

ECHO May Update

June 2022

Welcome to the 2022 Spring ECHO Network Update!

It's been some time since we last updated everyone, so this ECHO Update is full of exciting events, news and updates. We hope you enjoy this glimpse into what has been happening with the ECHO Network during an important transition phase. 2022 is our year to wrap up and look beyond the CIHR Team Grant funding that has supported the ECHO Network since 2017 through the CIHR Environment and Health Signature Initiative. You will note that our echonetwork@unbc.ca email will be quite active as we work through this transition phase and prioritize knowledge exchange outputs, so you can look forward for more news coming by email, as well regular updates on our website.

This update introduces members of the ECHO Network team you may not have met yet, shares shifts in research management roles and capacity, highlights and offers details about past and upcoming events, and includes a focus on some of our ECHO trainee "strengthening capacity" team. The update also touches on current news from Team Learning and Impact, the Operations Committee, ECHO Tools and Processes, Team GECHO, regional case activities, and celebrates a number of publications of interest. We also revisit our fond farewell to ECHO Network Research Manager Diana Kutzner, withing her every success in her new endeavors (check out our "Where's Diana" play on "Where's Waldo") at the end of the document!

Any questions or suggestions, please contact: echonetwork@unbc.ca



Environment
Community
Health
Observatory
Network

Réseau
observatoire sur
l'environnement
les communautés
et la santé



CANADIAN
WILDLIFE HEALTH
COOPERATIVE

COPEH-
Canada



NB Children's Environmental Health
COLLABORATIVE



First Nations Health Authority
Health through wellness



New Brunswick Environmental Network
Réseau environnemental du Nouveau Brunswick



SIMON FRASER
UNIVERSITY



UNIVERSITÉ
DE MONCTON



THE HEALTH ARTS
RESEARCH CENTRE



northern health
the northern way of caring



UNIVERSITY OF
NORTHERN BRITISH COLUMBIA



University of
Lethbridge



CIHR IRSC
Canadian Institutes of Health Research
Instituts de recherche
en santé du Canada



CIRC
The Cumulative Impacts
Research Consortium



BATTLE RIVER
WATERSHED ALLIANCE



the Prentice Institute
for Global Population and Economy

Welcome to our May 2022 ECHO Network Update



Research Management Capacity

In an attempt to fill the ECHO Network Research Manager boots (a big task!), we are fortunate to welcome Shona Thorne and Jamie Reschny to the ECHO Network team (some of you will recall Jamie from the earliest days of the ECHO Network). As well, Makayla Skrlac and Angel Kennedy have expanded their trainee roles to provide additional support for 'Research Manager' tasks. Together with Margot Parkes these four team members are working together to support the many tasks that were previously championed so effectively by ECHO Network Research Manager, Diana Kutzner, and interacting widely across the ECHO Network Team to support the wrap-up and transition phases ahead

Shona Thorne

Shona joined our ECHO Network Team in December 2021 and is supporting a variety of coordination and administrative roles. Before coming to live in northern BC, Shona lived in and worked in multiple countries in Africa, Jamaica, and Britain in diverse roles that range from Zimbabwe Professional Safari Guide, English Language teacher, rafting and interpretive guide, and business development to continued education and literacy coordinator, trauma informed response and community outreach, finance and operations supervisor for not-for-profits and tax preparation. We are grateful to benefit from her experiences and willingness to champion ECHO final reporting tasks and transitions forward.

Makayla Skrlac

Makayla has been with the ECHO Network since May 2018 as a research assistant then project assistant and now project coordinator. Makayla worked closely with Diana Kutzner and previous project assistants (i.e. Louisa Hadley, Meg Labron) to learn the ropes of how to support a Network like ECHO. These experiences help support Makayla in her ECHO Coordinator role. More about Makayla is available in the team trainee section of this update.

Jamie Reschny

Jamie was previously involved in the ECHO Network prior to its launch in May, 2017 as the grant writer for the original CIHR LOI and application. Jamie has lived in various places throughout Canada and abroad, and now resides in New Brunswick where he spends most days renovating older houses and a former church. He has worked with Margot Parkes over the last 12 years and since December, 2021, has resumed his role as a research contractor, working as a grant writer and Research Administrator for ECHO and other related projects.

Angel Kennedy

Angel has been with the ECHO Network since May, 2018 as a FNHA-SFU regional case member. Angel works with Maya Gislason as a Research Manager for the RESET and TAKE NOTICE groups. She is also a lead of ECHO's team equity and is currently completing her PhD at SFU. More about Angel is available in the team trainee section of this update.

News & Updates

IPCC WGII Sixth Assessment Report

An ECHO funded journal article (Brubacher et al., 2020) was cited in the IPCC WGII Sixth Assessment Report – six times in chapter 7 and once in chapter 14. If you would like to read this Report: <https://www.ipcc.ch/report/ar6/wg2/>
Brubacher, J., Déry, S., Parkes, M.W., Allen, D., Sobie, S., Mak, S., Chhetri, B., & Takaro, T.K. (2020). Associations between five food and waterborne diseases and ecosystem classification, aquifer type and agricultural land in a changing climate. *Science Total Env.* 728: 138808. <https://doi.org/10.1016/j.scitotenv.2020.138808>

Hot off the press in 2022*

*Other papers and links of interest can be found on page 31

Onabola, C. O., Andrews, N., Gislason, M. K., Harder, H. G., & Parkes, M. W. (2022). Exploring Cross-Sectoral Implications of the Sustainable Development Goals: Towards a Framework for Integrating Health Equity Perspectives With the Land-Water-Energy Nexus. *Public Health Reviews*, 0. <https://doi.org/10.3389/phrs.2022.1604362>

Buse, Chris G., Sandra Allison, Donald C. Cole, Raina Fumerton, Margot Winifred Parkes, and Robert F. Woollard. "Patient- and Community-Oriented Primary Care Approaches for Health in Rural, Remote and Resource-Dependent Places: Insights for Eco-Social Praxis." *Frontiers in Public Health* 10 (2022). <https://www.frontiersin.org/article/10.3389/fpubh.2022.867397>.

Environmental Bill of Rights in New Brunswick

In June 2019 the Environmental Rights Caucus brought together 10 environmental groups and other organizations interested in the well-being of children to draft an Environmental Rights Act for the province of NB. The purpose of this Act is to ensure that children, all citizens of the province, and future generations have the right to a healthy environment. The Act will also define the government's obligations to protect the rights of children and the entire population as well as the environment and to put in place mechanisms that will allow them to access relevant environmental information and participate fully in decision-making processes while providing the citizens of NB with the ability to challenge or demand redress for existing environmental damage. In March 2022, the caucus had the opportunity to present the bill to the New Brunswick Liberal Party Caucus.

Please feel free to support the bill by clicking on this link: <https://nben.ca/en/bill-of-rights.html>

New Grant linked to ECHO

Maya Gislason, in collaboration with various ECHO Network Members has received a SSHRC Partnership Development Grant for work focused on bringing together researchers, practitioners, policy-makers, and youth who operationalize the principles of intergenerational justice and equity in partnering to advance sustainable and transformative climate solutions. They will work to amplify the use of an intergenerational justice lens in climate change-related priority setting and largescale responses through refining and sharing tools and frameworks that effectively build equitable and sustainable intergenerational partnerships.

Past Events

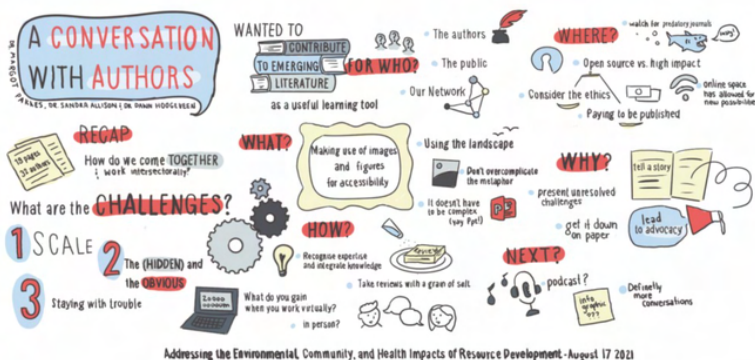
This section provides a quick overview of some recent past events; however, many of these events are elaborated on in other sections of this update such as the 'echos from across the regional cases' section.

Conversations with Authors

The Conversations with Authors sessions took place online on August 17th, 2021 facilitated by ECHO trainees Makayla Skrlac and Mackenzie Kerr. The objective of these Conversations with Authors was to revisit ECHO Network manuscripts (or ECHO-related manuscripts) as a capacity-strengthening activity to help generate additional outputs to audiences beyond academia. The manuscript guiding this session was the “Addressing the Environmental, Community, and Health Impacts of Resource Development: Challenges across Scales, Sectors, and Sites. There were a total of 32 authors for this manuscript and three authors, Dr. Margot Parkes, Dr. Sandra Allison, and Dr. Dawn Hoogeveen, joined the session to provide their insights and respond to facilitated questions from the trainees.

Throughout this session, Annika Chiasson was the graphic facilitator, where she captured and displayed the conversation through her art: see the graphic recording below. The link will allow you to view-only the slides for the session.

<https://docs.google.com/presentation/d/1DhEgFnQrofEcVgf97ZF5x7jeFMI1RDbmdTHJu8hYurs/edit?usp=sharing>



ECHO Profile at ISEE

The Columbia University of Mailman School of Public Health hosted the International Society for Environmental Epidemiology's (ISEE) 33rd annual conference during August 23-26, 2021. The event took place online. At this conference, the abstract of the following manuscript - Bouncing forward: Knowledge Translation for policy making in response to the COVID-19 and climate change co-emergencies - was presented by Dr. Chris Buse.

<https://ehp.niehs.nih.gov/doi/10.1289/isee.2021.P-456>

LEO Network Virtual Gathering

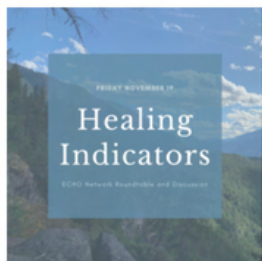
The First Nations Health Authority (FNHA) has launched the Local Environmental Observer (LEO) Network in BC to help raise awareness about environmental change and the ways in which we can adapt to these changes in a healthy and effective manner. The LEO Network is also used to share Traditional knowledges to help revitalize cultural practices by integrating First Nations perspectives and leadership. The Coordinator of the LEO Network in BC, Cody Thomas, spoke at a virtual gathering on April 5th, 2022. The title of this presentation was “Exploring Our Relationship with Fire,” and included a guest panel comprised of Fire Ecologist Dr. Kira Hoffman and members of the First Nations Emergency Services Society of BC (FNESS). Throughout this presentation, guest speakers elaborated our relationship with fire and previous wildfire seasons within BC. The concept of fire stewardship was also explored in addition to personal experiences that relate to our understanding of fire. Link to view the recording:

<https://www.youtube.com/watch?v=5gMnCTSVrIM>. To learn more about the LEO Network, please see:

<https://www.fnha.ca/what-we-do/environmental-health/bc-leo-network>.

ECHO Pulse Series

With the intent of 'honouring complexity, making space to address cumulative impacts, climate change and co-benefits,' the ECHO Network hosted knowledge exchange sessions from November 19th-26th, 2021. These sessions were formally referred to as the ECHO Pulse Series, whereby university researchers, research partners, community members, and youth from across Canada and abroad connected virtually to discuss:



Healing Indicators : focused on shifting the common deficit focus of current indicators towards land as a source of health and healing, while centering on Indigenous people's collective strengths.

Link to video recording: <https://vimeo.com/668811348>

Creation of Digital Story: explained how using arts-based and narrative methods could prompt diverse conversations, emotional connections, team strengthening and team creativity. Further, these methods can help tackle transdisciplinary and nuanced complexities at the nexus of environments, communities, and health.

Link to video recording: <https://vimeo.com/668808877>



Health in Watersheds: explored the need to (a) demonstrate the impacts of resource extraction and issues at watershed and national levels in order to compare and contrast across regions, and (b) to develop intensely local indicators and data that coincide with community values and knowledges.

Link to recording: <https://vimeo.com/668816228>

ECHO and You(th): prioritized youth voices and showed how engagement with ECHO has explored social media, digital storytelling and channels such as TikTok to share work encompassing intergenerational climate justice, young people and mental health.

No recording.



Enviroscreen: described the Enviroscreen tool and how it aims to integrate environment-community-health by using high quality data that underscores an asset-based approach. The tool was co-created with users, including policy and decision-makers, and most importantly, serving Indigenous, rural and remote communities where representative data is scarce.

Link to recording: <https://vimeo.com/668816228>

For more information about the ECHO Pulse Series, check out the Pulse Report (EN) and Infosheets (FR/EN) on the ECHO website: <https://www.echonetwork-reseaecho.ca/resources>

Student Round Table Participation

The Student Round Table Participation virtual event took place on January 26th, 2022. La Journée des Idées (The Day of Ideas) honours students from the Université of Moncton who are enrolled in the humanities, social sciences and environmental sciences programs. This session was moderated by Arnaud Scaillez and included three round tables from the following panelists: Claudie Ringuette, Emilie Savoie and Onitriinaia Rakotorahalahy. The third and final round table was led by Oni, where she presented on women's engagement in the agroecological transition in south-eastern New Brunswick through use of photovoice. The following summary of her work was uploaded by Moncton University: La transition agroécologique est une réponse à l'autosuffisance alimentaire pour la province du Nouveau-Brunswick face aux défis engendrés par le changement climatique et les réalités socioéconomiques. Des agricultrices mènent des actions au sein de leur communauté pour la revalorisation de l'agriculture locale, biologique et diversifiée de la production agricole jusqu'à la souveraineté alimentaire. Ma recherche consiste donc de renforcer, voir augmenter leur capacité d'actions et leur implication dans la production agricole.

Translation: The agroecological transition is a response to food self-sufficiency for the province of New Brunswick in the face of climate change and socio-economic challenges. Women farmers carry out actions within their community for the revaluation of local, organic and diversified agriculture from agricultural production to food sovereignty. My research therefore consists of strengthening and even increasing their capacity for action and their involvement in agricultural production.

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

Lakehead University Teaching and Learning Week

Lakehead University hosted their "Teaching and Learning Week: Insights from Interdisciplinary, Experiential, and Place-based Climate Education." On October 26th, 2021, Dr. Margot Parkes, Dr. Thomas Beery, and Dr. Lindsay Galway presented on Insights from Interdisciplinary, Experiential, and Place-Based Climate Education where each panelist spoke on specific examples and insights to inspire and inform your teaching and learning.

<https://www.lakeheadu.ca/about/sustainability/events/archive/node/67226>

Indigenous Centre for Cumulative Effects (ICCE)

The Indigenous Centre for Cumulative Effects (ICCE) is an independent organization that supports Indigenous communities to undertake cumulative effects work. The ICCE hosted their 2022 Virtual Indigenous Conference on Cumulative Effects over the span of two days (Tuesday, March 1st, 2022 - Wednesday, March 2nd, 2022). On March 1st, We'es Tes, Sandra A. Martin Harris and Dr. Margot Parkes presented 'We Move Together: Restoring Connections Between Lands, Waters and Well-Being' and on March 2nd, Dr. Dawn Hoogeveen and Namaste Marsden presented 'Pulling Up the Roots: A Dialogue on Grounding Cumulative Impacts in Indigenous Rights and Nation-Based Knowledge'. Please view the recordings at:

<https://www.icce-caec.ca/2022-virtual-indigenous-conference-on-cumulative-effects-presentations/>

Radio Podcast

Radio-Canada had the privilege of hosting Onitriiniaina Rakotorahalahy on Wednesday, January 26th, 2022 where she described her master's project focusing on women's engagement in the agroecological transition in south-eastern New Brunswick.

<https://ici.radio-canada.ca/ohdio/premiere/emissions/l-heure-de-pointe-acadie/episodes/599810/ratrapage-du-mercredi-26-janvier-2022>

Land Health and Healing Gathering

This workshop that occurred on March 10th, 2022, was part of ongoing "Land, Health and Healing" series that is focused on knowledge exchange and strengthening connections among Indigenous led initiatives that work to integrate well-being, culture and connection to land. The "Land, Health and Healing" series was and co-designed by a team from Lheidli T'enneh Nation and UNBC. See below for more details (page 30).

https://static1.squarespace.com/static/5c2e40cf5417fc1b3d2e7930/t/61291c436e08235ee00c0ed8/1630084167661/Detailed+Program+-+LHH+Gathering_Final_compressed.pdf

Trainee Award

For her exciting work on women's engagement in the agroecological transition, Onitriiniaina Rakotorahalahy was awarded with the 3rd prize in the Humanities, Social Sciences and Health category at the University of Moncton's young researchers conference. Her presentation can be found on youtube: <https://www.youtube.com/watch?v=DdkLXL14bw4&list=PLM3tfIKmPL7J9z13PBC-DVL6RF9USWIXd&index=4>

NBEN Conference

The New Brunswick Environmental Network (NBEN) held a virtual gathering on March 1st and March 2nd, 2021: “Helping Children Navigate Through Health and Climate Crises.” See below for more details (page 28).

Trainee Panel Presentation

This session, titled “Cultivons l’avenir : panel sur la souveraineté alimentaire à, Regroupement féministe du Nouveau-Brunswick,” was organized as part of the womens rights day at the Sainte-Anne Community Center. The panel was moderated by Monique Brideau, and it aimed to dive deeper into concepts such as food sovereignty, how they could better feed New Brunswick, and activists that are contributing to a greener future in their province. The panelists involved in this session were Rébeka Frazer-Chiasson (co-owner and manager of the Terre Partagée farm), Geneviève L. Latour, (vice-president and environmental justice activist), and Onitrianiaina Rakotorahalaly (candidate for the master's degree in environmental studies at the Université de Moncton). For more information, please visit: <https://rfnb.ca/mobiliser/semaine-de-l-egalite-des-genres/samedi-6>.

Accredited by UBC CPD
CONTINUING PROFESSIONAL DEVELOPMENT
FACULTY OF MEDICINE

Brown Bag Lunch Session – October 28, 2021
Everyone Welcome!
Virtual Session Via WebEx
12:15pm – 1:00pm

ROYAL COLLEGE
COLLEGE ROYAL

[Click here to join the WebEx Meeting](#)



Dr. Margot Parkes,
MBChB, MAS, PhD
Associate Professor,
Health Sciences &
Northern Medical
Program, UNBC



Dr. Raina Fumerton,
NW Medical Health
Officer,
Northern Health



Sally Western, M.A.
Technical Advisor,
Office of Health &
Resource Development,
Northern Health

From Cumulative Impacts to Co-Benefits: Why engaging Intersectoral Partners on the Health Impacts of Resource Development offers pathways to a healthier future for northern British Columbia.

Decades of evidence have established that large extractive projects impact the social, economic, and cultural determinants of health for resource-based communities throughout rural Canada. In Northern British Columbia, the economic benefits of mining and pipeline construction can be accompanied by significant pressures on social infrastructure, economic instability, and increased crime rates. This presentation explores how the Northern Health Authority and the Environmental Community Health Observatory (ECHO) Network have been partnering to understand and respond to these impacts. Our presentation shares new ways our team has been engaging Intersectoral Partners on the Health Impacts of Resource Development, and how these lessons can also enhance preparedness for other complex public health issues. Our team will share insights gained from developing accessible tools to translate complexity to a broad audience of stakeholders: community leaders, policy-makers, regulatory bodies, and industry proponents. We will also discuss how Northern Health and the ECHO Network are using Knowledge Translation tools to strengthen awareness of complex determinants of health in Impact Assessment, and in policy discussions for related challenges such as health and climate change.

This webinar will introduce the partnership between Northern Health and the ECHO Network, and the learning across sectors and disciplines that has enhanced how Knowledge Translation tools are being used to communicate the interactions of social, economic, and cultural health determinants to stakeholders in the context of BC extractive projects. We will also describe next steps in using and refining these Knowledge Translation tools as the topic of extractive projects and impacts to health determinants continues to expand in public health dialogues.

UNBC UNIVERSITY OF
NORTHERN BRITISH COLUMBIA

northern health
the northern way of caring

UNBC Brown Bag Lunch Session

Thursday, October 28th, 2021, Dr. Margot Parkes, Dr. Raina Fumerton, and Sally Western presented on: From Cumulative Impacts to Co-Benefits: Why engaging Intersectoral Partners on the Health Impacts of Resource Development offers pathways to a healthier future for northern British Columbia. This online webinar introduced the partnership between Northern Health and the ECHO Network, and the learning across sectors and disciplines that has enhanced how Knowledge Translation tools are being used to communicate the interactions of social, economic, and cultural health determinants to stakeholders in the context of BC extractive projects. The speakers also described next steps in using and refining these Knowledge Translation tools as the topic of extractive projects and impacts to health determinants continues to expand in public health dialogues.

<https://innovationdevelopment.webex.com/recordingservice/sites/innovationdevelopment/recordings/5d1b444bd4c4486ab9197eae81c0cb7c/playback>

World Water Day Story

A groundwater story from Christiana Onabola occurred on March 22, 2022. Christiana shares: "My groundwater story is first about my appreciation of the interconnected, trans-jurisdictional nature of groundwater, and a concerning issue about how its cross-contamination can travel fast in underground aquifers, polluting connected communities across scales. Another concern is that groundwater is unevenly distributed - meaning some communities will have little or no drinking water sources. When we consider additional challenges emanating from groundwater extraction for agriculture or use in dam construction for hydropower generation, then we have escalated impacts of the depletion of this limited resource and the communities that are most impacted are those already living with some socio-economic disadvantages".

International Association for Impact Assessment (IAIA)

From May 4th-7th, 2022, the IAIA held a conference examined confidence in impact assessment through the lenses of policy (the role of legislation and policy in building confidence in impact assessment), partnerships (how new relationships are transforming projects), and participation (supporting human and community well-being through effective participation). More details can be found at:

<https://conferences.iaia.org/2022/index.php>

WHO World Health Day

The student moderated panel (led by Makayla Skrlac and Jonathan Doyon) invited UNBC faculty from across campus to share their perspectives on the connections between Our Planet and Our Health, and to offer tips and tricks for navigating boundary-crossing work and challenging conversations. This session took place on April 7th, 2022, and included both an in-person and virtual audience. The panelists for this session included Dr. Daniel Sims (First Nations Studies), Dr. Davina Banner-Lukkaris (Nursing), Dr. Flor Garcia-Becerra (Engineering), Dr. Sinead Earley (Environmental and Sustainability Studies), Dr. Stephen Déry (Environmental Sciences) and Dr. Margot Parkes (Health Sciences). Panelists were also asked to discuss if and how their disciplinary or professional background could relate to the phenomenon of co-benefits, and how this could weave into creating a more sustainable and eco-friendly future. Towards the end of the session, a Q&A took place to give the audience members the opportunity to ask any questions.

WORLD HEALTH DAY 2022: 'OUR PLANET, OUR HEALTH'
EVERYONE WELCOME!
Hybrid event: April 7th 4:30-6pm PT
In-person Room: Bentley Centre; Online Zoom: <https://bit.ly/3tRcsHI>

A student moderated panel will invite UNBC faculty from across campus to share perspectives on the connections between Our Planet and Our Health, and to offer tips and tricks for navigating boundary-crossing work.

**Connecting across Campus & Beyond...
Creating Capacity for
Challenging Conversations**

UNBC Faculty Panelists:
Daniel Sims - First Nations Studies
Davina Banner-Lukkaris - Nursing
Flor (June) Garcia-Becerra - Engineering
Margot Parkes - Health Sciences
Sinead Earley - Env. & Sustainability Studies
Stephen Déry - Environmental Sciences

Student Moderators:
Jonathan Doyon & Makayla Skrlac -
ECHO Network

Takeaways & Insights:
- Navigating challenging conversations
- Fueling connections across people, place & planet
- Exploring co-benefits and why they matter

Join us for Post Dialogue mingling: Thirsty Moose 6:00 - 7:30pm

An event supported by: UNBC UNIVERSITY OF NORTHERN BRITISH COLUMBIA Health Research Institute

Upcoming Events

We feature other upcoming events in the 'echoes from regional cases' sections below which allows this upcoming events page to be dedicated to celebrating the release of 'The Environment, Community and Health Observatory (ECHO) Network Outcomes, Learning and Pathways Forward 2017-2021' Synthesis and Summary reports. These reports are helping to inform the 2022 ECHO Annual Meeting.

ECHO Annual Meeting 2022

The one month count down begins to the 2022 ECHO Annual Meeting (AM)! The virtual AM will take place June 29-30. The planning team previously sent out the 'Save the Date' poster (right) and registration to the event is now available. The links to the sessions as well as session descriptions can be found on the next page.

We'll open the event and set the scene by referring to 'The Environment, Community and Health Observatory (ECHO) Network Outcomes, Learning and Pathways Forward 2017-2021' documents (see more about these on p. 15). We've shared both the [ECHO 2022 Full Synthesis Report \(2017-2021\) 54 pages](#) and the [ECHO 2022 Summary Report \(2017-2021\) 15 pages](#) via email.

Our entire Learning Community is invited to attend this final Annual Meeting! Registration is required.

SAVE THE DATE
June 29-30, 2022

Day 1 - 2 sessions am & pm
+ a social event
Session 1: 8am-10:30am PT
Session 2: 12:00pm-2:30pm PT
Social event: 2:30pm - onwards

Day 2 - 1 session in the am
Session: 8am-10:30am PT

What to look forward to:

- Stories from the Regional Cases
- Glimpses of ECHO wrap up activities from ECHO Teams
- Social Iggy competition!
- Bouncing forward to the ECHO Collective

June Virtual Event 2022

Looking forward to spending this time together and celebrating the ECHO Network Learning Community!



ECHO Collective Gathering

Not to be confused with the 2022 ECHO AM, another kind of annual meeting, the ECHO Collective Gathering, is being planned later in the Canadian fall (October) as well! This gathering is planned as a hybrid event (in-person and online). This meeting will include some ECHO members from the regional cases, alongside some of our health authority partners. At this meeting, members will share some of the tools and processes we have developed over the past five years, and engage in dialogue about ways to modify and apply the tools for health authority settings.

ECHO Annual Meeting Sessions

Session 1: Stories and journeys from ECHO Regional Cases

Taking the spotlight in session 1, ECHO regional cases will present stories from the last 5 years, some of which may identify less-known threads or activities that occurred. These presentations are leveraging a "Guiding Activity" developed by regional cases to reflect on their ECHO journeys and help them to bounce forward to future work!

Session 2: Glimpses from ECHO Teams reflecting back and looking ahead

Session 2 will feature ECHO Teams including the trainee team, ECHO & youth + Team Equity, Teams Watershed + GECHO sharing their experiences and invoking lessons to carry forward.

Social/Iggy Competition



Ideas are brewing for this ECHO-tradition. Iggy is our ungulate mascot (pictured on the left). We look forward to surprising everyone with an entertaining and friendly competition helping to envision Iggy's future!

Session 3: Bouncing forward toward the ECHO Collective

Session 3 will include interactive breakout rooms with a fun challenge to envision extra applications of ECHO tools & processes and discussion of threads to carry forward to the ECHO Collective.

June 29

8:00 - 10:30am PT.

Register here!

<https://bit.ly/38zA23O>

June 29

12:00 - 2:30pm PT.

Register here!

<https://bit.ly/3x05391>

June 29

2:30pm - onward PT.

Register here!

<https://bit.ly/3NDVNhy>

June 30

8:00 - 10:30am PT.

Register here!

<https://bit.ly/3a46Faa>

Strengthening Capacity Trainee Team

Most recently, the trainee team met on March 25, 2022 to catch up and touch base about ECHO wrap up tasks. Although we will stay in touch in other ways, this was the final trainee team meeting. However, in addition to our work within our regional cases and on our various ECHO teams, a group of co-authors are also working hard on our trainee manuscript. This reflective manuscript characterizes ECHO trainees' experiences working across disciplines and sectors as part of the ECHO Network and is based on findings from an asynchronous reflection activity conducted in 2021. The reflection activity was also presented by Makayla & Katya at the UNBC 2022 research week, please see the ['ECHO Network Trainee Reflective Practice: Strengthening Capacity of a New Cadre of Researchers, Practitioners, and Community Members'](#) poster [here](#).

Overall, this team is looking ahead to new opportunities! Below, some of the current trainees have shared brief summaries about their ECHO roles and respond to the prompt "how you are carrying an ECHO lesson forward into next steps"?

We would like to acknowledge that the trainee team, like many ECHO teams, has been in-flux and organically shifted since its initiation in 2017. Many more trainees are a part of this team but have moved on in their next steps, thus they are not featured here.

Makayla Skrlac



I've been working with the ECHO Network since May 2018 as part of the team at UNBC. I started as a volunteer research assistant helping out with the ECHO Portal (<http://echo-portal.gis.unbc.ca/>) and Nechako Portal (<http://iwrg.gis.unbc.ca/>). My role has continued to shift throughout the last four years into an ECHO Coordinator role. I also work with Margot's Learning from Ecosocial Approaches to Public Health (LEAPH) Lab in a Program Coordinator role. I've been fortunate to be a part of several teams within ECHO including the trainee Team, ECHO & YOUTH, Research Leads meetings, GECHO, and others. I recently accepted a seat on the [Fraser Basin Council \(FBC\) Youth Advisory Committee](#) and graduated from my second undergrad degree! I'm excited to help out with ECHO wrap up tasks and be learning how to leverage knowledge exchange processes.

The ECHO lesson I'm carrying forward is the recognition of the 'latency period' of my learning. For example, in the past few months I've made so many connections that I hadn't realized in my previous years with ECHO and this reinforces the idea that addressing complex issues not only takes time but it also requires reflection! Reflection is a topic I'm getting the opportunity to learn more about as a co-author of the trainee manuscript which is discussed above.



Nick Yarmey

Recently, my work with ECHO has been focused on the “Health in the Watershed Atlas” as part of the [BRWA case study](#). This has involved graphing change-over-time in >50 different indicators of environment, community, and health to accompany the maps I created for each indicator. I also presented a poster at the American Association of Geography’s (AAG) annual meeting titled “ECHO Screen: A spatial assessment tool for quantifying cumulative effects to environment, community and health”.

Tangential to ECHO, I’ve been supporting Lars Hallstrom to build the [Prentice Institute’s](#) new research portfolio by doing analysis, visualization, and mapping of data relevant to population, economy, and (in)equity. Outside of ECHO I do independent consulting on projects that benefit from my familiarity with Canada’s public data landscape and knowledge mobilization. One project that’s recently wrapped up was to build an interactive GIS dashboard to explore cumulative effects of multiple land uses in the Alberta Foothills ([read the report from Phase 1 here](#)). In another project I am working with a non-profit in Victoria, BC to quantify the region’s performance relative to ecological planetary boundaries and thresholds for social wellbeing (based on Kate Raworth’s [Donut Economics](#) concept).



Christiana Onabola

I joined the ECHO network in fall of 2018 as a Health Sciences PhD student. So far, my academic journey has been supported by ECHO. My research has been shaped by ideas I gleaned from many ECHO meetings and events. I have benefited from participating in ECHO-related events such as Team Watershed meetings and the more recent Pulse Series.

With support from the ECHO network, I have presented at conferences, executed an SDG-focused project at UNBC, and received sponsorship for my latest publication. Moreover, I have come to appreciate the deeper connections between the environment and many facets of our health from learning about Indigenous ways of being. Being a part of ECHO has also helped me learn about watersheds, their significance, connections to many important concepts like health, youth and, in general, the E-C-H connections. Moreover, I have come to appreciate teamwork and collaboration for research. This has informed my work with teams outside of ECHO.

Katya Korol

My work with ECHO began as a graduate research assistant with the UNBC team in the fall of 2020 and has largely focused on projects in line with the team's commitment to arts-based and narrative approaches. Specifically, I worked with fellow ECHO trainees on a collaborative digital storytelling project: the ["ECH Expressions in Art" Digital Story](#).



Another part of my work with ECHO has been supporting connections with partner organizations such as the [Ecological Determinants Group on Education](#) and the [Health Arts Research Centre](#) and working with the trainee team on projects such as a forthcoming trainee manuscript.

Working with the ECHO team has been an invaluable experience and I've been able to apply my 'E-C-H' lens in my own master's thesis "Nourishing Land: Health Experiences of Food Sovereignty in Northern BC," and in collaborations related to social and ecological justice (such as board membership of [PGPIRG](https://www.pgpirg.org/about): <https://www.pgpirg.org/about>) and [radical food geography](#) (forthcoming chapter in: <http://mailman12.u.washington.edu/pipermail/foodplanning/2021-August/000160.html>).

Aita Bezzola

I am a research associate working on supporting and advancing the Portals (<http://iwrg.gis.unbc.ca/> and <http://echo-portal.gis.unbc.ca/>), to create more connections and increase their usefulness and usability. Currently our two Research Assistants Lisa Rickard and Natalie Maslowski are focused on getting more content into the Nechako and ECHO Portal in collaboration with our partners. Whenever needed, I support the ECHO team with maps, geo-spatial support and projects such as the EnviroScreen.

Outside of this role I've moved home to the Columbia Valley since completing my MSc in UNBC's NRES program. I work for myself as a biologist and map maker with NGO's, First Nations and industry and am often challenged to implement my E-C-H approach with all the forestry-related work that seems to be popping up in my roles.



Tavia McKinnon

I joined the ECHO Network as a UNBC team member in fall of 2020. I have since supported multiple ECHO events and become particularly involved with ECHO & Youth activities, including helping to coordinate youth participation in the Nechako watershed at our ECHO Pulse in November 2021. With many connections to ECHO & Youth, I am also a research coordinator with the [Koh-Learning in our Watersheds program](#), a collaboration between UNBC and School District 91. With an aim of connecting students with their communities and waterways, the Koh-Learning program provides many opportunities to see relationships play out between environment, community, and health within an education context.

I further carry forward the importance of youth participation in Environment-Community-Health discussions through my Master of Social Work thesis research, where I am exploring youth relationships with land and place in the Nechako watershed and implications for (eco)social work.



Onitriina Rakotorahalahy

Recently, my journey with ECHO has been pretty fulfilled. In January, I defended my master thesis at Université de Moncton, with professor Céline Surette and Julie Forgues. My thesis demonstrated Women's role with agroecological transition. I titled it "[Engagement des femmes dans une transition agroécologique dans le sud-est du Nouveau-Brunswick en utilisant la méthode photovoice](#)". In brief, I used photovoice to share that women in agriculture are essential to reach food sovereignty by agroecological practices: use of sustainable technology like geotextile, use of renewable energy like solar panels. But, there are a lot of challenges to attend to the point of being sovereign like patriarchy, capitalism, local governance, land insecurity, etc. I can say it is overwhelming to see how far this research spreads.

Since then, I have been invited to a radio podcast "[L'Heure de pointe - Acadie](#)" on Canada Radio with Amélie Gosselin to talk about my research. Also, I was one of the panelists on food sovereignty organized by '[Regroupement féministe du NB](#)' in Fredericton. I was also a speaker at two student conferences at the University of Moncton: La nuit des idées / Day of Ideas and Printemps des hautes études publiques Politiques publiques, environnement et transition écologique Inscription.

All of these meetings, sharings teach me and help me to understand the key point of interdisciplinarity and the importance of collaborative work and action research. I'm still learning with this amazing team.



Jordan Brubacher



In the first while with ECHO I was quantifying cumulative impacts of industrial activity across BC by integrating spatial datasets characterizing a wide variety of human impacts to create an “anthropogenic disturbance index”. Soon, these raw disturbance datasets, as well as polished high-resolution maps, will be available on ECHO’s website so that others can download and use them for public engagement or research purposes. More recently, a paper we wrote on climate change and food- and water-borne disease in BC was published and subsequently cited in the most recent IPCC report. In that work, we found that a 1 degree increase in annual temperature was associated with a 10% increase in bacterial diseases associated with food and water – an observation that does not bode well for future disease rates under a warming climate.

With ECHO wrapping up, I am working as a private contractor and continuing my work with [FNHA’s WATCH Project \(We All Take Care of the Harvest\)](#), a seafood safety, security and sovereignty project involving four coastal BC First Nations that are building a monitoring system to assess seafood safety, in particular shellfish, in their traditional territories. I also work with the [West Coast Climate Action Network](#) on building an online dashboard showcasing the many Indigenous-led climate-related projects across BC to help facilitate collaboration and knowledge sharing.

My experiences with ECHO have been diverse and rich, and my current (and future) work greatly benefits from having learned about E-C-H links throughout the course of the project - links that I cannot un-see.



Angel Kennedy

My work with the ECHO Network began in spring 2018 as an SFU undergraduate student, and continued as I progressed through a Master of Public Health degree and recently entered a PhD program at SFU in Health Sciences with Maya Gislason. I am grateful to have been involved in various teams throughout my time with the ECHO Network, including the SFU/FNHA Regional Case, the Trainee Team and Team Equity, and to have the opportunity to work on several of the Network’s knowledge exchange activities.

With synergies to the ECHO Network, I am also a Research Manager for the Researching for EcoSocial and Equitable Transformation (RESET) Team at SFU and the Coordinating Early Career Representative for Ecohealth International.

Working with the ECHO team has been pivotal for me to shape my ‘environment, community, health’ lens, which I apply to my PhD work that involves working with youth to develop strategies for promoting intergenerational collaboration within climate change decision-making processes, with a focus on achieving cross-sectoral co-benefits and minimizing barriers to youth engagement.

Jonathan Doyon

I just finished my final year of undergraduate studies with UNBC and will graduate with a Bachelor of Health Sciences majoring in Biomedical Studies in May 2022. In tandem, I have been given the opportunity to complete an honours thesis project under the supervision of Dr. Margot Parkes and Dr. Jessie King. The objective of this research project was to better understand the nature of health indicators in relation to Indigenous community contexts, while further emphasizing the nuanced relationships co-existing between cultural, social, and ecological systems.



Having joined the ECHO Network as a research assistant in September 2021, I largely function through support roles to help the team in whatever capacity is needed, such as note-taking, Zotero filing, manuscript writing, and helping organize ECHO-related events such as the more recent Pulse Series. In November 2021, I began joining the ECHO Operations Committee meetings as a note-taker to help familiarize myself with other members, and consequently, I helped facilitate the Graphic-Recorded Interview Chat on April 7, 2022.

I am grateful to be surrounded by my ECHO Network colleagues. They have significantly influenced my trajectory in life for the better. Collectively, they have broadened my understanding of health and wellbeing in a more comprehensive manner that acknowledges the reciprocal interactions between human and non-human life. I look forward to continuing this learning experience with them as I embark on a new journey of pursuing the Masters of Health Sciences program with UNBC, where I hope to build upon our current efforts to address planetary health-related challenges.



Melissa Bates

This is my first year with ECHO, with UNBC and on the traditional territory of the Lheidli T'enneh in what is now known as Prince George. I began my Masters journey with Dr. Margot Parkes in September of 2021 in the Natural Resources and Environmental Studies program in the interdisciplinary stream. I feel extremely fortunate to be welcomed onto these spaces by the many incredible people I have met during my first few months here.

My ECHO-related work is largely involved with the co-designed Land, Health and Healing series which seeks to connect communities and people who see the interconnections between these three important areas through workshops and seminar series. This series is co-hosted by the Lheidli T'enneh Nation, whom I am privileged to work with. Outside of this, I am also involved with the design aspects of ECHO and look forward to more opportunity to learn through this diverse and interdisciplinary community.

Saadia Hara



I joined the ECHO team in 2018 during my last internship in biochemistry. I would say that it was a very rewarding experience and it allowed me to continue as a research assistant and to start a master's degree in environmental studies as well as my thesis project with professor Céline Surette. From 2018 to 2021, I had the chance as a research assistant to develop integrative tools that allow us to better understand the history of natural resource extraction in NB. I have been able to develop arts-based tools and mapping tools (NBEnviroScreen) during my thesis.

I also had the chance to participate in several conferences to share our different work. Since August 2021, I am the new Environmental Health Programs Coordinator at the New Brunswick Environmental Network and I am also coordinating the NB regional case. (<https://nben.ca/en/groups-in-action/new-brunswick-children-s-environmental-health-collaborative.html>).

The contact with the ECHO Network allowed me to better understand interdisciplinarity and the importance of collaborative work and action research. The different reflections and discussions allowed me to collaborate with students from UQAM in Quebec on a project on interdisciplinarity that was funded by the CINBIOSE group. My research and the meetings we had also helped me to create my first comic book that addresses the issue of development and environmental protection. The comic has been accepted for publication and should be available in bookstores soon!



Jordan Cranmer

I joined the ECHO network in 2018 as an eleventh-grade high school student, and formally as a youth UNBC team member in 2019 after attending the annual meeting in Camrose, Alberta. As a high school student, I carried the connections made through the ECHO Network forward through engagement with elementary students from the Cocange watershed. This included hosting video calls with elementary students to share our experiences learning on and from our respective watersheds.

Since, I have been primarily involved with ECHO & Youth events and activities through my role as the Nechako Watershed Roundtable Youth Engagement Coordinator and a Research Assistant with Koh-Learning in our Watersheds. Through these positions, I have helped to coordinate youth engagement in the Nechako Watershed with the ECHO & Youth Network in various capacities including the ECHO Pulse in November of 2021. I also explore E-C-H connections through my conservation-based research and outreach role at the Nechako White Sturgeon Conservation Centre, where I focus on knowledge translation between research groups, youth, and communities through outdoor experiential opportunities and mentorship programs. I study E-C-H connections through my Community, Population, and Environmental Science undergraduate degree program at UNBC and continue to explore youth relationships with land, place, and self through my own experiences and those of others.

Team Learning & Impact

Learning and Impact includes an evaluation of the ECHO Network as reported in:
[The Environment, Community and Health Observatory \(ECHO\) Network Outcomes, Learning and Pathways Forward 2017-2021](https://bit.ly/3HnRXrj) (<https://bit.ly/3HnRXrj>)
and [Synthesis Report Summary](https://bit.ly/3MAeZMn) (<https://bit.ly/3MAeZMn>)

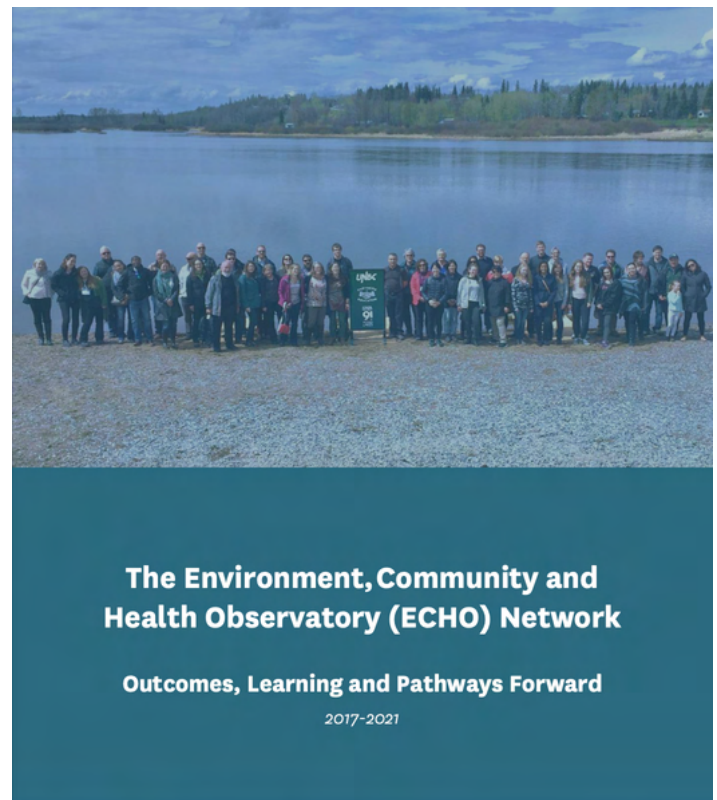
The report synthesizes the ECHO journey from 2017 to December 2021 and demonstrates how the ECHO network is bringing people together to connect, share, learn, and plan.

Situating ECHO, the report highlights the objectives of creating improved integrative understanding of, and response to, health impact of resource extraction. It highlights the phenomenal work and reach of the 4 regional cases and 8 teams collaborating across sectors with the diverse partners who ground and maintain the focus on the real-world use of knowledge generated.

The report explores the wealth of ECHO 'outputs', describing the variety of tools and processes developed, and the regional impacts and value of the ECHO network. It also highlights the diverse array of peer reviewed articles and other outputs that have been required, funded, influenced or come about as a result of the ripple effects of the ECHO network.

This synthesis highlights the various pathways the ECHO network explored as part of their journey and research which include Arts Based and Narrative methods, Youth Engagement, Capacity Strengthening, the development of Integrative Tools and Processes, and Indicator Frameworks including the Healing Indicators work being led by Dawn Hoogeveen.

Building on the outcomes of ECHO, the report frames and discussed ECHO's pathways to systems change including: how the ECHO Network fosters conversations and builds relationships that feed into policy contexts, ECHO integrative approaches to collaborations such as health impact assessment, and ECHO asset based approach and values attributed to local knowledge.



[The Outcomes, Learning and Pathways Forward 2017-2021 Report: https://bit.ly/3HnRXrj](https://bit.ly/3HnRXrj)

[The 15 page Report Summary: https://bit.ly/3MAeZMn](https://bit.ly/3MAeZMn)

Operations Committee

On Wednesday April 6th, 2022, the ECHO Operations Committee held an online graphic-recorded interview conversation. The attendees included Margot Parkes, Diana Kutzner and the ECHO regional case coordinators, such as Saadia Hara, Sally Western, Jordan Brubacher and Sarah Skinner. Further, research assistants Makayla Skrlac and Jonathan Doyon participated as support personnel. The overarching objective was to engage in thoughtful conversation and hear about the diverse range of experiences from each of the regional case coordinators. For instance, attendees were asked to: (i) share their perspectives regarding how the Operations Committee functioned together as team, (ii) elaborate on key perspectives and lessons gained, and (iii) touch on their transitions into the future.

Another output that emerged from the ECHO Operations Committee is the team manuscript which aims to provide valuable insights into thinking through complex problems and applying cross-cutting lessons. The manuscript provided a brief overview of the ECHO Network and further described the 'why bother' of doing this kind of work in the first place. Next, the authors touch on some of the interesting background and context-related information surrounding the team, underscoring (i) how it was designed, (ii) how members managed to interact, and (iii) how the team organized its time. A significant portion of this manuscript prioritized the findings and lessons gained from each member throughout their time with the team.

Team ECHO & YOU(th)

IKT Casebook:

Angel, Makayla, Diana, Jordan, Tavia, and Margot have submitted an article for the IKT Network's fifth volume of the How We Work Together casebook series. Using the Network's youth engagement as an example, we discuss the ECHO Networks principles and processes behind our IKT partnerships and relationships by summarizing how the ECHO & Youth Team supported partnerships in practice, navigated challenges to meaningful inclusion, and shifted power dynamics in the team. The Casebook is receiving feedback and will be published later this summer. This Casebook includes identifying some of the lessons learned because "[a]t the center of the success of the ECHO Network are the highly-valued relationships formed across the Learning Community. The Network itself has been described as a unique source of collective wisdom that members can tap into when grappling with complex issues, and a source of mutual learning and support in spaces where issues are overwhelming, and feelings of isolation can be common. Through initiating, developing, and navigating partnerships, we have come to understand that responses to issues are context-specific." In the Casebook, we suggested a series of questions which help to critically reflect on how to manage intersectoral partnerships:

1. How can you integrate **flexibility** in your partnerships to allow new interests and diverse knowledge sources to emerge? What steps are you taking to ensure your partnership allows for youth-responsive pathways for this type of emergence to happen?
2. How can you include youth in research in ways that are mutually beneficial and respond to the **ethical dilemma** that we encounter when youth are changing the ways we think through these complex issues, but at the same time are faced with siloed systems that cannot implement their suggestions without upstream system-level changes?
3. How can you challenge dominant narratives and paradigms while working to the best of your ability to provide a safe, **equitable**, and productive space for all your members/partnerships?

Conference Presentation:

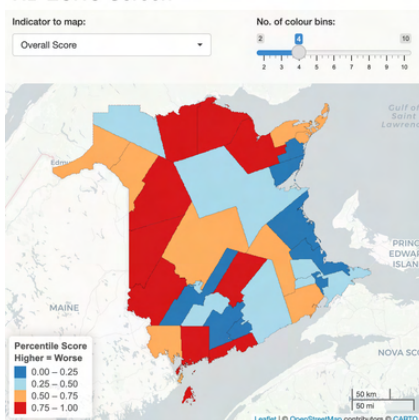
Jordan, Angel, Tavia, and Makayla (with contributions from Margot and Diana) will be giving a Pecha Kucha presentation at the upcoming Health xChange event in Vancouver June 16, 2022. In this presentation, they will share what they have learned (and unlearned) about: fostering creative youth engagement in research and knowledge exchange, shifting power dynamics to engage youth meaningfully as experts, and how to support youth and their leadership when they encounter systems and institutions which are not attuned to their integrative, cross-sectoral and equity-focused perspectives.

Geospatial ECHO (GECHO) Team

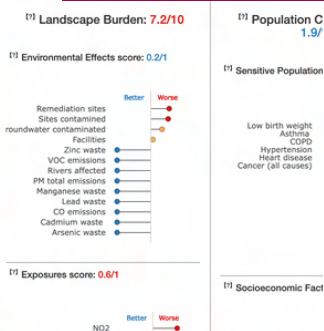
ECHO/EnviroScreens

3 regional case EnviroScreens are now in a knowledge exchange phase with their an equity-informed environmental justice screening tools capable of merging environmental, socioeconomic and health data.

NB ECHO Screen



New Brunswick EnviroScreen



We have finalized the pilot version of the tool for New Brunswick. Over the past few months we have been invited to several conferences and workshops to present the tool. Right now, we are writing an article for NB as well as a policy brief and a blog for the Conservation Council of New Brunswick (<https://www.conservationcouncil.ca/>)

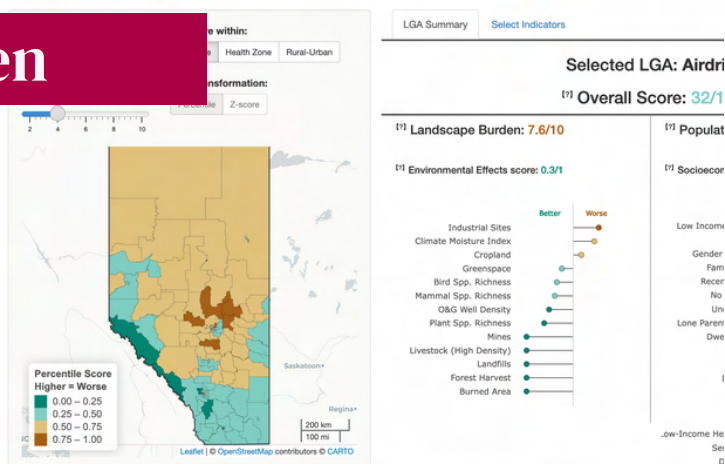
NB EnviroScreen: https://nicholas-yarmey.shinyapps.io/NB_Enviro_Screen

Alberta EnviroScreen

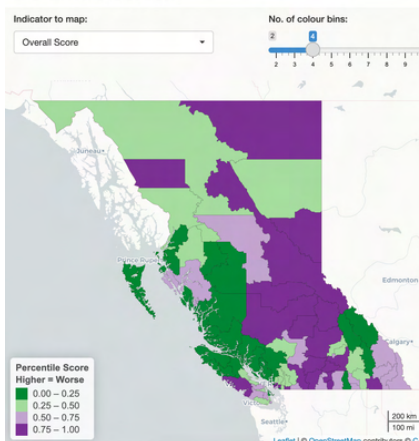
The main functionality of the AB Enviro Screen app is finished, and next we will be drafting a manuscript related to the findings.

AB EnviroScreen: https://nicholas-yarmey.shinyapps.io/AB_Enviro_Screen/

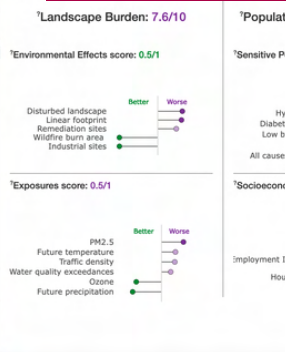
AB Enviro Screen



BC Enviro Screen



BC EnviroScreen



A manuscript has been submitted to the Canadian Journal for Public Health; stay tuned for its release.

BC EnviroScreen: https://nicholas-yarmey.shinyapps.io/BC_Enviro_Screen/

ECHO & Nechako Watershed Portals

With the help of our two Research Assistants Lisa Rickard and Natalie Maslowski, Aita and Makayla are in the midst of a push to increase the spread of documents into the Nechako Watershed and ECHO Portal in collaboration with our partners. This push is adding in grey literature, videos, photos, and even a song about the Nechako region to the portal which compliments the Nechako Literature Review (NLR) academic/journal article resources. It's an ongoing effort to continue building up the "community library" or "public resource filing cabinet" to create more connections within the portals and increase their usefulness and usability for integrative thinking.



An important connection to the ECHO & YOUTH team is a series of teaching modules being developed to help support teachers in SD 91 (and other) to utilize the portal and the resources it contains in their classrooms.

The design of these modules hopes to evoke interdisciplinary thinking as they are cross-curricular activities.

**Cross-teams
connection!**

Love Data Week

Margot, Aita, and Tavia presented on February 16, 2022 for Love Data Week (<https://researchcommons.library.ubc.ca/2022/01/19/love-data-week-feb-14-18-2022/>) to share lessons and insights from the development and use of our geospatial portal tools that has been developed by First Nations and other groups to address complex environment, community and health concerns. We profiled the implementation of the Nechako Watershed Portal through its use by the Koh-Learning in our Watersheds group.

Parkes MW, Bezzola A, McKinnon T. Just what we needed (!?): Lessons from working together with a user-driven, open-source, geospatial tool for archiving and sharing data across diverse contexts. "Love Data Week" Presentation. February 16, 2022.

Upcoming:

Integrating our integrative tools! Next steps for portals work includes combining the AB, BC, and NB ECHO/Enviro Screens into the Portals.

ECHO Tools & Processes

Zotero Library

ECHO ZOTERO PROTOCOL

The Zotero library has been published online and is available now on the ECHO Network website. See it here: <https://www.echonetwork-reseaecho.ca/zotero-library>.

We can continue to add resources despite it being published online!

There are currently 378 resources uploaded to the library. All of which have been utilized by ECHO Network members to progress either their ECHO work, like journal articles, or been helpful in ECHO-related studies and activities, like creating a digital story.

Most, and eventually all, of the resources will have a minimum of 3 "tags". The tags are useful for sorting through items in the Zotero library to find resources that might be of interest to you. For more information about the tags and the Zotero library, please visit the ECHO website linked above or contact Makayla (makayla.skrlac@unbc.ca)

Website updates!

Our ECHO Network website is being continuously updated. Recently, we've added a drop down menu about our 'tools and processes' and will be continuing to build these pages with more details and connections to our work. Please check these webpages out.



Echoes from Across the Regional Cases

SFU/FNHA Regional Case

Past Events

On April 5, 2022, the LEO Network led a BC Virtual Gathering focused on 'Exploring our Relationship with Fire'. This exciting session explored our relationship with fire, experiences with past wildfire seasons, fire stewardship, and diverse knowledges of fire, with guest panelists Dr. Kira Hoffman and members of the First Nations Emergency Services Society of BC.

Upcoming

- The FNHA/SFU Regional Case is collaboratively planning an in-person ECHO Collective Launch event, to be held on Vancouver Island in October, 2022.
- Cody Thomas and Dionne Sanderson from the SFU/FNHA Regional Case are planning and coordinating a series of workshops highlighting citizen science tools related to climate and environmental health through cross-collaborative practices. The tools being explored will include the [Local Environmental observer Network \(LEO\)](#), [Community Collaborative Rain, Hail, and Snow Network \(CoCoRaHS\)](#) and [Purple Air](#). These workshops will be tailored to unique audiences such as First Nations communities in British Columbia, Internal staff and departments at the FNHA, and community organizations.

Member Updates

Dawn Hoogeveen's Healing Indicators work is well underway in collaboration with SFU and FNHA. There are two currents of this work. The first is determining if and when the FNHA has a role to play in Impact Assessment processes, which is being done with legal counsel. The second is health and wellness ecological indicator research, the pilot for this is scheduled to begin in June.

Valued member of the FNHA/SFU Regional Case, Maery Kaplan-Hallam, has accepted a permanent position as FNHA's Climate Change and Health Adaptation Specialist.

Echoes from Across the Regional Cases

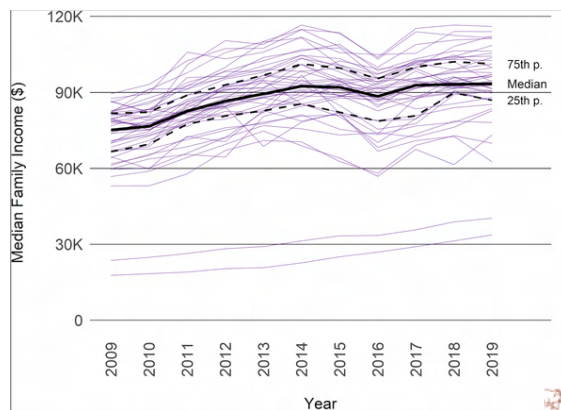
UofL/BRWA Regional Case

Past Events

On May 24 ECHO & BRWA facilitated a workshop showcasing two portals. The "Using riparian & watershed portals to share data & information: an interactive workshop" presentation was a success with attendees from across Canada. The Riparian Web Portal (<https://riparian.info/#/nav>) was presented by Sarah Skinner with the Battle River Watershed Alliance (BRWA), and the Nechako Watershed Portal (<http://iwrg.gis.unbc.ca/>) and ECHO Portal (<http://echo-portal.gis.unbc.ca/>) was presented by BC Regional Case members Aita, Jordan and Makayla. Margot moderated the session. You can watch this session here: <https://vimeo.com/715318177>

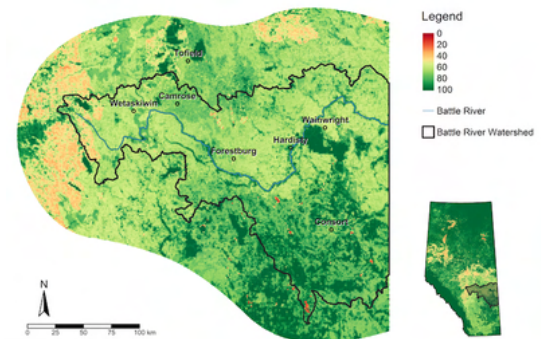
Upcoming

The Health in our Watershed Atlas is in the review phase and will soon be finalized and published! Right now, the people working on the Atlas are graphic designers as well as RAs who are combing through the 80 page-long bibliography. The Atlas will be featured at the 2022 ECHO Annual Meeting. Below is a sneak preview of some of the kinds of content we can expect to see in the Atlas.



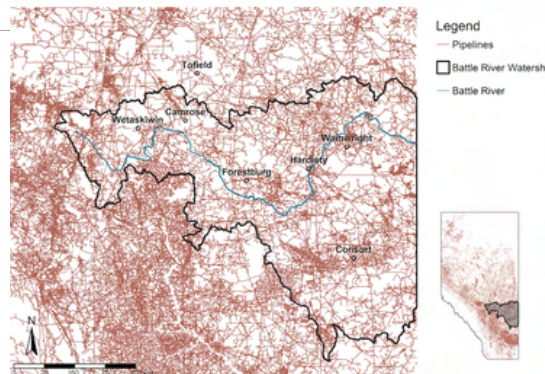
Title: Median family income
2009-2019

Subtitle: For census subdivision
within the Battle River
Watershed



Title: Mammal Species
Intactness 2018

Subtitle: Relative intactness of
mammal species, which values
closer to 100 representing
complete intactness (i.e., no
disturbance)



Title: Pipelines 2018

Echoes from Across the Regional Cases

UNBC/NH Regional Case

Past Events

Brown Paper Bag Presentation: Dr. Margot Parkes, Dr. Raina Fumerton, and Sally Western presented on the partnership between Northern Health and the ECHO Network on Thursday, October 28th, 2021. The speakers also described how emerging knowledge translation tools are being used to underscore the interactions between social, economic, and cultural determinants of health. Link to recording: <https://bit.ly/3akpBl0>

Zotero Training: Makayla Skrlac, Barb Oke and other Health and Resource Development (HRD) team members from Northern Health met to better navigate the ECHO Zotero library. The cornucopia of resources within this library can help us acknowledge certain deficits and strengths of traditional environmental assessment models, in addition to bolstering our capacity to improve them for future use.

Recent News

- KaRE Meetings are being re-initiated: The Knowledge and Research Exchange (KaRE) group on Health and Resource Development in northern BC was created with input from the Northern Health Authority, First Nations Health Authority, and UNBC. The group is working to better understand and respond to the health impacts of complex issues such as climate change and resource development. The first session took place on May 30 and included lunch for those in person, followed by roundtable introductions, and a re-initiation to our KaRE meeting format including updates, presentations and discussions.

Member Updates

A group of co-authors recently published 'Patient- and Community-Oriented Primary Care Approaches for Health in Rural, Remote and Resource-Dependent Places: Insights for Eco-Social Praxis'. Some of the highlights from this article are included here:

- Multiple frameworks within the patient-oriented care movement align with principles of eco-social approaches to health.
- Attention to processes of patient and community engagement are crucial for incorporating eco-social approaches to health in primary and public health collaboration.
- Frameworks, processes and tools relevant to treating both patients and 'communities of patients' need adaptation for application in rural areas.

Echoes from Across the Regional Cases

UdeM/NBEN Regional Case

Member Updates

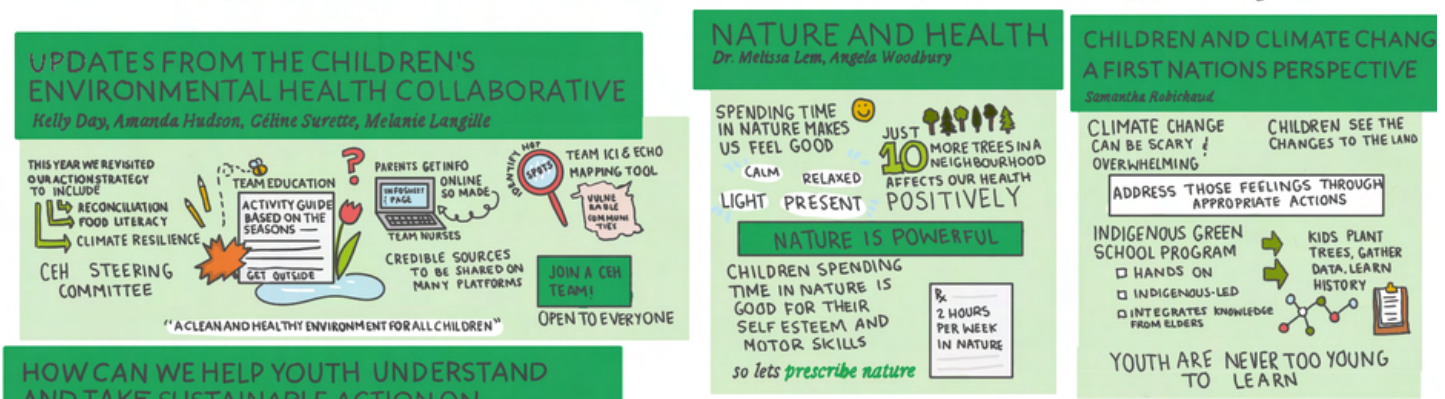
Sending our best wishes to Tim Leblanc Murphy, Executive Director of the New Brunswick Environmental Network (NBEN), as he embarks on a new role. The ECHO Network was fortunate to work with Tim since June 2020.

Saadia Hara, ECHO Trainee, stepped into the NBEN Environmental Health Programs Coordinator role at the beginning of August 2021!

Past Events

The conference "Helping Children Navigate Through Health and Climate Crises" was held virtually via Zoom on Tuesday, March 1st and Wednesday, March 2nd, 2021. This conference was organized by the New Brunswick Environmental Network (NBEN), under the auspices of the Children's Environmental Health Collaborative of New Brunswick (NBCEH). A total of 56 people attended the two-day conference from a variety of sectors including the provincial government, public health, environmental non-governmental organizations, family service organizations, and post-secondary institutions.

One of the highlights of the first day of the conference was the panel "How can we help youth understand and take sustainable action on climate change?" moderated by Dr. Céline Surette, University of Moncton, during which Serge LaRoche, Groupe de développement durable du Pays de Cocagne; Michelle Thibault, University of Moncton; Maya Gislason, Simon Fraser University shared their views on research projects and activities that are being done in schools and communities to help youth take concrete and sustainable actions to address climate change. To round out the first day, several speakers, Dr. Melissa Lem of the Canadian Association of Physicians for the Environment, Angela Woodbury of the University of Manitoba ; Samantha Robichaud of the Esengôpetitj Watershed Association ; Denise Melanson and Bonnie Hamilton of the Environmental Rights Caucus made excellent presentations on nature and health, the First Nations perspective on climate change, and the Environmental Bill of Rights.



HOW CAN WE HELP YOUTH UNDERSTAND AND TAKE SUSTAINABLE ACTION ON CLIMATE CHANGE?

Serge LaRoche, Michelle Thibault, Maya Giszton

AIDER À FAIRE COMPRENDRE

UTILISER DES MESURES 1 AN DE CO₂ POUR FAIRE DES SOLUTIONS

MAIS COMMENT ALLER AU-DELÀ? PROMOUVOIR LA DISCUSSION

WHEN KIDS LOVE NATURE THEY ARE BETTER EQUIPPED TO DEAL

PROMOUVOIR L'IMAGINATION

MODEL BEING AN ECO-CITIZEN

INTEGRATE YOUTH, THEIR FAMILIES, COMMUNITIES IN CLIMATE DISCUSSIONS

LISTEN

MENTAL HEALTH

I KNOW · ICARE · IACT

WE NEED TO DO A BETTER JOB

so lets prescribe nature

YOUTH ARE NEVER TOO YOUNG TO LEARN

NEW BRUNSWICK ENVIRONMENTAL BILL OF RIGHTS

Bonnie Hamilton Bogart, Denise Melanson

CHILDREN ARE DISPROPORTIONATELY AFFECTED BY ENV POLLUTION

THE TIME TO ACT IS NOW

THE DATA DEMONSTRATES IT

THE WORLD NEEDS THIS BILL; WE NEED YOUR HELP

TELL YOUR REPS

END OF THE BILL

DOWNLOAD OUR TOOLS

WRITE TO YOUR MLAS

VISIT OUR WEBSITE

1 MAR 2022

ANNIKA CHIASSON

The second day of the conference began with a welcome address by Dr. Jennifer Wylie-Russell, Chief Medical Officer of Health for the Province of New Brunswick followed by a presentation by Melanie Langille of the New Brunswick Lung Association and Alexandra Gagnon of Health Canada on perspectives on air quality and chemical exposure. Melanie Langille and Alexandra Gagnon also introduced participants to resources and actions they can take to protect families and reduce chemical exposure. Dr. Britt Way from Stanford University & London School of Hygiene and Tropical Medicine then presented her research on climate change and anxiety. Dr. Britt explained that eco-anxiety is related to eco-compassion. She gave some examples of actions that could be taken to help people who suffer from eco-anxiety.

Finally, the conference ended with an excellent panel. The panel on "the impacts of the pandemic on children", moderated by Dr. Renée Turcotte, of the Canadian Association of Physicians for the Environment of New Brunswick, during which nutritionist Amanda Hudson and Chantal Varin, of the Association francophone des parents du Nouveau-Brunswick, shared their views on the benefits and negative impacts of the pandemic on families and communities, as well as the link with climate change.

If you didn't have the chance to attend the different presentations, you can always watch the recordings on our youtube channel:

https://youtube.com/playlist?list=PL1NJ57Lzj3IS0-FzvwDSH3M3a_bUign8-

HELPING CHILDREN NAVIGATE THROUGH HEALTH AND CLIMATE CRISES AIDER LES ENFANTS À TRAVERSER LES CRISES SANITAIRES ET CLIMATIQUES

AIR QUALITY, CHEMICAL EXPOSURE AND CHILDREN HEALTH

Melanie Langille, Alexandra Gagnon

SUBSTANCES CHIMIQUES PEUVENT AVOIR DES IMPACTS POSITIFS ET NÉGATIFS

LA SÉCURITÉ EST RESPONSABILITÉ PARTAGÉE

FAIRE DE L'ÉDUCATION À TRAVERS BDs, GUIDE D'ACTIVITÉS ET PRÉSENTATIONS

GARDER LES DIRECTIVES SIMPLES ET FACILES

CHEMICAL EFFECTS CAN HAVE LIFE-LONG EFFECTS AND IMPACT ON COMMUNITIES

AVOID NON-STICK PANS & PLASTICS

CHOOSE WOOD METAL OR CLOTH TOYS

IL Y A PLUSIEURS INITIATIVES ET PROGRAMMES

A Conference of the Children's Environmental Health Collaborative
Une conférence du Collectif pour la santé environnementale des enfants

CLIMATE CHANGE ANXIETY

Dr. Britt Way

ECO-ANXIETY IS MORE THAN ANXIETY

IT'S ON A SCALE

FEAR GUILT SAD ETC

YOUTH FEEL BETRAYED BY GOVERNMENT

ARE VULNERABLE TO THESE FEELINGS

When you are aware you can act

THERE'S AN EMERGING FIELD OF CLIMATE AWARE THERAPY

HOW TO COPE

A NON-COMPREHENSIVE GUIDE

- INTERNAL ACTIVISM NOT JUST EXTERNAL
- RECOGNIZE
- TALK TO OTHERS I FEEL THE SAME
- BECOME AWARE OF YOUR SENSOR

THE IMPACT OF THE PANDEMIC ON CHILDREN

Amanda Hudson, Chantal Varin

INCREASE IN FOOD INSECURITY

LACK OF ACCESS TO SCHOOL PROGRAMS

INCREASE IN COMFORT SNACKING OUT OF STRESS

LESS ROUTINE CAN AFFECT RELATION WITH FOOD

CLIMATE CHANGE IS AFFECTING ACCESS TO NUTRITIOUS FOOD LOCAL IS BETTER!

HAUSSE D'UTILISATION DE PLASTIQUES ET MASQUES JETABLE

CONCILIER FAMILLE ET TRAVAIL EST DIFFICILE

LES PARENTS SONT ÉRUIS

HAUSSE DE SENTIMENTS D'INCOMPÉTENCE

THERE'S MORE HOME COOKING AND GARDENING

UN RETOUR VERS LA NATURE

2 MAR 2022

ANNIKA CHIASSON

Land, Health & Healing Series Update

The Land, Health and Healing series represents an ongoing partnership between Lheidli T'enneh First Nation and UNBC team members, that has been actively supported by the ECHO Network team. A key aspect of this collaboration was the Land, Health and Healing gathering in June 2021. A Padlet as well as some Video recordings from the June 2021 Land, Health & Healing gathering will soon be made available to find on the ECHO website. We look forward to sharing these with you.

Since June 2021, our team has continued to work together to co-design new events in the Land, Health and Healing series: exploring and supporting Indigenous-led approaches, with a focus on Lheidli T'enneh and across Dakelh territories. Our ongoing Land, Health & Healing Series team include Lheidli T'enneh Nation Elder Darlene McIntosh and knowledge holder Kym Gouchie, along with ECHO Team members Margot Parkes, Dawn Hoogeveen and Melissa Bates, and input from Professor Emeritus Henry Harder.

On March 10th the Land, Health and Healing co-hosted a workshop that focused on the connections being built around the Chun T'oh Whudujut (the Ancient Forest). This inland temperate boreal rainforest is about an hour-long drive outside of Prince George, BC. Recognized for its incredible biodiversity and old-growth cedar, this critical area has deep historical and cultural significance to the Lheidli T'enneh Nation. The event brought together voices and perspectives from Lheidli T'enneh Nation (spanning the Health Centre, Ancient Forest Working Group, education initiatives and more) along with the Caledonia Ramblers, BC Parks, UNBC and others with interest in future connections that reflect our shared interest in the Ancient Forest. We are honoured to be a part of these connections and hope to continue to be humble witnesses as further partnerships develop.



Publications and links of interest

Publications

- Buse, C. G., Allison, S., Cole, D. C., Fumerton, R., Parkes, M. W., & Woollard, R. F. (2022). Patient- and Community-Oriented Primary Care Approaches for Health in Rural, Remote and Resource-Dependent Places: Insights for Eco-Social Praxis. *Frontiers in Public Health*, 10, 867397. <https://doi.org/10.3389/fpubh.2022.867397>
- Buse, C.G., Bezzola, A., Brubacher, J., Takaro, T., Fredeen, A., Parkes, M.W. (2021). Cumulative impacts of diverse land-uses in British Columbia: Applying the CalEnviroScreen methodology to a Canadian context to understand environment-community-health interactions. *Canadian Journal of Public Health*. (Under Revision)
- Farrales, M., Hoogeveen, D., Sloan Morgan, O., de Leeuw, S., & Parkes, M.W. (2022). Framing Futurities in Photovoice, Health, and Environment: How Power Is Reproduced and Challenged in Arts-Based Methods. *Geohumanities* (In Press).
- Hoogeveen, D., Williams, A., Hussey, A., Western, S., Gislason, M.K. (2021) Sex, mines, and pipelines: Examining 'Gender-based Analysis Plus' in Canadian impact assessment resource extraction policy, *The Extractive Industries and Society*, Volume 8, Issue 3, 2021. <https://doi.org/10.1016/j.exis.2021.100921>
- Onabola, C. O., Andrews, N., Gislason, M. K., Harder, H. G., & Parkes, M. W. (2022). Exploring Cross-Sectoral Implications of the Sustainable Development Goals: Towards a Framework for Integrating Health Equity Perspectives With the Land-Water-Energy Nexus. *Public Health Reviews*, <https://doi.org/10.3389/phrs.2022.1604362>
- Parkes, M. W. (2022). River conversations: A confluence of lessons and emergence from the Taieri River and the Nechako River. *River Research and Applications*, 38(3), 443–452. <https://doi.org/10.1002/rra.3907>
- Picketts, I. M., Dery, S. J., Parkes, M. W., Sharma, A. R., & Matthews, C. A. (2020). Scenarios of climate change and natural resource development: complexity and uncertainty in the Nechako Watershed. *The Canadian Geographer*. 64. <https://doi.org/10.1111/cag.12609>
- Tu'itahi, S., Watson, H., Egan, R., Parkes, M.W., & Hancock, T. "Waiora: The Importance of Indigenous Worldviews and Spirituality to Inspire and Inform Planetary Health Promotion in the Anthropocene." *Global Health Promotion*, December 21, 2021, 17579759211062260. <https://doi.org/10.1177/17579759211062261>.

Links

Cumulative effects management plan by Metlakatla First Nation community: <http://metlakatlacem.ca/>

Research Impact Canada Course "Storytelling – Humanize the numbers":
https://researchimpact.ca/kmb_resource/storytelling-humanize-the-numbers/

Tamarack Institute for Community Engagement - Making the Case for Arts-Based Engagement: <https://bit.ly/3xmYKhf>

Where is Diana?

As winter moved to spring here in Canada, our ECHO Team has definitely missed Diana's contributions in her role as ECHO Research Manager, while also glad she is thriving in her new role at the First Nation Health Authority. We invite you to practice your "Where's Waldo" skills and try to find Dr. Diana Kutzner in the graphic below.



Hint: Top, Left Quadrant near the middle