



“There is no such place as away .”

Chief Seattle

May, 2015

City of Lethbridge Discusses ICI Waste

SAGE meeting

7:00 p.m. May 14th at the Lethbridge Public Library (Downtown).

SAGE AGM June 11th
Date and time TBA.

Don't forget to renew your [SAGE membership!](#)

Alberta Council for Environmental Education

Conference on Energy and Environmental Education, October 15-17th in Canmore. <http://abcee.org/conference>

The City of Lethbridge presented options to Council to better manage Institutional, Commercial & Industrial (ICI) waste in the city. This sector constitutes 58% of the waste going to the landfill (as opposed to 19% for Construction & Demolition waste, and 23% for Residential waste).

The City target is to reduce ICI waste by 45% before 2029.

The first phase will involve education and awareness programs, which can reduce waste up to 10%, based on comparative data. The second phase will involve economic

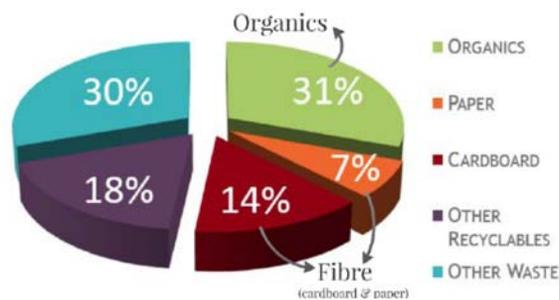
incentives like differential tipping fees at the landfill or surcharges on designated materials. Economic incentives can achieve 25% diversion levels.

A third phase would involve mandatory recycling and source separation, as well as disposal bans at the

landfill for designated materials. It is expected that such regulatory measures will successfully lead to the desired targets.

ICI waste is often source specific and has the advantage of being already source separated and more easily diverted as a result.

CITY OF LETHBRIDGE ICI WASTE CHARACTERISTICS



Doomsday Clock Still Ticking

It's three minutes to midnight.

This is the closest the doomsday clock has been to midnight (the end of the world) since the beginning of the nuclear arms race and the end of the Cold War.

But this time it is not just due to political instability and the reversal of positive disarmament trends experienced in the 1990s. This time, according to the Science and Security Board, a major concern is the lack of political will to address the challenges of climate change:

"Efforts at reducing global emissions of heat-trapping gases have so far been entirely insufficient to prevent unacceptable climate disruption," said the Bulletin's Richard Somerville. "We all need to respond now, while there is still time."

And Speaking of Doomsday ...

Despite having promised to match U.S. reductions in greenhouse gas emissions, Prime Minister Harper says "it is unlikely that Canada will join the United States in a pledge to meet tough new targets for green-

house-gas emissions over the coming decade."

The U.S. recently raised the bar to cut emissions by 26% by 2025 and 80% by 2050.

"A report last week prepared by Environment Canada suggested this country had little hope of meeting its international commitment to reduce greenhouse-gas emissions by 17 per cent from 2005 levels by 2020. That pledge was made by Mr. Harper at a climate summit in Copenhagen six years ago.

[Reference: [Globe & Mail report](#)].

Miscellanea ...

Blackfish:

Last month we reviewed the film, *Blackfish*. The following are some of the impacts on SeaWorld:

<http://www.upworthy.com/>

And an expose from a SeaWorld trainer:

<http://www.theguardian.com/>

<http://news.nationalgeographic.com/>

At the OWC:

The Hidden Creek Pilot Project begins by "Engaging recreational users through conversations, events, activities and demonstration days ... will provide an opportunity for sharing perspectives of motorized and random camping

recreation in the Oldman headwaters, and also deeper discussion about the cumulative impacts of recreational use on headwaters health.

The OWC is currently renewing their memberships.

Water Scarcity in California:

And a public service announcement regarding the water crisis in California ... use those rain barrels (see luring add to right of page).

<https://www.youtube.com/watch?v=IC3yX253Y2k>

Environment Lethbridge
Fundraiser
Rain Barrels—\$70 each
(Only 15 remaining for this Spring)

Order Online:

<http://>

www.environmentlethbridge.org/



Interesting Links:

U.N. Water for a Sustainable World <http://www.unesco.org/>

FAO State of the World's Land and Water Resources <http://www.fao.org/>

Overpopulation, Overconsumption—in pictures <http://www.theguardian.com/>



Southern Alberta Group for the Environment (SAGE)

A Leading Voice for a Healthy and Environmentally Sustainable Community.

Visit us at: <http://sage-environment.org/>

If you are interesting in getting involved, contact us at:

sage-communications@sage-environment.org

Draft Report on Waste Management in Lethbridge (Part 1) ... Part 2 coming in June on the statistics.

Waste Not, Want Not:

The average Albertan produces about 1120 kg of garbage per person each year. Of that amount, 265 kg comes from residential sources, and the remaining 855 kg/person/year is non-residential – that is Construction & Demolition (C&D) and Industry, Commercial, and Institutional (ICI).

Lethbridge statistics suggest that about 120,000 tonnes of waste is sent to the landfill each year. For the 94,000 citizens of the city, that results in 1290 kg of garbage per person each year or, in other words, 3.5 kg (7.7 lbs) of garbage each day.

Not all of this waste leaves directly from our home – it is the total waste that we collectively create at home, at work, and at play. About one-quarter of the total waste comes from our homes.

Alberta disposes the most waste in Canada, and Lethbridge produces more waste than the average in the province. This places us amongst the most wasteful people on the planet.

Why Do We Care:

Our materials system is linear. This means that we extract resources from the earth (often non-renewable resources), transform them into products and, at the end of their useful life, send the prod-

ucts to the landfill (or into the air and water as emissions). On a finite planet, linear systems are unsustainable. The more one can close the materials loop into a perpetual cycle, the more sustainable will be the system.

The very best thing we can do to conserve resources for future generations and other species sharing our ecosystem is to reduce consumption to those things that we need.

When products are made for our consumption, reuse becomes our second best choice. Reusing consumer products does not require additional energy to transport and reprocess the material into another product.

Recycling materials into new products is better than sending it to a hole in the ground as waste. These materials have been removed from the cycle of use, and this diminishes resources available in the future.

In addition to the waste of non-renewable resources, landfills are sources of pollution. Sanitary landfills are designed to contain the waste and prevent water and air from reacting with the waste.

When the waste of a community is combined and thrown into a pit and covered up with clay, all sorts of things happen. Because there is no air and water is present in the waste (mainly from organics), anaerobic bacteria break down the composta-

ble materials and produce carbon dioxide, methane, and often hydrogen sulphide (a poisonous gas).

The carbon dioxide and hydrogen sulphide can be converted into carbonic and sulphuric acids, which helps dissolve and corrode other wastes creating a toxic stew of metals, acids and toxins called leachate. The leachate trickles down through the landfill and is trapped by a liner – as long as the liner maintains its integrity. Once the liner fails, the toxic leachate can permeate into groundwater aquifers.

The methane produced in the landfill can escape the clay barriers and enter the atmosphere as a potent greenhouse gas (GHG). According to *City of Lethbridge Corporate Greenhouse Gas Inventory* conducted at the University of Lethbridge, the largest sources of corporate greenhouse gas emissions within the City of Lethbridge are three municipal landfills. Other emissions include volatile organic compounds (VOCs) which may be hazardous air pollutants (HAPs) or ozone depleting substances, and particulate matter (PM) with possible health effects.

In summary, landfills should be seen as a last resort for directing materials (resources) and compostable materials. It has been said: "There is no 'away' in throw away."

The Comeback (2014)



John Ralston Saul is a noted Canadian philosopher and social commentator. *The Comeback* is his latest book, building on many of the themes he developed in *A Fair Country* - notably, the perspective that Canadian values have been built on Aboriginal philosophies of balance, mutualism, and listening.

John Ralston Saul is generally a fine writer, but *The Comeback* was strangely written - in many ways, it was like an interior discussion. He may have been trying to make the exposition more conversational - simulating what might be typical of an oral culture - but the resulting tone seemed to be a bit doddering.

The Comeback has two main parts: the first is the author's thesis, and the second is a collection of documents, speeches and writings representing indigenous voices.

The author has a few main arguments, and *The Comeback* begins with a short history of the treaty process and the past hundred or so years of Canadians breaking them. He presents that when we discuss the problems of *The Indian Act* and its management, that it is a fundamental problem of Canadian society represented by our governments - that is, the source of the problem is not the victims of the Act.

The author criticizes the current government and the general impoverishment of the democratic process in Canada:

"Because if democracy is only power, then what we are left with is a system of deep distrust. Why? Because if only power matters - even if it is the result of an election - then the government feels that it has a mandate to do whatever it wants; that the law is there principally to serve power. If democracy is only about winning power and using it, then it has been deformed into a denial of society and of the idea of responsible citizenship. ... Only power matters. This is partly the outcome of government being de-intellectualized. Elections are now thought to be unsuitable moments for real debates over ideas. In between these elections the focus is on administrative problems - legalistic, managerial undertakings" (p.30).

Saul then makes some interesting comments on the cosmologies of the indigenous peoples of North America in contrast to 'European' philosophies:

"Why do I mention this? Because the environmental movement seems now to be held back by Western intellectual structures that have sidelined the major questions, like global warming, into a confusion of competing facts and a desperate attempt to analyze these questions from a linear, utilitarian point of view. Any conceptual or holistic approach is ridiculed or punished. But you can only change directions on major issues through a conceptual, holistic approach. Leroy Little Bear: "All things are animate, imbued with spirit, and in constant

motion. In this realm of energy and spirit, interrelationships between all entities are of paramount importance, and space is a more important referent than time." ... Now we can see that it is a philosophy that allows biodiversity to make sense, as well as the idea of sustainability. And for that matter the ideas of balance and harmony. ... Continuity is not a Western democratic idea. But it is an indigenous idea" (p.171).

The solution? "All of this adds up to the rejection of a great deal more than a few policies or a political party. It suggests the rejection of a system that has dominated us for half a century with increasingly utilitarian assumptions about how societies should function - that is, not really as societies, but as a haphazard bundle of self-absorbed individuals driven by self-interest" (p.99). In other words, we need radical change built on the cultural values of First Peoples.

This comes frightening close to Rousseau's 'noble savage' trope, but he supports his perspective with observations on Idle No More and the important work of indigenous scholars, lawyers, and the resulting landmark decisions from the Supreme Court.

FOR THE LAST HUNDRED YEARS, **ABORIGINAL PEOPLES** HAVE BEEN MAKING A COMEBACK - A REMARKABLE COMEBACK FROM A TERRIFYINGLY LOW POINT OF POPULATION, OF LEGAL RESPECT, OF CIVILIZATIONAL STABILITY. A COMEBACK TO A POSITION OF POWER, INFLUENCE AND CIVILIZATIONAL CREATIVITY...
THE COMEBACK
JOHN RALSTON SAUL



**A leading voice for a healthy and
environmentally sustainable community**

Box 383 Lethbridge AB T1J 3E9

To: Cary Coglianese
Director, Penn Program on Regulation

Regarding your email:

“I wonder if you might be willing to help us further by expanding on one aspect of your comments. You mention that the AER is not an excellent regulator because it lacks “data collection & analysis on practical indicators.” I wondered if you had in mind any specific suggestions or examples of what you have in when you refer to “indicators.” Later in your comments, you do mention emissions and land use changes. Are these examples of what you had in mind?”

Thank you for considering the feedback provided by the Southern Alberta Group for the Environment (SAGE) on the Alberta Energy Regulator.

Our comments were generally related to the environmental aspects of oil & gas exploitation in Alberta and, more specifically to your inquiry, the indicators of environmental performance for the industry.

We take an ‘indicator’ to mean the evidence or information that will tell you whether your program is achieving its intended outcomes – in this case, the sustainable preservation of water quality & quantity, air quality, and natural & biodiverse ecosystems. These indicators should be measurable and observable characteristics, that can help answer the question: ‘How will we know if change has occurred?’

We understand that the AER has various regulations, directives and bulletins related to effluent and emissions resulting from the drilling, completion, and production of oil & gas wells in the province. Indicators related to air quality and greenhouse gas emissions typically include carbon dioxide, methane, NMVOCs, sulphur oxides and nitrogen oxides released as fugitive emissions during drilling and completion, as combustion gases from flaring, or as ongoing vent gas/gas migration emissions as the well ages.

SAGE is specifically concerned with indicators that measure the impact of modern well-stimulation techniques as they relate to greenhouse gas emissions, and the chronic and ubiquitous fugitive emissions from producing and abandoned wells. A number of years ago Bachu & Watson presented a report on casing vent flow and gas migration but, based on SAGE correspondence to previous configurations of the current AER, these emissions have not been adopted as an indicator. As well reclamations lag behind abandonments in the province, this is an environmental concern and affects the measurement of life-cycle impacts of fossil fuel consumption.

Protecting surface and groundwater in the province is also an important goal for the AER. This includes the consumption of water for the production of bitumen and the stimulation of oil & gas wells producing from tight sand, shale or coalbeds. As this water is permanently removed from the hydrologic cycle, the growing demand for fresh water for these practices is undesirable. Contamination of surface water from leaking tailing ponds or groundwater contamination due to communication during stimulation practices is of concern. The deep-well disposal or the use of tailing ponds for produced water is another concern, as the volumes of disposed water increases with increasing production.

Baseline indicators of water quantity and quality would be important to monitor long-term impacts of this industry. SAGE has concerns, based on the ongoing litigation between Ernst and Encana Corporation, that the AER has been deficient in establishing baseline water quality indicators. The court documents indicate that the AER has 'no duty of care' for the protection and preservation of fresh water in the province – this is disconcerting.

The AER has introduced a discussion paper on Regulating Unconventional Oil and Gas in Alberta that suggests more measurement and control of cumulative effects of expanding production in different regions. Indicators for cumulative effects could include pace and scale of oil & gas production, land-use changes from natural areas, industrial footprints, linear features for accessing production sites, traffic (noise, air particulates), and impacts on endangered species. Perhaps the industry could become a more active participant in watershed planning – groups that are defining indicators (eg. linear disturbance thresholds) and exploring practical implementation. You might be interested in the Oldman Watershed Council's indicator project.

SAGE maintains that AER is not an excellent regulator because it lacks "data collection & analysis on practical indicators." We believe that the AER understands the importance of environmental indicators, but the lack of publically accessible data limits the ability of Albertans to monitor the impact of this industry so as to evaluate the short term, long term, local and global costs related to diminished environmental services, human health, and the health of the ecosystem (water quality and maintaining minimum flows, biodiversity, and preserving natural areas). We are unconvinced that the AER values the importance of protecting and sustaining a healthy environment for future Albertans – measureable and accessible environmental indicators would improve our opinion.



**A leading voice for a healthy and
environmentally sustainable community**

9 April 2015

Stakeholder and Government Relations Division
Alberta Energy Regulator
Suite 1000, 250 – 5th Street SW
Calgary AB T2P 0R4

Email: stakeholder.engagement@aer.ca

Dear Sir/Madam:

Re: Proposed drilling of Milk River Ridge Public Grasslands Recommended for Conservation (Tp3–Rg18–W4)

The Southern Alberta Group for Environment (SAGE), a non-profit society established in 1984, is a leading voice for a healthy and environmentally sustainable community. Conservation of native grasslands and biodiversity in southern Alberta is a key area of interest for SAGE.

We are informed that DeeThree Exploration Ltd. intends to make an application to the Alberta Energy Regulator to drill within the proposed addition to the Twin River Heritage Rangeland Natural Area on the Milk River Ridge. This is one of only two grassland conservation areas outside of the foothills identified for protection in the South Saskatchewan Regional Plan.

This letter is to inform you that SAGE has concerns about approval of any application for industrial development in this area because of potential adverse effects on significant natural features. Approving an application to drill would undermine government intent for protective designation of the area. We ask to be informed of any application that the Alberta Energy Regulator (AER) receives regarding drilling on public land in this parcel (Tp3-Rg18-W4). We assume that such an application would be treated as non-routine by AER and ask that we be notified.

We have previously made our concerns known to the Ministers of Energy and Environment as well as MLAs for Cardston-Taber-Warner, Lethbridge West, Lethbridge East, (letter dated 13 September 2013) and are in the process of sending a letter to the Premier.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Braum Barber", written in a cursive style.

Braum Barber
Chair

Cc: Martin Cheyne, DeeThree Exploration Ltd., Calgary AB mcheyne@deethree.ca



**A leading voice for a healthy and
environmentally sustainable community**

9 April 2015

The Hon. Jim Prentice
Premier of Alberta
Edmonton, AB T5K 2B6
Email: Premier@gov.ab.ca

Honourable Kyle Fawcett
Minister of ESRD
Edmonton, AB T5K 2B6
Email: ESRD.Minister@gov.ab.ca

Honourable Frank Oberle
Minister of Energy
Edmonton, AB T5K 2B6
Email: minister.energy@gov.ab.ca

Dear Premier Prentice, Minister Fawcett and Minister Oberle:

Re: Continuing Threat of Drilling of Milk River Ridge Public Grasslands
Recommended for Conservation (Tp3-Rg18-W4)

The Southern Alberta Group for Environment (SAGE), a non-profit society established in 1984, is a leading voice for a healthy and environmentally sustainable community. Conservation of native grasslands in southern Alberta is a key area of interest for SAGE. During development of the South Saskatchewan Regional Plan (SSRP), SAGE advocated for expansion of conservation areas in grasslands to help accomplish the objective of maintaining biodiversity in our region.

The final SSRP fell far short of provincial targets for a system of protected areas within the grasslands of southern Alberta. Establishment of the Pekisko Heritage Rangeland was a big step forward in grassland protection in the foothills. However, only two "potential grassland conservation areas" were identified elsewhere in the Grassland Natural Region, one of these a proposed addition to the Twin River Heritage Rangeland Natural Area on the Milk River Ridge. In a letter to government on September 13, 2013 we expressed support for long-term preservation of this important ecosystem and were pleased to see that intent specified in the SSRP. It therefore causes us considerable dismay to learn that public lands within the area continue to be targeted for industrial development.

SAGE is writing to ask that the proposed addition to the Twin River Heritage Rangeland in the South Saskatchewan Regional Plan be off-limits to new oil and gas development. We have communicated with members of the ranching community in the area and understand that they share our views. This is an opportunity to demonstrate that Alberta's commitment to maintenance of biodiversity through conservation of landscapes is not just a hollow promise.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Braum Barber', written in a cursive style.

Braum Barber, Chair

cc: Bridget Pastoor, MLA Lethbridge East, lethbridge.east@assembly.ab.ca
Greg Weadick, MLA Lethbridge West, lethbridge.west@assembly.ab.ca
Gary Bickman, MLA, Cardston-Taber-Warner, cardston.taberwarner@assembly.ab.ca

April 23, 2015

Calgary Head Office
Suite 1000, 250 – 5 Street SW
Calgary, Alberta T2P 0R4
Canada

www.aer.ca

Re: Response to a concern regarding a proposed application, Proposed drilling of Milk River Ridge Public Grasslands Recommended for Conservation (Twp3 Rg18 W4)

To: Southern Alberta Group for the Environment (SAGE) and DeeThree Exploration Ltd,

The Alberta Energy Regulator (AER) has received a preapplication concern about an energy development project that has not yet been applied for, from SAGE. The concern is regarding an proposed project to drill within the proposed addition to the Twin River Heritage Rangeland Natural Area on the Milk River Ridge on the Milk River Ridge, Tp3–Rg18–W4 by DeeThree Exploration Ltd.

The AER expects the above referenced company communicate with all concerned parties in an attempt to resolve concerns.

The AER offers and strongly recommends you make use of our Alternative Dispute Resolution (ADR) program arranged through an AER mediator. Please contact **Julia Fulford at Julia.fulford@aer.ca or call 403-476-4981** for more information on this process. Further information about this program is available through *EnerFAQS: All About Alternative Dispute Resolution and Manual 004: ADR Alternative Dispute Resolution Program and Guidelines for Energy Industry Disputes* on the AER website at <http://www.aer.ca/applications-and-notices/alternate-dispute-resolution>.

Preapplication concerns will not be linked to an application if an application is submitted by the energy resource company. A statement of concern (SOC) must be submitted by the filer, to the AER and the energy resource company if it is to be linked to an application. You may view energy development applications through the Public Notice of Application Tool at www.aer.ca.

Should you have any questions regarding the AER's procedures please contact the Customer Contact Centre, toll free, at 1-855-297-8311 or email the Stakeholder and Government Relations (SGR) Division at stakeholder.engagement@aer.ca.

Alberta Stakeholder Engagement

Stakeholder and Government Relations