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IAIA WNC

WNC IMPACT

The Newsletter
of the
Western and Northern Canada
Affiliate of the
International Association for
Impact Assessment
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The International Association for Impact Assessment (IAIA) is the world's leading professional association in the field of impact assessment. The Western and Northern Canada IAIA Affiliate includes members from the federal, territorial and provincial governments, consultancies, co-management boards, Indigenous groups, industry and NGOs. Its goal is to promote and develop best practice in environmental impact assessment.

Welcome to the summer 2020 issue of WNC Impact. This issue includes some of the most interesting news relating to environmental management and EIA from the past months. Topics range from solar geoengineering to stabilize the climate, environmental DNA analysis to apply forensic techniques to conservation biology, and death by air pollution. **Please share this newsletter with any colleagues you think will be interested!**

In preparing this newsletter, we struggled with how much to focus on COVID. The global pandemic and lockdown have many implications to the field of EIA. In addition to the widespread tragedy, reduced activity has changed air quality, global carbon emissions, and wildlife distributions. Pressing questions arise: Will the careful environmental management of projects is likely [affected by reduced personnel on site](#)? Will environmental safeguards be compromised in the interest of economic recovery?

One of the biggest questions of immediate concern to many EIA practitioners is: **What do Indigenous and public consultation and engagement look like with physical distancing and travel restrictions?** Is it really a “great time to build a pipeline”? How will EIA practitioners who recognize the essential nature of engagement conduct fair and credible EIA going forward? We suspect that this will drive consultative innovation that may extend beyond the current crisis.

For the first half of this newsletter, we've decided to give you a short mental break from COVID stresses, and focus on interesting research and articles on a variety of other environmental research and management subjects. The second half of the newsletter gets into what is happening in EIA in western and northern Canada, including a few items dealing with COVID adaptation in impact assessment.

If you enjoy this newsletter, and want more, along with seminars and networking opportunities, you are encouraged to join the IAIA Western and Northern Canada Affiliate (if you haven't already). Please check out our website for details (<https://iaia-wnc.ca/>).

Stay safe!
-Eds.

Events

IAIA has rescheduled its 2020 international conference to 2021- Seville, Spain. This decision was made for all of the obvious reasons. Having organized two such conferences in the past, IAIA WNC expresses its appreciation for the organizing efforts of the volunteers in Spain. **The IAIA conference will be hosted in Vancouver in 2022!**

Online Cumulative Effects Conference
You can register to “attend” CFX2020, a cumulative effects conference with loads of interesting speakers, online. IAIA WNC member Barry Wilson of CE Analytics organized and facilitated CFX2020. It was

originally planned as an in-person conference on May 5 in Kamloops, BC, but turned into a virtual conference as covid measures unfolded. **You can still register to view the full videos of all presentations online, at a discount price (about \$150)** courtesy of IAIA WNC! Barry will also generously include access to the talks from the previous year's cumulative effects conference as a sweet bonus!

You can see the [CFX2020 agenda](#) here. To register, go to www.cfxconference.com click on the *Register for CFX2020 Virtual* button, enter the (case sensitive) discount code **CFX2020IAIA** and hit apply.

2020 Annual General Meeting

Our AGM will be held by teleconference on Thursday, June 25, 2020 at 12:00 PM Mountain time (11:00 AM Pacific time, 1:00 PM Central time).

Members can attend the meeting using this [web link](#): or by phoning 1 (647)733-3230 [PIN: 972239655#]. We require a quorum so if you cannot attend, please complete a [proxy form](#) and send it to us at talktous@iaia-wnc.ca.

Recent IAIA WNC Online Seminar: Determining the Significance of Cumulative Effects

On May 13, 2020, almost 100 EIA practitioners in Western and Northern Canada virtually attended this online talk by Alan Ehrlich. The talk explored the

underlying cause of cumulative effects, and provided step by step guidance to demystify the determination of the significance of cumulative effects in environmental assessment. It also considered how to deal with projects that add to existing cumulative impacts that are already significant, and provided real-world examples of novel cumulative impact mitigations from Northern Canada.

This was part of IAIWNC's decision to provide helpful and interesting EIA material to the many practitioners who are physically isolated. Based on its success, we look forward to providing other speakers on the same platform.

Recent Research, Publications and Articles

Climate Change Studies and Research

"The chance of weather causing forest fires like in recent months in Southeast Australia has increased by at least 30 percent due to climate change", according to researchers at the Royal Netherlands Meteorological Institute. ["Attribution studies" is a growing field examining links between specific weather events and large scale climate change, like the one in [this article](#)]

Researchers predict that [wildlife loss from climate change may be sudden and widespread](#), because multiple species in ecosystems will be forced beyond their climate tolerances at the same time. More like freefall than a gradual slope...

Here's a first: A court of appeal has ruled that the plan to build a third runway at Heathrow is illegal because it ignored Britain's commitment to the Paris agreement. "The court's ruling is the **first major ruling in the world to be based on the Paris climate agreement** and may have an impact both in the UK and around the globe by inspiring challenges against other high-carbon projects". [Read about it here.](#)

Air Pollution

Air pollution is killing more people than war, malaria or cigarettes, according to [an article in the current issue of the journal Cardiovascular Research](#).

On the same theme, here are [cool interactive pictures of smog changes pre- and mid-COVID](#) in major cities.

Good [podcast interview](#) with Beth Gardiner, author of the 2019 book "[Choked: Life and Breath in the Age of Air Pollution](#)".

Conservation biology research and news

[This recent paper in Current Biology](#) suggests that sunspot activity contributes to grey whale strandings by affecting the geomagnetic sensors they navigate with. Ninety three million miles is a long pathway of impact!

The field of "[Environmental DNA analysis](#)" applies forensic techniques to conservation field biology.

Large invasive herbivores (like hippos in Columbia [!]) and camels in Australia) can mend broken food webs by [serving in the ecological role of extinct megafauna](#). Holy cow. "We found that, amazingly, the world is more similar to the pre-extinction past when introduced species are included," said Erick Lundgren, an ecologist at the University of Technology in Sydney, Australia".

Geoengineering: These two interesting 2017 papers look at using a similar basic technique for solar geoengineering to stabilize climate. See [Cao et al.](#) and [Wood et al.](#) Now there's a recent related experiment in impact mitigation: In Australia, there is a project trying to [reduce coral reef bleaching by making the clouds brighter](#) (!), to reflect more sunlight away.

Another interesting bit of recent Australian research to reduce coral reef bleaching using directed evolution to reduce coral bleaching events. (Directed evolution is a method used in protein engineering that mimics the process of natural selection to steer proteins or nucleic acids toward a user-defined goal). In response to bleaching events from high

temperatures, Australian scientists have used directed evolution to produce coral that is resistant to warmer seas. Microalgae live in symbiotically in coral, and by selecting for heat tolerant microalgae which photosynthesize better, coral becomes more resistant to bleaching. Read it [here](#).

(Bonus cool coral trivia: After bleaching, sometimes coral produces bright colour pigments when it is not well to make a better home for its symbiotic algae-- bright coral can be an indicator of a stressed reef, says the current issue of [Current Biology](#).)

Other curious high-tech environmental news

Phytomining: [Growing plants which hyper-accumulate nickel, cobalt and zinc](#), that "could be the world's most efficient, solar-powered mineral smelters".

Elon Must is [mitigating visual impacts IN ORBIT!](#) Really!

Alberta, BC and Saskatchewan Environmental Management News

BC has revitalized its EA act! The new act (called the 2018 Environmental Assessment Act) is now in force. There are good summary materials online [here](#). Exciting stuff!

The BC Environmental Assessment Office has accepted Teck Coal's Initial Project Description and Engagement Plan for the Castle Project (see [here](#) for a project summary), and is [inviting people to participate in the EA in a virtual open house](#).

The Narwhal published [an article](#) describing a First Nation's struggle to keep up with EA consultation during the current crisis, referring to temporary guidelines released by the BC Environmental Assessment Office on how to go forth with EAs.

The Canadian Association of Petroleum Producers (CAPP) raised consultation challenges in the time of COVID. Assembly of First Nations replied: "CAPP's call for an

immediate halt and indefinite delay to implementing the United Nations Declaration on the Rights of Indigenous Peoples will not promote economic recovery or certainty". CAPP [reaffirms support for UNDRIP](#).

The Alberta Energy Regulator has [suspended a variety of monitoring requirements](#) for oil sands companies (!) as a COVID response. Fort McKay First Nation [Chief Grandjamb noted that this does not help foster trust](#) or improve Indigenous relations.

Alberta energy minister Sonya Savage, discussing TransMountain Pipeline, says this is a ["great time" to build a pipeline](#), because protesting is harder than ever.

NWT, Yukon and Nunavut Environmental Management News

On the subject of reconciling meaningful EA participation with COVID restrictions, the Nunavut Impact Review Board has decided not to hold hearings on the expansion of the Baffinland's Mary River Mine, on Baffin Island, until people are free to travel and gather. It had originally explored the idea of holding eight teleconference as a means of public involvement in the environmental review. Here is [CBC's summary](#).

The Yukon Environmental and Social Assessment Board has a new [front-end process for engagement](#) for before proposals for projects are submitted. A [new report](#) looked at five projects to see if and how issues encountered during assessments (Executive Committee screenings) could have been improved with pre-submission engagement.

In the NWT, the Mackenzie Valley Environmental Impact Review Board has released a perspectives paper titled, discussing how EIA is evolving in four areas of practice: 1) understanding effects to **well-being**; 2) considering **climate change**; 3) addressing **cumulative effects**; and 4) collaborative project planning and early **engagement**. Read it here: [Evolving EIA in the Mackenzie Valley and Beyond](#)

In January, the Mackenzie Valley Environmental Impact Review Board released a Report of Environmental Assessment for a proposal to store processed kimberlite, a mine waste, below a large arctic lake next to the Diavik Diamond Mine. Measures prescribed by the Board include having the developer work with Indigenous groups to identify cultural criteria for judging water quality, and a measure for the territorial government to develop indicators of cultural well-being, to monitor and adaptively manage impacts from the Project and other sources. [The report can be viewed here.](#)

Other National Environmental News

Further east, Ontario's Environmental Review Tribunal approved a large wind development, and then Ontario's Environment Minister decided to cancel the project (as it has 750 other renewable energy projects!), arguing concerns about endangered bats, although the Environmental Review Tribunal concluded that risks to bats were negligible. An Ontario court recently quashed the Minister's ruling, arguing that his ruling was unreasonable and did not "meet the requirements of transparency, justification, and intelligibility." [See here for details.](#)

Notable Report:

First Nation-led cumulative effects management

The Metlakatla Nation in BC has published an impressive [step-by-step framework](#) for measuring the full impact of development on their communities through cumulative effects management.

May 2020 articles in the

Journal of Impact Appraisal and Project Management (vol 38, 2020)

[A critical appraisal of Uzani Environmental Advocacy v BP Southern Africa Ltd](#)

[The Role of Cost-benefit Analysis and Economic Impact Analysis in Environmental Assessment: The Case for Reform](#)

(by Western and Northern Canada's own Chris Joseph, Thomas Gunton, Duncan Knowler and Sean Broadbent!)

[How a new university campus affected people in three villages: the dynamic nature of social licence to operate](#)

[Strategic environmental assessment of urban plans in Australia: the case study of Melbourne Urban Extension Plan](#)

Quotation of the Month

For a successful technology,
reality must take precedence
over public relations,
for Nature cannot be fooled.

~Richard P. Feynman
Nobel Physicist

IAIA WNC Contacts

If you want to find out more about IAIA-WNC (and hopefully join if you haven't already), you can visit our website at <https://iaia-wnc.ca/> or contact us at talktous@iaia-wnc.ca.