



"My friends, watch out for the little fellow with an idea." Tommy Douglas

November 2014

SAGE Meeting November 20th at 7 p.m. at the downtown Public Library.

Respecting the Land: Transition to a New Economy conference at Augustana Campus, Camrose. November 7 & 8. To register: http:// spiritoftheland.ca/

Boundary Creek Landowners filing Notice of Appeal on Police Lake recreational development application. Contributions for legal fees welcome. Contact Jackie Morris at agiledog@cciwireless.ca.

Environment Lethbridge Visioning Event (AGM)

Environment Lethbridge has a non-traditional structure in which the Community Partners guide the direction of the organization for the next year. On October 30th, about 40 people representing a number of Community Partners met at the Helen Schuler Nature Centre to hear two guest speakers, and to discuss ideas for future projects.

Bill Spenceley, representing the Industrial Association of Southern Alberta (IASA), introduced the interest industry has to reduce its environmental footprint. He spoke to some of the emerging pressures from retailers that require greater sustainability standards in the products they sell. He also introduced some of the efforts Flexahopper Plastics has made to improve its energy efficiencies in the process and in operating the facility.

The second presentation, by Tim Wickstrom of Edible Earthscapes, introduced the concept of permaculture. The advantages for agriculture planned more holistically within the

regional environment include better water retaining ability of the soil, the building of soil and ecology within the soil, and the high-yield production of various foods. Agriculture should foster the interconnection of species in ecological balance.

The Visioning Event ended with a series of presentation from Community Partners to inform Environment Lethbridge on what sort of projects are being advanced in the community, and how EL could be involved.

The City of Lethbridge Waste & Recycling department would support EL involvement in community engagement efforts related to the Greenlist, Re-use Rendezvous, and Pitch In events.

Greensense continues to promote renewable energy in the region and is advocating for more technical education in the region. Seth Clark form Growtec gave an update on the biogas generator being installed on the Perry Farm near Chin. The facility is currently being commissioned to make electricity from agricultural waste.

The Lethbridge Naturalists continue to provide interesting field trips and presentations in the region. And the Lethbridge Sustainable Living Association sees a role for EL in assisting in Applefest and the promotion of community gardens, urban forests, and an E-directory that identifies 'green' businesses in the community.

Lethbridge College's School of Engineering Technologies will develop simple brochures for green options for home building and renovations to be distributed by EL. And Jim Byrne from the University of Lethbridge advocates for a more ambitious vision for regional projects supported by university expertise.

The EL board will set the direction for the next year at the upcoming Action meetings.

Curbside Recycling in Lethbridge

The City of Lethbridge is exploring options to deliver curbside recycling in Lethbridge. As presented to the Environment Committee of Council, there are three main options:

- Garbage collection each week + recycling collection each week. A monthly utility rate of \$10 to \$11 is expected.
- Garbage collection each week + recycling every two weeks. A monthly utility rate of \$9 to \$10 is expected.
- Garbage collection every two weeks+ recycling every two weeks

(alternating weeks). A monthly utility rate of \$8 to \$9 is expected.

The program would be rolled out in phases, and once the program is functioning, a similar program to collect compostable would be initiated.

Other cities that have designed progressive zero-waste management programs have a cart for recyclables and a cart for compostables - eventually eliminating the 'garbage' bin. Viewing waste as a resource closes the materials loop and reduces the need for extracting virgin resources.

Currently in Lethbridge approximately 47% (by weight) of municipal solid waste (MSW) is compostable, which contributes to greenhouse gas emissions from the landfill (the largest point source in the City according to research from the University of Lethbridge).

In context, MSW accounts for only 25% of the waste, while Institutional-Commercial-Industrial (ICI) waste accounts for over half of the total waste generated. Construction & Demolition waste contributes about 20% to the total.

Managing Aquatic Invasive Species

The Alberta Irrigation Project Association (AIPA) has provided money towards aquatic invasive species inspection at the borders of Alberta, as irrigators have become much more concerned about zebra mussels and quagga mussels spreading through irrigation infrastructure.

According to the <u>Invasive</u> Species Council of BC,

"zebra and quagga mussels are almost impossible to eradicate once they take hold and can cause millions of dollars in damage by clogging pipes and hurting aquatic life."

A pilot project at the Alberta borders this summer using inspection and sniffer dogs found that 4% of the boats that agreed to an inspection were contaminated with mussels. Only half of the watercraft entering the province agreed to the voluntary inspection, which suggests that there is currently a high risk of spreading mussels to Alberta lakes, rivers, and irrigation infrastructure.

Based on these results, the AIPA is lobbying for a mandatory inspection at each border.

CASA Odour Project Team Progress Report

The Odour Project Team of the Clean Air Strategic Alliance (CASA) met this summer. The three task groups the Odour Assessment group, the Health group and the Complaints group have been meeting on a monthly basis. Brief updates of the progress made by each task group were provided. The Prevention/ Mitigation task group and the Enforcement/Role of Regulation task group were formed in late June and have started their work.

In summary:

(1) The Health task group is in the process of completing two main portions of their work plan: (a) to complete a background report on odour and health.; and (b) to design a tool for individuals to track health related symptoms.

The initial phase consists of an online one-page form that an individual could use to record health symptoms they feel might be related to odors they've experienced. This phase is simply to evaluate the form to determine if it is complete and would meet the needs of affected individuals.

(2) The Complaints task group met over the previous several months and the task group has had presentations from several agencies on the complaints processes they use. Alberta Energy Regulator, Natural Resources Conservation Board, Alberta

Association of Municipal Districts and Counties, Alberta Airsheds Council, Hinton Pulp, Environmental Public Health, Edmonton Waste Management Center, AESRD, and Altex Energy have all participated. There was also a presentation regarding the Peace River proceedings on odour issues from loading facilities and the heavy oil sector.

All of the information will be compiled into a document titled: "Alberta Odour Complaints Overview". The structure of the document was based on a series of twelve questions that group members felt needed to be answered to determine how the complaints process has been used in the province. Strengths and gaps in the process were identified: Strengths were grouped into different topics: caller experience, data collection, initial response time, investigation response, data analysis, who are you going to call, information sharing between groups, attitude, tools and technology. And the gaps were also grouped into different topics: common language, data collection training, initial response time, area specific information, awareness of complex issues, investigation response, data analysis, contact options (technology), who are you going to call (awareness), sharing information between groups, tools and technology for odour assessment.

A decision tree will be developed to help call operators triage calls quickly and direct callers to the most appropriate agency. The use of 'common language' was also recognized as a problem in the complaints process.

- (3) Odour Assessment task group have been working with a consultant to prepare an inventory and analysis of odour assessment tools.
- (4) Prevention/Mitigation task group felt the Odour Assessment task group should adopt this work as it aligns with the mandate they have already been performing. They have prepared an RFP for an inventory and analysis of prevention and mitigation tools.
- (5) Enforcement/Role of Regulation have prepared an RFP to collate and review regulatory approaches.
- (6) Education/
 Communication/Awareness
 will involve the main project
 team. It was decided the target audience for the Good
 Practices Guide (GPG) would
 be primarily industry and
 government.

The overall project is moving forward however a considerable amount of work has yet to be done in the time frame we have been given - 24 months.

If you are interested in knowing more about the CASA Odour Project Team and the good work they are doing, contact SAGE.

"Who, Me?" "Part of a Watershed?" Don't Flush Yet!

(Courtesy of Lorne Fitch, P. Biol.)

I've got the handle in my hand, ready to flush. My eye catches an announcement in the paper I was reading, in the quiet room of the house. It's for a watershed meeting to be held here in town. As the noise of the toilet flushing echoes, I think, "who, me, part of a watershed?"

As I wash my hands I muse, "I live in town, and I don't live on a lake or next to a river". Brushing my teeth I say to myself, "I don't fish and I don't raise cattle that drink out of the river". The coffee noisily percolates and I wait impatiently for that first cup. Fortified with a jolt of caffeine I remark, "I don't know what all the fuss is about. Water is water; it comes out of the tap". That reminds me to mix up some orange juice. I use the bottled water, pour it into the juice concentrate, mix and thirstily drink a glass. The water holds the sweetness of Florida sunshine in suspension. The last drops drain out of the glass and my answer is,"No, I don't know why I would be interested in a watershed meeting".

Satisfied with my decision I head off to work. It's a lovely morning and I linger beside the car savoring the sunshine. Bird song puts my ears on alert and a flash of yellow captures my eye. I think, "That's a funny looking sparrow". I glance over and see my neighbour sitting on her porch peering through binoculars. She's a bit odd; there have been words over her yard. It's become a wild and untidy place with what looks like weedy plants springing up everywhere. She replanted her lawn to some native stuff and she never waters or fertilizes it.

This morning though, the differences over yard care seem to have disappeared and she is visibly excited. She shouts to me that the bird is a yellow warbler, the first of the year. "It's just flown up from South America, almost 9000 km to get here". "Nine thousand kilometers!" I think to myself, "How does a tiny bird manage that feat?" Despite the differences I have with my neighbour this intrigues me and I have to ask how this is possible. "Even though these birds only weigh the equivalent of two twenty five cent pieces they manage that migration by stopping in the rich, treed areas along rivers and streams and around lakes and wetlands. They fuel up on insects and then make the next leap". I'm amazed;

these wooded areas must be the bird equivalent of 7-11's.

The morning passes at work. My ears perk up at a news report on the radio of a boil water order in some other community. "Boil water, I wonder what that's about?" says one of my coworkers. "It's not about childbirth, corn or canning", says another. "There's either too much mud in the water and it can't be cleaned, or some bug has got into the water and only boiling it will kill it." The thought of boiling water and mud reminds me its coffee time and I head down to the corner café. The usual crowd is there, dissecting the events of the day. I sit next to the fellow that runs the water treatment plant.

When there's a lull in the conversation I ask him about this boil water order. He replies that there are more and more of these to meet drinking water standards. One of the curmudgeons in the group snaps, "So what if the river is muddy and is covered by green scum-can't they filter and treat the water with something? Anyway, don't we get our water from a well?"

Interesting Events:

The Waterton Biosphere Reserve Carnivore Working Group would like to invite you to attend our upcoming public meetings.

The dates, times and locations are as follows:

- 1. Chain Lakes M.D. of Ranchland building on Monday November 10 at 7 pm.
- 2. Pincher Creek the old Fields location in the Co-op/Ranchland Mall on Wednesday November 12 at 7 pm.
- 3. Cardston Tanner Seniors Center on Thursday November 13 at 7 pm



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

The treatment plant operator smiles at the opening he's been given. "Yes, we get our water from a well but most communities in Alberta get all of their water from surface sources like lakes or rivers. Even though we have a well you have to think about where that water comes from; it comes from the surface and slowly trickles down. That water comes from a huge area and even though a lot of stuff gets filtered out, there's an increase in some chemicals." "What kind of chemicals?" snorts the curmudgeon. "Well, things like pesticides, herbicides and nitrates that come from fertilizer or animal manure. Even stuff like the weed and feed you put on your lawn can sneak into the ground water. All of these things, including mud, are hard to remove and can be very expensive, especially for a small town like ours with a limited tax base. Our best, and cheapest, option is protection of the water at its source. That's why many towns are starting to work with the rural counties on watershed protection- its where our water comes from."

"But" he said, "there's another side to this- we treat our waste water and put it into the river. There are at least three communities downstream of us that take water right out of the river." The curmudgeon snorts again and sarcastically retorts, "Should we flush twice for them?" That ended the coffee break!

The phone rings at work; it's a rancher north of town with a side of beef I ordered from him. We agree to meet at my place for lunch. Over sandwiches I tell him about my morning of water, watersheds and birds. He listens intently, with a wrinkle on his brow. He starts to talk. "After 40 some odd years of ranching I thought I knew it all. I'm embarrassed to say there are some things I should have known more about. Back in the 70's I went to a bunch of seminars where they told me I had to be more profitable and efficient." He spat the words "profitable" and "efficient" out.

"So I fired up the cat and bulldozed all the willows and poplars off my bottomlands by the big river. And they were right, for a few years I could graze more cattle and it was more profitable. Then the first flood came along. Without the willows and the trees to glue the riverbanks together the river just ate them up. I tried to slow down that erosion; I even got the government to help. We dumped rock, concrete slabs and even old car bodies. Nothing worked; the river ate those up too. I figure I've flushed more than five acres of my best pasture down the river. I wish I had those willows back. If I had it to do again I wouldn't touch that brush next to the river."

The beef is safely stored in the freezer and I decide to walk back to work. Around the corner one of my neighbours, a retired farmer, is trimming his hedge. He's a quiet, thoughtful man and I share some of the day's events with him. "As I get older I see more ", he mused. "I grew up fishing, I suspect it kept me out of a lot of trouble", he said, with a mischievous twinkle in his eye. "This river used to have walleye in it and I once caught a 12 pound pike. It's hard to find a fish anymore and that worries me."

"But if you want fish, can't you buy fish sticks?" I say, prodding him a bit. "Can't stand them!" he replies, "Fish in the river tell me the place I live is healthy; that's why I'm worried." He's quiet for a moment, thinking about something else. "Fishing and being next to the river helped me see my place in the world. It's about making connections, something that eating fish sticks will never do for you. I want my grandchildren to be able to fish, to make those same connections I was able to make. How can they if we've used up all their chances?"

I almost miss the building where I work; I'm so lost in thought. Waiting for me is a county councilor and I apologize for being distracted by this watershed stuff. She waves off my apology. "Sometimes our thinking is pretty narrow" she recounts, "we are only interested in our own backyards. I used to think, so what if someone drains a mosquito-infested slough 50 km from my back door. How is this going to affect me?"

She goes on to say,"The problem is that our backyards are hitched to everyone else's in the watershed. We've got a situation where the folks in the headwaters want more drainage, to get rid of those sloughs that hold all the snowmelt. The people in the middle, especially here in town, have more flooding and bigger floods because the water all runs off too quickly with the sloughs gone. Then, the people at the bottom end of the river complain there's no water left for most of the year." I think to myself that I'm glad to be on higher ground but I do remember the ban on lawn watering during the drought a couple of summers ago. "It's like we're all living in different areas with different ideas about what we want, but we are all part of the same watershed. We've got to figure this out together", she says.

After supper I take a short drive to clear my head. I cross what I thought was a drainage ditch and it strikes me, "No, this is the river!" There's no sign on the bridge and I'll bet many of my neighbours don't realize this is their river. No wonder it doesn't get any respect! We've ignored our river, turned it into one of the back alleys instead of a front street we could be proud of. It's been quite a day.

At the last flush of the evening I think, "Me, I'm part of a watershed!" I'm going to go to that watershed meeting, meet my neighbours and get educated about where I live.

Lorne Fitch is a Professional Biologist, a retired Fish and Wildlife Biologist and an Adjunct Professor with the University of Calgary

This Changes Everything: Capitalism vs. the Climate

Naomi Klein is a fine writer and has made a significant contribution to the discussions around globalization and the 'shock doctrine,' which describes the fabrication of crises (social, economic, environmental) to discipline populations to accept neoliberal goals.

With *This Changes Everything*, Klein attempts to relate climate change to the logic of capital. Her description of capital is, however, pretty cursory - that capital creates greater inequality, that capital must grow to survive, and that capital subsumes democratic governance have become commonplace observations.

Klein begins by relating colonialism to modern day capitalism through the common thread of exploitation - she uses the people of the island of Nauru as an example of the victimization of colonial resource extraction and, now, as victims of the impacts of climate change.

Klein focusses most of the book on the barriers to addressing climate change: "The three policy pillars of this new era are familiar to us all: Privatization of the public sphere, deregulation of the corporate sector, and lower corporate taxation, paid for with cuts to public spending. Much has been written about the real -world costs of these policies – the instability of financial markets, the excesses of the super-rich, and the desperation of the increasingly disposable poor, as well as the failing state of public infrastructure and services. Very little, however, has been written about how market fundamentalism has, from the very first moments, systematically sabotaged our collective response to climate change" (p.19).

Klein suggests that civilization since Francis Bacon has viewed nature as a machine external to humankind. Instead, she argues: "we are not apart from nature but of it," and further, "That acting collectively for a greater good is not suspect, and that such common projects of mutual aid are responsible for our species' greatest accomplishments. The greed must be disciplined and tempered by both rule and example. That poverty amidst plenty is unconscionable" (p.61). Greed, in this context, is the *modus* operandi of capital, and poverty its natural outcome. It is this logic, she suggests, that allows us to distance ourselves from nature and each other.

This Changes Everything explores the potential for change through 'enlightened' capitalism. Klein looks to billionaires like Bill Gates and Richard Branson who have pledged to address climate change through investment in innovation. The results, predictably, have been insubstantial: she concludes, 'the parade of billionaires who were going to invent a new form of enlightened capitalism but decided that, on second thought, the old one was just too profitable to surrender' (p.252).

More directly, Klein assesses one of the main contributors to climate change - the greenhouse gases from burning fossil fuels. In 2011, a think tank in London called the Carbon Tracker Initiative conducted a breakthrough study that added together the reserves claimed by all the fossil fuel companies, private and state-owned. It found that the oil, gas, and coal to which these players had already laid claim – deposits they have on their books and which were already making money for shareholders – represented 2, 795 gigatons of carbon ... That's a



very big problem because we know roughly how much carbon can be burned between now and 2050 and still leave us a solid chance (roughly 80 percent) of keeping warming below 2 degrees Celsius. According to one highly credible study, that amount of carbon is 565 gigatons between 2011 and 2049" (p.148).

Unless we address climate change through good governance, through an economic system that meets needs and not wants, and by reducing the consumption of fossil fuels, Klein says the future is grim. "Put another way, only mass social movements can save us now. Because we know where the current system, left unchecked, is headed. We also know, I would add, how that system will deal with the reality of serial climaterelated disasters: with profiteering, and escalating barbarism to segregate the losers form the winners. To arrive at that dystopia, all we need to do is keep barreling down the road was are on. The only remaining variable is whether some countervailing power will emerge to block the road, and simultaneously clear some alternative pathways to destinations that are safer. If that happens, well, it changes everything" (p.450).

The mass social movement that Klein is most hopeful about is Idle No More, and the possible ability for First Peoples around

the world to block further resource extraction. These are respectable movements, but will they be enough? Klein does not make a convincing argument ...

