

# Walk Softly

Newsletter of the  
Yukon Conservation Society  
Spring 2015

---



---

**Inside:** • Frack free Yukon! • Next generation hydro • Mining costs

## Whitehorse Christmas Bird Count 2014

The 2014 Whitehorse Christmas Bird Count – held on Boxing Day – set some new records.

The fall and early winter of 2014 was very warm and there was little snow on the ground by count day. There was an unusually large amount of open water on the Yukon River as well as in various streams within the count circle. It seems both the birds and the observers like warm weather, as we had record numbers of species (33) and participants (48)! We had our first Common Loon and Fox Sparrow ever for the count, as well as record numbers of Mallards, American Dippers, Bald Eagles, House Sparrows, and Rusty Blackbirds. There were Bald Eagles everywhere, whereas in most years they are rarely seen anywhere but the Whitehorse landfill. The Common Raven count was high as well, but this may reflect the record number of participants afield. Not only were a lot of people out this year, many of them stayed out from dawn till dusk to take full advantage of the perfect weather conditions.

After the count, many participants enjoyed a social gathering, where some very good finger food was consumed and many tales were told of surviving the (barely) sub-zero temperatures and blistering sun.

*Yukon Bird Club*  
[yukonbirdclub@gmail.com](mailto:yukonbirdclub@gmail.com)  
[www.yukonweb.com/community/ybc/](http://www.yukonweb.com/community/ybc/)

*Here is a list  
of species and  
numbers seen.*

### The Yukon Environmental Training Fund

The goal of the Yukon Environmental Training Fund (YETF) is to support training, retraining, upgrading and improving of occupational skills of those employed by Yukon's environmental groups or individuals working on environmental issues and activities in the Yukon.

Training opportunities offered to assist Yukoners with securing immediate employment or keeping Yukoners up to speed in the Yukon non-profit conservation sector have been funded in past years. Individuals can be successful in obtaining funding if the training makes them immediately employable in the Yukon non-profit conservation sector or if they're currently working in the Yukon non-profit conservation sector and like to benefit from training to stay current in their field.

**The Yukon Environmental Training Fund is available for you!**

Check our website [yukonconservation.org](http://yukonconservation.org) for more information about this Fund and whether your training project is eligible for funding or contact Judith at YCS 668-5678.



Species Sighted	Number Seen
Common Loon	1
Mallard	75
Barrow's Goldeneye	1
Common Merganser	6
Bald Eagle	39
Golden Eagle **	1
Rock Pigeon	6
Downy Woodpecker	1
Hairy Woodpecker	3
American Three-toed Woodpecker	1
Gray Jay	27
Black-billed Magpie	158
American Crow	0
Common Raven	2209
Black-capped Chickadee	108
Mountain Chickadee **	2
Boreal Chickadee	70
Chickadee sp.	4
Red-breasted Nuthatch	3
American Dipper	15
American Robin	3
Bohemian Waxwing	216
Fox Sparrow	1
White-crowned Sparrow	1
Dark-eyed Junco **	4
Pine Grosbeak	258
Red Crossbill	106
White-winged Crossbill	140
Crossbill sp.	46
Common Redpoll	519
Hoary Redpoll	6
Redpoll sp.	22
House Sparrow	70
Willow Ptarmigan	1
Spruce Grouse	7
Ruffed Grouse	1
Grouse sp.	1
Rusty Blackbird	3
<b>Total Individuals</b>	<b>4135</b>
<b>Number of species</b>	<b>33</b>

## The Yukon Will Remain Frack Free!

The much-anticipated report from the Select Committee Regarding the Risks and Benefits of Hydraulic Fracturing was released on January 19, 2015 ([http://www.legassembly.gov.yk.ca/pdf/rbhf\\_final\\_report.pdf](http://www.legassembly.gov.yk.ca/pdf/rbhf_final_report.pdf)).

YCS quite liked the report and its recommendations. However, if we step back and consider the much larger picture for a moment, the report is irrelevant.

Nature, the world's most authoritative scientific journal, recently published calculations that showed that if we are to avoid heating the world more than 2° C, 3/4 of all discovered fossil fuels will have to remain in the ground (Jakob & Hilaire 2015). The 1/4 we could extract will have to be from the lowest carbon sources- close to refineries, close to markets, easy and cheap to extract (McGlade & Ekins 2015).

By no measure could we say that any of the fossil fuels that may be under Yukon fit these criteria, and certainly not if they have to be fracked out of the ground.

In any case, if we are to take global warming seriously, the era of exploring for yet more oil and gas has to be over. Which is why I opened this article stating that the Select Committee report is irrelevant.

But to dive into the contents of the report itself: Perhaps the Committee realized fracking will never happen in Yukon and that is the reason they spent almost no effort detailing the benefits of fracking and concentrated almost entirely on its risks and unknowns.

Perhaps the Committee could not find any benefits.

YCS' strategy for our fracking campaign included getting out early and being clear, firm and authoritative about why fracking should be banned in Yukon.

YCS was one of the first groups to present to the Select Committee and we made our case so well that all of the points we raised featured in the report.

Much of the fracking report talked about how little is known of fracking's ill effects.

**OIL, GAS,  
FRACKING  
AND THE YUKON!**

The number of peer-reviewed articles on fracking grew exponentially during the 21-month mandate of the Committee, and some facts came to light while it was being released:

Fracking induced earthquakes had always been associated with injection wells (the deep wells where the toxic waste from fracking gets pumped if the companies are not allowed to dump it on the surface or into rivers), but now we learn that the actual act of fracking – pumping liquid underground at high pressure to crack rock - causes the largest fracking related earthquakes (Nikiforuk 2015).

We recently learned more about the issue of radioactive waste: about a dump truck of radioactive waste a year is generated by each fracking well (Scheyder 2015).

But it is the effects of fracking on human health where the field of knowledge has really taken off and the news is not good.

Four times as many articles on the human health effects of fracking were published during the hearings as had been published altogether before the hearings started.

It was these reports that caused the Governor of New York, the premiers of New Brunswick and Nova Scotia and the governments of Wales, Bulgaria, Scotland and others to ban fracking until it can be done safely.

It is clear from the recommendations of the Committee that they did come to a consensus that fracking is dangerous and not enough is known about it to allow it to happen in Yukon.

Most dramatically the Select Committee members in effect recommended restoration of the veto First Nations used to have over whether fracking could take place on their traditional territories.

YCS congratulates the Committee on their thorough work and calls on the Yukon government to accept these recommendations and follow through with a full ban on fracking in Yukon.

*Sebastian Jones,  
YCS energy analyst*

### References

- Jakob, M. & Hilaire, J. Nature 517, 150–152 (08 January 2015) doi:10.1038/517150a
- McGlade, G. & Ekins, P. Nature 517, 187–190 (08 January 2015) doi:10.1038/nature14016
- Nikiforuk, A. Fracking Quakes Pose Added Risks and Require Study, Expert Warns <http://thetyee.ca/News/2015/02/02/Fracking-Quakes-Study-Required/>
- Scheyder, E. <http://www.reuters.com/article/2015/01/28/us-usa-north-dakota-waste-idUSKBN0L11Z420150128?feedType=RSS&feedName=environmentNews>

### Walk Softly

is published by the Yukon Conservation Society for members and subscribers. Memberships and information about the Society can be obtained by contacting the YCS office.

302 Hawkins Street  
Whitehorse, Yukon  
Y1A 1X6

PHONE: 867 668-5678

FAX: 867 668-6637

EMAIL: ycs@ycs.yk.ca

WEBSITE: yukonconservation.org

We welcome newsletter submissions and letters to the editor. Deadlines for submissions are Feb 1, May 1, Aug 1, and Nov 1. Views expressed in *Walk Softly* are not necessarily those of the Society.

Publications Mail Agreement number 4154991  
Changes of address or undeliverable copies should be sent to YCS at 302 Hawkins St., Whitehorse, Yukon Y1A 1X6

#### YCS BOARD OF DIRECTORS:

Mary Whitley (President)  
Joshua Hunt (Vice President)  
Skeeter Wright (Treasurer)  
David Neufeld (Secretary)  
Meagan Christie  
Lee Carruthers  
Bonnie Burns  
Nick de Graff  
Roy Jantzen  
Alberto Suárez

#### STAFF

Christina Macdonald,  
executive director

Anne Middler, energy analyst

Lewis Rifkind, mining analyst

Sebastian Jones,  
energy analyst

Judith van Gulick,  
office coordinator

#### WORKERS ON THIS ISSUE

Tanya Handley  
Judith van Gulick

printed on 100% recycled paper



## Editorial

by Christina Macdonald

“6 o’clock and it’s still light out?” With the return of daylight at this time of the year the social sap starts flowing in the territory – people emerge from hibernation to make after work plans and there’s even talk of the summer. But from where I sit (back room of the YCS Office) the excitement in the air seems to be about more than just the prospect of warmer temperatures and long days – good things are happening when it comes to the environment. Since November’s edition of *Walk Softly* some major events have occurred that have put a buzz in the air and a spring in my step. The articles in this edition of *Walk Softly* dive into more detail, but here’s a taste of what’s inside:

- November 21 - a group of Yukon people working for a frack-free Yukon hosted a Celebration of Land and Water to celebrate the 7000+ people who signed a petition against fracking in the Yukon
- December 2 - Justice Ron Veale released the Yukon Supreme Court decision on the Peel legal case: we won! An historic judgment that will put us in a powerful position when we meet the Yukon government at the Yukon Court of Appeal.
- December 5 – Yukon Energy announced plans to complete the work necessary to select a site for a five to ten megawatt wind farm in the territory
- December 16 – hundreds of people from across the territory gathered in Whitehorse to celebrate the Peel Watershed Yukon Supreme Court decision
- January 15 – in response to Yukon government’s appeal of the Yukon Supreme Court decision, the plaintiffs held a Peel Appeal Public Meeting that was packed with people affirming their support for protecting the Peel
- January 19 – the Select Committee Regarding the Risks and Benefits of Hydraulic Fracturing released their Final Report. Although the Committee did not recommend a moratorium the report contained strong recommendations, including First Nations veto power
- January 22 - Chiefs at a leadership meeting of the Council of Yukon First Nations pledged support for a Peel watershed land use legal defense fund
- January 25 - U.S. President Barack Obama asked Congress to declare over 12 million acres of Alaska’s Arctic National Wildlife Refuge (the calving grounds of the Porcupine Caribou Herd) as wilderness, the highest level of protection available for public lands (prohibits mining, drilling, roads, vehicles and permanent structures).
- January 27 – discussion of Yukon’s mining closure regulations instigated by Wolverine Mine operational issues
- February 15 – YCS sponsored screening of DamNation at the Available Light Film Festival enhanced public discussion of Yukon Development Corporation’s Next Generation Hydro process, and the role of hydroelectricity in the Yukon’s sustainable energy future



It seems to me that more than ever, people in the territory are getting involved and speaking out. Technology is helping – within an hour our tweet about our Peel legal case Yukon Supreme Court win reached thousands, and YouTube allows us to video stream information events in real time right to people's home computers. We can also thank our local journalists for elevating the level of discussion with their hard hitting, well researched stories and interviews that encourage us all to reflect and ask questions.

First Nation governments have been inspirational in their united stand against fracking in the territory and their assertion of treaty rights.

In the Yukon we are immersed in the 'environment' – it isn't covered by concrete or hidden by skyscrapers, it stares you in the face, quite often literally from the side of the highway on your commute to work. This intimacy fuels Yukon people in their work to ensure the wildlife and land are sustained and makes it hard to turn a blind eye – no wonder people are speaking out and celebrating our collective achievements! I am certainly glad and hopeful to be sitting in this movement and this land.



## Damage Deposit Up Front

Prior to moving into a rental apartment or house, a damage deposit is paid to the landlord.

This damage deposit covers the potential cost of repairs to the apartment should a future damaging event occur.

When vacating the rental unit, if no damage had been inflicted, the deposit is returned.

That is an example of how damage deposits normally work. Then there is Yukon mining damage deposits.

The general idea is that when a mine starts operating they have to put up some money to cover cleanup and reclamation to the mine site once the mine stops operating. This is known as the financial security.

The money is used by the government to hire contractors to do the cleanup and closure work if the company was unable to. This occurs if the company either runs into financial difficulties or has gone bankrupt.

In the past, it has mainly been the Federal Government that approved mines and held the security deposit, but since devolution the Yukon Government has assumed that role.

Not only do they hold the financial security, they are also responsible for determining the amount.

When a company applies for a Quartz Mining License to operate a mine, the financial security amount is determined through negotiations between the company and the Yukon Government.

The Yukon Water Board can also establish a financial security deposit above and beyond what the Quartz Mining License states.

As the reader might be aware, the Yukon does not have a good record in ensuring mining companies pay to clean up the messes they have made.

Clinton Creek, Keno, Mt. Nanson and Faro are all costing Canadian taxpayers billions to clean-up and close. Yes, that is correct. Billions.

Having learnt from these past environmental and fiscal disasters it is imperative that mining companies put up enough money to cover their clean-up costs.

And it's important to put the money up front.

An apartment dweller doesn't promise to pay a damage deposit at some future date. Only after they've paid all of it do they get to move in.

But not the Yukon mining industry.

Recent press coverage of the Wolverine Mine has revealed that the financial security for the site was determined to be \$10.5 million.

Even after three years in operation the full amount wasn't paid, and by early 2014 there was only \$7.5 million.

Now the mine has temporarily closed and without a cash flow it would appear highly unlikely that the outstanding three million will be paid.

Should the company not be able to resume operations at the mine site, and the Yukon Government have to assume closure costs, there will only be \$7.5 million to do the work.

If the closure is \$10.5 million that would mean Yukoners are on the hook for \$3 million.

If like every other mining project in Yukon's history, the clean-up costs are higher than anticipated, then the Yukon shall be on the hook for considerably more.

If there's a moral to this tale of fiscal ineptitude, it's get the money up front. Get all the money up front.

*Lewis Rifkind, Yukon Conservation Society Mining Analyst*

## Peel Watershed land use planning process timeline

*This timeline details the land use planning process specific to the Yukon government's interactions with the Peel Watershed Regional Planning Commission. A similar, concurrent process took place between affected First Nations and the Commission.*

To read Justice Veale's Yukon Supreme Court ruling or to learn more about the Peel Watershed, go to [protectpeel.ca](http://protectpeel.ca)

Thank you to all of those who have supported us over the years! Let's keep the support growing as we move through the Appeal process.

**2004** - Peel Watershed Regional Planning Commission was established

**2009** - Peel Watershed Regional Planning Commission produces a Recommended Plan

**February 2011** - Yukon government (YG) can opt to reject, approve or modify the Recommended Plan. YG opts to modify the Recommended Plan and provides five modifications to the Commission, requesting:

- 1) a more balanced plan
- 2) new options for access to the area
- 3) a simplification of the land management regime
- 4) a revision to the plan so the Parties are responsible for implementation on their lands
- 5) development of a high level, streamlined document

**July 22, 2011** – Planning Commission produces a Final Recommended Plan that recommends 80% of the region be protected (55 per cent complete protection and 25 per cent interim protection) and 20% be open to development. In producing the Final Recommended Plan, the Commission considered YG's proposed modifications and made changes to the Recommended Plan in response to the last three, but concluded that the first two (regarding balance and access) were too general for them to respond to as no information was provided about why or where within the region YG wanted the changes.

**October 2011** - territorial election. Premier Pasloski refuses to comment on his party's position on the Final Recommended Plan to not politicize the issue.

**February 2012** - YG announces it has new principles and tools to guide modification of the Final Recommended Plan and conducts final consultations with First Nations and affected communities. There were over 10,000 submissions during these consultations, including petitions and form letters, of which 9,222 (94%) supported the Commission's Plan.

**January 22, 2014** - YG approves a plan for the Peel Watershed that opens 71% of the Peel Watershed to staking.

**January 27, 2014** - legal proceedings are launched against YG by four plaintiffs, YCS, CPAWS Yukon, the First Nation of Nacho Nyak Dun and Tr'ondëk Hwëch'in. The grounds for the case are that YG broke with the land use planning process laid out in the Umbrella Final Agreement (UFA) and incorporated in all the First Nations Final Agreements in Yukon.

**July 7-10, 2014** - case is heard by Justice Ron Veale in the Supreme Court of Yukon, Whitehorse. Plaintiffs are represented by lawyer Thomas Berger. Gwich'in Tribal Council supports the plaintiff's case as an intervener. The plaintiffs seek to have the process set out in the UFA upheld and to see the planning through to a conclusion that would protect more than 54,000 square kilometres of wilderness in northern Yukon's Peel River Watershed from mining and other industrial development.

**October 24, 2014** - continued one day hearing at the Supreme Court of Yukon to accommodate a deeper discussion focused on the remedy the plaintiffs are seeking.

**December 2, 2014** - Justice Veale releases the verdict of the Yukon Supreme Court, a judgment of constitutional significance because it involves "land claims agreements", and "treaty rights" which have constitutional protection under section 35 of the 1982 Constitution Act.

**December 30, 2014** – YG files notice that it is appealing the Yukon Supreme Court decision



### Justice Veale's ruling:

- describes government's process as "impermissibly flawed" (para 197), and concludes that Yukon government's process "neither respected the land use planning process, nor interpreted the land use planning process in the honourable way expected of the Crown under First Nation Final Agreements" (para 200).

#### Declares:

- 1) Yukon government failed to follow the land use planning approval process because it did not properly conduct the Final Consultation and introduced new modifications that were not presented to the Peel Planning Commission
- 2) *And orders that*
  - a. The final consultation and Government approved plan be quashed
  - b. YG must redo Final Consultations with First Nations and affected communities. (up until Final Consultations, all parties were properly following the process; it was only at this point that YG took things off the rails, so it is to this point, not earlier, the process should be returned to)
  - c. If YG wants to modify the Final Recommended Plan during Final Consultations, modifications are limited to modifications 3, 4, 5 they proposed earlier in the process during consultations on the Recommended Plan. Modifications 1 and 2 (regarding balance and access) are off the table. In other words, YG cannot redo the Final Consultations only to submit their own plan for the Peel Watershed which dramatically increases development and access in the watershed.

### Appeal Timeline

**February 28, 2015** – deadline for YG to file documents on Yukon Supreme Court trial

**March 30, 2015** – deadline for YG to file factum (a statement of facts and an outline of the legal argument)

**April 29, 2015** – deadline for Plaintiffs to file response

**Sometime after this ...** Yukon Court of Appeal appearance at a mutually agreed time

*Christina Macdonald,  
YCS executive director*

## BIG THANKS!

The Yukon Conservation Society shouts out a BIG thank you to the **Yukon Fish and Wildlife Management Board** for the donation of a desk and cabinet. We love the –for us new – office furniture. Thanks so much!!

The Yukon Conservation Society shouts out a BIG thank you to Cathie Archbould from **Archbould Photography** for the donation of her amazing skills! Thanks to Cathie the Yukon Conservation Society now has great profile photos of our lovely staff on our website – [yukonconservationsociety.org](http://yukonconservationsociety.org)

### Do you know that the Yukon Conservation Society is carrying Limited Edition prints by Don Weir?

Don has kindly offered YCS partial proceeds from the sales of the prints.

Alpine Colour in the Tatshenshini \$ 185.00 (tax included) 16" x 24"

Don Weir is donating \$75.00 from the sale of every Alpine Colour in the Tatshenshini Fine Art Print to the Yukon Conservation Society.

Autumn Colour – Donjek Valley \$ 185.00 (tax included) 16" x 23"

Don Weir is donating \$35.00 from the sale of each Autumn Colour – Donjek Valley Fine Art Print to the Yukon Conservation Society, and \$50.00 to Karen's Fund up at the Whitehorse General Hospital which supports breast cancer patients.

They're beautiful prints! But hard to show in black and white here. Check them out at <http://www.yukonconservation.org/store.htm>

## For What It's Worth

All the minerals in the Yukon ground belong to all of Yukon people. There is a notable exception, and that is if the minerals are on First Nation Category A land. In those instances, the minerals and the associated royalties belong to that particular First Nation.

Generally, when a mining company digs metals up, it pays royalties to the Yukon Government in exchange for the minerals.

And then the mineral no longer belongs to us. So one assumes that the economic benefit gained from mineral royalties would reflect the value of this loss.

Let's look at the figures and try to figure out where they came from.

Take gold for an example. Yukon levies a royalty on all gold shipped from Yukon for export, whether in the form of gold dust as mined or bars.

The royalty is calculated at the rate of 2.5% of the value of the gold. Not today's gold price however, which is about \$1,275 an ounce, but the gold price from 1918 - \$15 per ounce!

The royalty therefore is \$0.375 per ounce of gold. That's right. The Yukon gives \$1,275 worth of gold away in exchange for thirty seven and a half cents.

From this chart it can be determined that for 2013 the Yukon received about \$22,298 in placer royalties for the nearly \$70 million worth of gold removed from the ground forever.



Hard rock royalties are harder to calculate.

For the purpose of calculating the hard rock royalty, the profit is considered the amount by which the value of annual output from mining (revenues) exceeds eligible deductions (costs) for the year.

But according to Yukon Government ([http://www.emr.gov.yk.ca/mining/royalty\\_narrative.html](http://www.emr.gov.yk.ca/mining/royalty_narrative.html)), we have an idea of the royalties paid from 2007 to 2012 from the three hard rock mines that have been active. It's probably a lot less now, given that there is only one left operating in the Yukon.

### Minto Mine (Capstone Mining Corp.)

Year	Royalty Paid
2007	\$0.00 *
2008	\$1,503,491.00
2009	\$5,917,904.00
2010	\$3,806,550.00
2011	\$1,680,398.00 **
2012	\$391,661.00

### Bellekeno Mine (Alexco Resources)

Year	Royalty Paid
2010	\$0.00 *
2011	\$351,525.00
2012	\$372,588.00

### Wolverine Mine Yukon Zinc

Year	Royalty Paid
2012	\$0.00 *

\* First commercial production year

\*\* Transition year under new regulations

So, the total hard rock royalties for 2007 to 2012 for the three mines were just over fourteen million dollars, of which \$13,300,000 went to the Selkirk First Nation because the mine is on Category A land.

In other words, for all the hoopla we have about mining benefiting the Yukon, over a five year period, the Yukon Government got \$700,000.

Given the amount of money spent promoting the industry, cost of providing infrastructure such as roads and power generation, the other hidden subsidies in the form of mine training and exploration programs, not to mention the cost of cleaning up the mess of all the abandoned mines within the Territory, it makes one wonder why the Yukon Government is so supportive of this industry when there are such low rates of return.

The Red Herring argument that we need to replace federal transfer payments by selling out our resources in exchange for royalties, looks like fool's gold.

- Lewis Rifkind, YCS Mining Analyst



### YUKON PLACER INDUSTRY PRODUCTION

YEAR	OUNCES (fine@ 0.80)	VALUE (CDN)	Yukon Royalties
2010	41,897	\$52.8 million	\$19,639
2011	37,345	\$58 million	\$17,505
2012	42,123	\$70.2 million	\$19,745
2013	47,569	\$69.4 million.	\$22,297

(these figures apart from the Yukon Royalties column are taken from <http://ygsftp.gov.yk.ca/publications/yplacer/Yukon%20Placer%20Industry%20Report%202010%20to%202014.pdf>)





### Yukon's Energy Solutions Showcase

YCS has been working with partners to identify “solutions practitioners” to profile, recognize, and celebrate for this exciting project. It is inspiring to consolidate a list of people who are taking actions to reduce their energy consumption and the associated environmental impacts, and who are generating renewable energy.

We have an impressive list that grows daily as we learn about more energy conservation champions. It will be impossible for the project to showcase everyone. We take comfort, though, in the hope that this will be the first annual YES Showcase, and that the people we are unable to capture on film due to time and budget constraints can be featured the next go around. In addition to finalizing a (very long) shortlist of potential participant subjects, we are accepting expressions of interest from filmmakers and videographers.

As of *Walk Softly's* deadline, there are still a few days left to receive applications.

We have already had a diverse range of amazing proposals come in, and many talented professionals inquire for more information. It will be a difficult decision to make.

We will keep you posted on our progress as we work towards the community celebration of energy solutions with short film screening some time in May.

## Once You Start Asking Questions, Innocence Is Gone\*

The Casino Mine project is a proposed copper, gold, silver and molybdenum mine located due west of Pelly Crossing and straight south of Dawson. If it goes ahead, it would be the largest mine in Yukon history and one of the largest in Canada.

YCS noted concerns with this project before, notably in the Fall 2014 issue of *Walk Softly* where it was pointed out that the Casino tailings pond would be contained behind an earthen dam very similar in concept to the Mount Polley one which was about thirty-five metres high.

For those not familiar with it, the Mount Polley earthen dam collapsed in northern British Columbia this past summer. It released 24 million cubic metres of mine waste water and tailings into the environment.

The Mount Polley earthen dam was about thirty-five metres high but the Casino earthen dam would, at its deepest point, be 286 metres high. You can read the full article at <http://www.yukonconservation.org/library/newsletters/fall2014.pdf>.

Now the Casino Mine has been submitting paperwork to the Executive Committee of the Yukon Environmental and Socio-economic Assessment Board (YESAB). This is the start of the environmental assessment process.

Part of the process involves YESAB and interested parties doing a technical review of the submission to ensure it is adequate. Rather, the adequacy review stage ensures the proposal is technically competent and enough information has been submitted for the public review, the next stage in the process.

YESAB, to their credit, has determined that supplementary information is required before the proposal can be considered adequate enough to proceed to the public review stage.

The supplementary information requested takes the form of 449 questions asked by YESAB of the mining company. That's right, that's a lot of questions. But then the mine proposed is a lot of mine.

To read the questions visit [www.yesab.ca/registry](http://www.yesab.ca/registry) and look for project # 2014-0002, the Casino Mine Project. Once you've clicked on that link the document with all the questions is # 2014-0002-289-1, and it is titled *Adequacy Review Report – 2015-01-27*.

All the questions are important, but YCS takes particular comfort in the second to last question.

Question 448 asks the project proponent to provide:

An updated discussion regarding the likelihood and consequence of a TMF (tailings management facility) embankment failure considering the entire lifetime of the facility (i.e. in perpetuity) in light of updated site condition characterization and dam break/inundation analysis as outlined in other sections of the Adequacy Review Report.

It's all very well to propose the biggest mine in the Yukon's history, but it is doubly important to question every aspect of this project. Should that earthen dam get built and then fail, the environmental harm would be catastrophic.

When it comes to these massive proposals, the Yukon must ask the tough questions. After Faro, after Mt. Nanson, after Keno, after Clinton Creek, the Yukon cannot turn a blind eye to the harm large mining projects can do.

*Lewis Rifkind, Mining Analyst.*  
\* Title is a quote from Mary Astor.

## Next Generation Hydro

Yukon Development Corporation's (YDC) Next Generation Hydro process is unfolding and YCS is watching closely. With assistance from YCS's energy committee, we submitted a position paper to the Next Generation Hydro technical and engagement teams early in 2015. It outlined YCS's preference for maintaining our isolated grid status, and adding capacity incrementally with distributed, decentralized and diverse renewable energy projects to meet our energy needs and electrify currently fossil fueled sectors. As for hydro, we support small-scale low-impact projects that have the support of local communities and First Nations.

At the recent second technical workshop for the YDC-led, Yukon Government-directed process, members from the First Nation of Na-Cho Nyak Dun (NND) from Mayo were there to represent and defend their traditional territory from the threat of a big hydroelectric dam on the Stewart River. Elders and community members respectfully explained that it would have been a good idea to have the First Nations at the table at the beginning of this process, when criteria by which to assess the potential sites were being discussed and decided on.

At the beginning of the process, the longlist of upwards of 200 projects was whittled down by eliminating projects and sites if they: 1. were less than 10 MW, 2. were located on the Yukon River, 3. caused flooding in a National Park or a community and 4. were deemed too uneconomic to warrant further investigation (too far away from existing road and transmission infrastructure, etc).

These somewhat arbitrary criteria removed some potentially good projects in the 0-10 MW range. We are told, and we hope, that Yukon Energy Corporation (YEC) is investigating some of those smaller projects with First Nation government and development corporation partners to be developed over the next 10 to 20 years. Ideally there will be a mechanism for independent power producers to advance wind, solar and low-impact hydro projects, in particular seasonal and pumped storage hydro projects, to add energy and capacity to our grid as well.

If First Nations had been at YDC's Next Generation Hydro table from the outset, they likely would have identified significant Special Management and Habitat Protection Areas as Off Limits. Na-Cho Nyak Dun would have removed Fraser Falls from the potential sites because a dam there would flood Horseshoe Slough Habitat Protection Area, and other important cultural and historical sites.

Members of Selkirk First Nation and the Selkirk Renewable Resources Council were there to voice opposition to a dam on the Pelly River at Granite Canyon. The SRRC has worked hard over the past 15 years trying to designate the ecologically significant and productive South MacMillan River a Habitat Protection Area (HPA) to provide protection from the Granite Canyon Dam threat, which could also impact the upstream Final Agreement-recognized Ddhaw Ghro HPA.

At the workshop, the Midgard Consulting technical team shared its findings about the Yukon's Electrical Energy and Capacity Needs Forecast (2013-2065). Midgard looked at past trends to inform future predictions. Their analysis did not factor in the myriad variables that could impact future energy needs in the territory, such as a massive in-migration of climate refugees, widespread integration of solar arrays, retrofits for existing fossil fuel heating systems to electricity, or some new game-changing technology that we haven't discovered or heard about yet.

The electricity forecast had three potential scenarios: low case, baseline case and high case. The results for the low case concluded that we will have an 11 MW shortfall of electrical capacity by 2035 and a 31 MW shortfall by 2065. The high case a 36 MW gap in 20 years and a 136 MW gap in 50 years. The baseline case is 21 MW and 53 MW for 20 and 50 years respectively.

One hydro proponent who spoke on a panel at the workshop argued that we must look beyond electricity when contemplating how future hydro development can meet our energy needs. This acknowledges the potential electricity market for space heating, the Yukon's second biggest energy consumer that currently burns a lot of fossil fuels and emits lots of greenhouse gases. The Yukon's biggest energy consumer is transportation. This sector may pose greater challenges than space heating for electrification, but there is great potential to improve efficiency and electrify fleets with renewable energy to reduce and displace fossil fuels.



YCS agrees that we need to fuel switch – to electrify with renewable energy these sectors that are currently fossil fueled. But how we do that and what we are willing to sacrifice to achieve it are the energy conversations around tradeoffs that must be had. YCS is challenged by the choice between local impacts (fish, for example) versus global benefits (GHG reductions) that hydro projects often pose.

However, we believe that certain types of winter/pumped storage hydro projects, and others that meet low impact criteria and thereby don't have associated negative impacts, can alleviate these difficult decisions, and solve problems without creating new ones. YCS does not believe that potential pumped storage projects have been considered in past hydro and geography reconnaissance work. These types of projects can provide firm and dispatchable winter energy when we need it the most, and can be the key to the development of intermittent renewable energy sources like wind and solar by acting like a battery.

Despite the pitch for big hydro projects to displace the vast amounts of fossil fuels the Yukon currently imports for heating and transportation, YDC and its technical team are going with their relatively conservative electricity needs forecasts. The next step in their process is to revisit the shortlist of ten sites and revise the historical project designs to scale them to better fit into the needs forecast, which will reduce energy output and may also reduce the environmental and socio-economic impacts. The Fraser Falls and Granite Canyon dams as historically envisioned (100-300 MW and 80-254 MW respectively) would be too big. YCS is unsure whether the technical team will continue to investigate these two sites but design projects for a smaller footprint and energy output, considering the strong opposition.

In addition to Selkirk and Na-Cho Nyak Dun, other First Nations' traditional territories where the 10 sites are located are the Kaska (Ross River Dena Council and Liard First Nation), and Teslin Tlingit Council (and possibly also Ta'an Kwäch'än Council and Kwanlin Dun First Nation for a site on the Teslin River 60 km east of Whitehorse and 65 km downstream of Johnson's Crossing).

YDC's project manager and the technical and engagement teams frequently talk about the "four-legged stool". It is the chosen analogy for the four factors – technical, economic, social, and environmental – that must be in balance for a project to be acceptable.

While there have been some environmental considerations to date (fisheries, aquatic and terrestrial Species At Risk), most of the work so far has looked at technical and economic factors. The cultural and socio-economic impacts have not yet been taken into account. A technical paper about socio-economic and environmental effects is expected to be released in September.

YCS would have hoped that from its experiences, Yukon Government would have recognized that First Nations must be at the table, and their input and concerns must be considered paramount, not as postscripts or appendices.

To read our Next Generation Hydro position paper, visit [www.yukonconservation.org](http://www.yukonconservation.org)

*Anne Middler,  
YCS Energy Analyst*

## YISC Horticultural Program

The horticulture industry is both a contemporary and historical source of invasive plants, and a major link in their ever-increasing distribution. Close to 60% of invasive plants arrived in Canada as agricultural crops, landscape plants, ornamentals, and plants for medicinal and research purposes. Invasive plants continue to be sold in many nursery and gardening outlets across the Yukon, and are traded as seeds, transplants, or starter plants by gardening and landscaping enthusiasts. If left un-managed, invasive species can negatively impact wildlife and wildlife habitat, human health and safety, as well as local economies.

To help reduce the introduction of invasive plants through horticultural pathways, the Yukon Invasive Species Council (YISC) has recently reached out to industry representatives, landscape architects, gardening enthusiasts, and nurseries. By working together with these groups, YISC hopes to lessen the negative impacts that result from the spread of invasive species.

Gardeners and landscapers have a key role in helping to prevent the introduction and spread of invasive plants—individuals can make a difference! By following best practices and using recommended alternatives you can achieve a vibrant and dynamic garden while contributing toward the prevention of the spread of invasive species in the Yukon.

Stay tuned for YISC's Grow me instead brochure!

*Yukon Invasive Species Council  
[info@yukoninvasives.com](mailto:info@yukoninvasives.com)  
[www.yukoninvasives.com](http://www.yukoninvasives.com)*

## Eagle Plain and Kotaneelee Updates

Your Oil and Gas Energy Analyst has had a busy time since the last *Walk Softly* with two significant fossil fuel projects, Northern Cross Yukon (NCY) at Eagle Plain north of Dawson and EFLO Energy's Kotaneelee project in the extreme southeast Yukon.

Both of these projects have been going through Yukon's environmental and socio-economic assessment process, YESAB.

The Kotaneelee project has been recommended to proceed with conditions and the NCY project is still trying to answer YESAB's questions.

YCS submitted extensive comments on these projects that affected the course of the assessments. The public and government agencies also commented extensively and these comments were also very useful.

### Kotaneelee YESAB # 2014-0140

This is the project in the extreme south-east Yukon.

For many years, from 1990 to 2012, the Kotaneelee gas wells were the only producing fossil fuel project in Yukon. A pipeline was built to take the gas to Fort Nelson for refining.

As is inevitable with all non-renewable resource projects, the Kotaneelee produced well for a while and then began to run out.

The way that the Kotaneelee ran out has some bearing on the current project, so it is worthwhile to take a moment to describe what happened.

Oil and gas reservoirs are not giant caverns underground filled with oil or gas waiting to be released. They are more like aquifers; that is they are areas of porous rock that has its little spaces filled with oil, gas or water or a combination of the two or more of them. Usually there are all three. Gas is lighter than oil which is

lighter than water, so typically, the reservoir will stratify; water will lie at the bottom, with oil above it and the gas on the top.

The Kotaneelee seems to be mostly gas and water. As the gas was used up, water rose to take its place and more and more water and less and less gas came up through the wells until, in 2012, the company decided to shut the wells down.

As is typical in these cases, a smaller company (EFLO Energy) took over the distressed assets for the chance of making some marginal profits.

They soon realized that they would only be able to really make these wells work if they fracked them, but Yukon does not allow fracking so EFLO decided to proceed with what they call a "workover" where they will partially plug the wells, stopping the flow of water from the base of the wells, and start extracting further up in the formation.

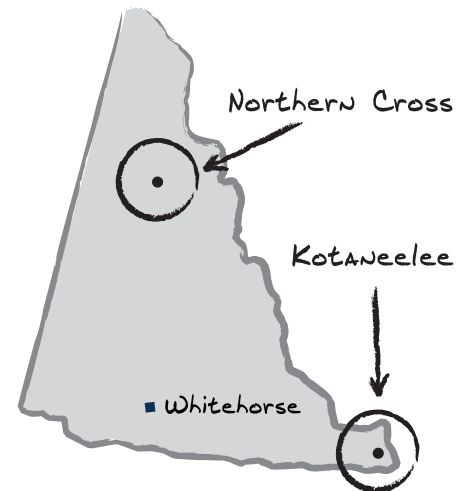
The idea is that they will get about the same amount of gas as when the wells shut down, but with less water.

These upper formations are less porous, so gas does not flow so well so this is why they want to frack them.

They are in fact proposing a kind of fracking called acid matrix fracking. This technique involves pumping hydrochloric acid down the hole so it eats away at the gas bearing rocks, creating spaces for the gas to flow more readily.

This is a different thing from High Volume Slick Water Hydraulic Fracturing, which is the beast the Select Committee Regarding the Risks and Benefits of Hydraulic Fracturing was looking at.

EFLO would like to do this big boy fracking, but figure that in the mean time they will stick to acid fracking.



YCS does not think this, or any fossil fuel project in Yukon, should go ahead - it is time we got off fossil fuels and there are plenty of producing wells already, enough to cook the planet without adding to the problem.

YCS had specific problems with the Kotaneelee project.

The first problem we had was economic. EFLO will not hire any Yukoners and will not buy any materials in Yukon and will give no work to Yukon contractors. It is unlikely they will pay any royalties because the price of gas is low and the cost of production is high: Yukon's royalty rules allow generous deductions from revenues to the point the deductions sometimes exceed revenues.

The second problem we have is environmental. The previous operator produced enough sulfurous air pollution that it probably wiped out a nearby population of rare lichen. EFLO has no plan to reduce this pollution, but they do plan to measure it. EFLO plans to inject excess wastes into a suspended well near the Beaver River. They are likely to have a hard time getting past the Yukon Water Board's requirement that a minimum of two years of ground water monitoring take place before commencing waste injection.

EFLO had a difficult time remembering they are proposing to operate in Yukon rather than in BC or Alberta so tended to think they could use BC or Alberta regulations and standards, but most of that was cleared up in the YESAB process.

I think it is unlikely that this project will go ahead until/if the price of gas rises again. Many junior companies in the gas business are struggling against bankruptcy, and EFLO is no exception.

### Northern Cross Yukon YESAB # 2014-0112

This is the project at Eagle Plain.

Companies have been scratching around Eagle Plain since the late '50s. Despite all this activity, there are no proven reserves identified at Eagle Plain. This project aims to do just that.

NCY has drilled four wells there already and last year did a 3D seismic survey project- recall the photographs in the Summer 2014 Walk Softly. Now they want to drill at least ten more wells, possibly up to twenty.

Their proposal to YESAB has been interesting, to be generous. It is a large proposal, numerous documents and thousands of pages. NCY originally intended to start drilling this winter. However, they are still trying to answer YESAB's additional questions.

These questions arose after the project was put out for public comments. YCS, the public and several government agencies identified serious concerns with the project, including effects on the Porcupine Caribou herd, the utter lack of surface water in the vicinity in winter and the idea of dumping radioactive and toxic drilling wastes on the surface near the project (These last are called "mix bury cover sumps" which reminds me of the adage to "shoot, shovel and shut up"). The price of oil has plummeted from over \$100 to under \$50 a barrel since the project was conceived. The spare cash available for speculative plays from China National Offshore Oil Corporation (CNOOC) (the owner of NCY) is drying up as that nation's economy falters. The reality of operating in a remote area with minimal infrastructure, little winter water and an essentially intact environment that periodically hosts tens of thousands of caribou is starting to bite.

I think this project is unlikely to go ahead until/if the price of oil rises to recent high levels. NCY's backer, CNOOC has deep pockets, but it, like all oil companies, is taking a financial hit these days and mothballing small, marginal projects. Which nicely describes NCY's Eagle Plain project.

*Sebastian Jones,  
YCS energy analyst*



### YCS Board and Staff Retreat

The Yukon Conservation Society Board & Staff had a productive weekend of strategic planning meetings in late November. On the photo below you'll find us all:

Back row (left to right): David Thomson (TREC facilitator), Skeeter Wright (Board), Sebastian Jones (staff), Christina Macdonald (staff), Bonnie Burns (Board), Lee Carruthers (Board)

Middle row: Judith van Gulick (staff), Joshua Hunt (Board), Nick de Graff (Board), Mary Whitley (Board)

Front row: Lewis Rifkind (staff), Roy Jantzen (Board), Meagan Christie (Board), Anne Middler (Staff)

Missing: David Neufeld (Board)

## Rotary Centennial (Pedestrian) Bridge Coming soon: a motorized experience?

July 28, 2015 will mark the 10th anniversary of the Rotary Centennial (Pedestrian) Bridge. For almost ten years the Millennium Trail and RCB have provided the citizens of Whitehorse and tourists alike with an experience that has become a vital part of our community.

“The Rotary Centennial Bridge and Millennium Trail are the fulfillment of a long-time dream of Father Jean-Marie Mouchet. Father Mouchet’s special mission was to bring hope and health to our communities through active living. He envisioned a trail that would allow everyone, regardless of his or her abilities, the opportunity to get out and be active.” (Pat Milligan, Who Killed the Rotary Centennial Bridge? 11/14/14 Whitehorse Star)

Pat went on to say that the “use of the Millennium trail and Rotary Centennial Bridge has grown immensely over the last decade. Approximately 315,000 annual visits involve walking, jogging, biking, roller blading, cross country skiing, bird watching, and many other forms of active recreation. We are very fortunate to have a showcase trail like this in our community.”

Rarely have I have crossed the RCB without having stopped to view the scenery, take a photograph, watch kayakers play in the waters below, listen to the power of the river, or talk with fellow walkers. The bridge is a gathering point – a place to linger and enjoy both the beauty that surrounds me and the people who appreciate that same beauty. The bridge and the Millennium Trail help to build community.

We have often heard the argument that bridge users should be willing to share the RCB with ORV users. It is not the operators of snowmobiles and ATVs that are presently denied use of the bridge; it is their machines. Sharing the bridge with machines will detract from the enjoyment of the bridge and trail by its present users.



The experience they enjoy is one without the presence of machines.

ORV owners on both sides of the river are able to enjoy their motorized experience on numerous motorized trails in their respective areas. In addition, they have the means to transport their machines to either side of the river if they wish to do so.

We have heard that motorizing the bridge will compensate ORV owners for their supposed lack of success in getting more motorized trails on the East Side of the Yukon River. (Info: <http://www.activetwa.org/info-eyr-trails.html>) However, no one has proposed compensating those who opposed some of the newly designated motorized routes, or those that suggested that snowmobile operators be required

to stay off so-called non-motorized trails as are ATV users. No one got all they wanted under the EYR Plan.

We expect the RCB motorization issue will come before Council in late February or in March, so it is important to be aware of City Council’s Agenda for each Monday. Be at City Council and express your opinion when the issue is discussed. Do not be the silent majority any

longer. Please refer to the City of Whitehorse website for upcoming Agendas.

“Consider everything that makes the experience of the Millennium Trail and the bridge enjoyable and appealing for such a huge number of citizens and tourists. Join with those who are urging Mayor and Council to protect the non-motorized status of the bridge, and put this “idea” of opening the bridge to ORV traffic to rest once and for all.” (Lynn Poile, Keep this bridge free of motorized vehicles! 10/27/14 Whitehorse Star)

*Keith Lay (Active Trails Whitehorse Association)*  
[www.activetwa.org](http://www.activetwa.org)  
[activetwa@gmail.com](mailto:activetwa@gmail.com)



**YES! I want to protect the Yukon's environment and support the Yukon Conservation Society!**

**I'd like to make a tax deductible gift!**

\$60  \$200  \$500  \$1000  Surprise us! \_\_\_\_\_

I'd like to make a monthly pledge by visa of \$ \_\_\_\_\_ (charged on the 15th of each month)

I have made a bequest to YCS in my will

**Please, sign me up as a member:**

Student \$10  Individual \$25  Family \$40 (2 or more people)

I am a **new** member!

I am **renewing** my membership for 2015!

*Memberships are activated on day of receipt and good for 1 year, and include a subscription to the Walk Softly newsletter. Both donations and memberships are tax-deductible.*

Do not send me newsletters. Instead, **notify me by email** when they are online.

**Payment Method:** Total \$ \_\_\_\_\_

Cheque # \_\_\_\_\_ enclosed (payable to Yukon Conservation Society)

I am putting it on my Visa # \_\_\_\_\_ Expiry \_\_\_\_\_ Signature \_\_\_\_\_

Name(s): \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

Email – for Tax Receipt and YCS Email List \_\_\_\_\_

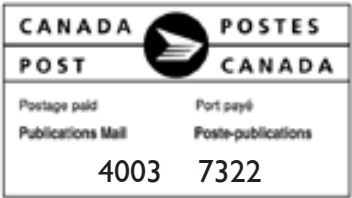
**Mail completed slip to: 302 Hawkins St. Whitehorse, YT Y1A 1X6 – Phone: 668-5678 – ycs@ycs.yk.ca**

**Thank You Volunteers!**

*The Yukon Conservation Society wouldn't be the vibrant, active organization it is without your help!*



- Computer maintenance, back-ups and support: Joshua Hunt
- Energy Committee: JP Pinar, Sally Wright, Skeeter Wright, Lee Carruthers, Nick de Graff, Bonnie Burns & Karen Baltgailis
- Communications: Tanya Handley, Lewis Rifkind & Mary Amerongen
- Cranberry & rhubarb donations for Peel Celebration: Jim Tredger, Julie Frisch, Afan Jones, Suat Tuzlak, Mary Ann Lewis & Paul Davis
- Office Support: Julie Frisch
- Recycling: Raven Recycling



**YCS staff and board invite you to our Annual General Meeting (AGM)!**

Tuesday March 17, 2015 at 5:30pm

Yukon Conservation Society, 302 Hawkins Street, Whitehorse, Yukon.

YCS has Board positions available and asks any interested individuals to contact our office at least one week prior to the AGM. In addition to the regular AGM business, we will also ask our members to approve some changes to our bylaws.

Please RSVP your plans to attend so that we may ensure quorum (and seating): [ycoffice@yco.yk.ca](mailto:ycoffice@yco.yk.ca) or 668-5678.

Refreshments will be served!



Follow the Yukon Conservation Society on Twitter: [@YukonConservati](https://twitter.com/YukonConservati) and 'like' us on Facebook: Yukon Conservation Society

