systems to round out the community data inventory.

Are you doing work in the North that you'd like to let others know about? Please feel free to contact me, or to draft an article for the newsletter. The CSEB provides a valuable networking and communication forum! There is also the option of instigating

CSEB activities – both of the fun and/or of the educational variety - with colleagues in the north. Please email your thoughts to me at anne.wilson@ec.gc.ca.

Arctic at Risk From Global Warming: Study

Reprinted from CBC News June 30, 2010

Temperatures in Canada's Arctic were about 19°C warmer two million years ago than they are currently, according to a new study.

And that means a small increase in global greenhouse gases could lead to a large drop in the amount of glacial ice in Canada's northernmost region, according to a group of scientists led by researchers at the University of Colorado.

"As temperatures approach zero degrees Celsius, it becomes exceedingly difficult to maintain permanent sea and glacial ice in the Arctic," said Ashley Ballantyne, a University of Colorado geology professor and study member.

Near zero

The six-person research team — which included David Greenwood of the University of Manitoba and Natalia Rybczynski of Ottawa's Canadian Museum of Nature — figured that Ellesmere Island, located north of Baffin Bay, exhibited the higher temperatures in pre-historic times despite levels of carbon dioxide only slightly greater than they are now.

Back then, Canada's North was a much warmer place with active animal and plant life.

The researchers set the island's average annual temperature in that time at 0 °C and the level of carbon dioxide at 400 parts per million of all molecules in the atmosphere.

Ballantyne and the other scientists made their calculations by using fossilized wood and the well-preserved remains of prehistoric plants and soil bacteria from the island.

Warning sign

However, the group's discovery indicates that Ellesmere Island could be heading back to its balmy past. That is because the current carbon-dioxide levels in the area are closer to 390 parts per million, near the levels now associated with pre-historic temperatures.

"Our findings indicate that ${\rm CO_2}$ levels of approximately 400 parts per million are sufficient to produce mean annual temperatures in the High Arctic of approximately zero degrees Celsius," Ballantyne said.

As the temperature rises, the region's ability to maintain its permanent ice fields will decrease, she said.

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N.W.T. Proposes New Bathurst Caribou Plan



Reprinted from CBC News, June 1, 2010

The most recent N.W.T. government survey of the Bathurst caribou herd showed a decline from about 128,000 caribou in 2006 to an estimated 31,900 animals in 2009.

A new plan to help the imperiled Bathurst caribou herd in the Northwest Territories proposes lifting an existing hunting ban for aboriginal hunters, while still limiting the number of caribou that can be taken.

The N.W.T. government and the Tlicho aboriginal government have jointly agreed to the plan, which recommends that a total hunting ban stay put for non-aboriginal hunters and commercial hunting outfitters.

The proposed plan has to be approved by the Wek'weezhi Renewable Resources Board before it can be implemented.

The board is a wildlife co-management authority established under the Tlicho Dene land claim. The board is responsible for managing wildlife in the area where the current caribou hunting ban is in place.

Since Jan. 1, all N.W.T. hunters — including aboriginal subsistence hunters — have been banned from hunting Bathurst caribou in the herd's winter range, stretching north of Great Slave Lake to the Nunavut border.

The ban was imposed amid concerns about the Bathurst herd, which the territorial government believes has shrunk sharply in recent years.

Ban Angered Dene Hunters

A ban on hunting the Bathurst caribou herd has been in effect since Jan. 1 2010, in an area encompassing the herd's winter range north of Great Slave Lake.

The latest government survey of the herd showed a decline from about 128,000 caribou in 2006 to an estimated 31,900 animals in 2009.



But the total hunting ban enraged Dene in affected communities, since Dene have long relied on caribou meat in the winter.

The N.W.T. and Tlicho governments have been trying to work out a plan that would not only ensure the survival of the Bathurst herd, but also that of the neighbouring Bluenose East caribou herd.

In the past, both sides had agreed on some things but were unable to agree on how best to manage the aboriginal subsistence hunt.

Under the new plan, the governments are proposing to restrict the aboriginal harvest to 300 caribou a year, about 80 per cent of which would be bulls.

Biologists have said the herd cannot recover quickly enough from a hunt of more than 300 animals a year.

Details of reduced harvest unclear

However, the proposal does not specify whether the 300 caribou limit would be divided among N.W.T. communities or First Nations, or how government officials would keep track of how many animals are harvested.

The proposed plan also recommends a 45 per cent reduction in the number of caribou that can be harvested from the Bluenose East herd.

As well, the plan calls for a doubling in the number of wolves that can be killed, to relieve the risk predators pose to the caribou. It proposes raising the wolf harvest from 40 wolves to at least 80, with the help of incentives such as higher prices for wolf pelts and carcasses.

The governments' proposal acknowledges the importance of caribou to the Tlicho people, and urges aboriginal communities to take the lead on managing and monitoring the caribou harvest.

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