

Looking Back, Moving Forward:
The Continued Role of Geography in Learning and Discovery



CONFERENCE PROGRAM

60th Annual Meeting of the Western Division of the Canadian Association of Geographers (WDCAG)
Hosted by: The King's University & the University of Alberta
Venue: The University of Alberta

March 9-10th, 2018



UNIVERSITY OF
ALBERTA

WELCOME TO WDCAG-2018

On behalf of the organizing committee, I want to say thank you for registering for the 60th Annual Meeting of the Western Division of the Canadian Association of Geographers held at the University of Alberta, March 9-10, 2018!!!

This year's theme "**Looking Back, Moving Forward: The Continued Role of Geography in Learning and Discovery**" pays tribute to the WDCAG's 60th anniversary. The WDCAG continues to be an important venue for undergraduate and graduate students to highlight their research and contribution to geographical learning and knowledge.

The 49 individual oral presentations, 10 special sessions/panels, 40 poster presentations, and the keynote speaker illustrate the continued importance and diversity of geographical research being conducted.

We welcome all participants to join us at the Friday night social at Dewey's Pub on campus and Saturday night's banquet at the Yellowhead Brewery.

Edmonton is a wonderful, dynamic, beautiful city and it's our pleasure to welcome you to WDCAG-2018.

Sincerely,

The WDCAG-2018 Organizing Committee
Leith Deacon, University of Alberta
Harry Spaling, The King's University
Joanne Moyer, The King's University

IMPORTANT DETAILS

REGISTRATION DESK

Friday March 9 th 08:30 – 10:00	CCIS Atrium next to 1-440
Friday March 9 th 17:00 – 19:00	CCIS Atrium next to 1-440
Saturday March 10 th 07:30 – 14:30	ECHA 1-152

ABSTRACTS: a complete list of abstracts is available at <https://cms.eas.ualberta.ca/wdcag/>

BE GREEN: We're pleased to announce that the WDCAG-2018 has been certified GOLD by the University of Alberta's Green Spaces Certification Program. In order to receive the highest level of certification, the organizing committee has been committed to incorporating the three pillars of sustainability across all elements of the conference: **Environmental, Social, and Economic**. We encourage all attendees to bring their personal refillable water bottles. Water fountains and/or fill-stations are available in all venues.

WEATHER: Edmonton is one of the sunniest cities in Canada receiving on average more than 2300 hours of sunshine a year. However, in March, the weather in Edmonton is temperamental ranging from very cold to snow, to unseasonably warm and wet. We encourage you to *dress appropriately* - especially the folks on the field trips. With the exception of the Edmonton Waste Management Centre tour, all field trips will include a significant amount of time outside. Wear appropriate footwear.

INTERNET (WiFi): the University of Alberta is a part of the EDUROAM network. Once on campus, simply login to the network and you will have full access. If your home university is not a member of this network, the University of Alberta also hosts a GUEST@UofA which provides limited online access.

SCAVENGER HUNT: a long-standing tradition of the WDCAG, the scavenger hunt details will be released at noon Thursday March 8 at <https://cms.eas.ualberta.ca/wdcag/scavenger-hunt/>

KEYNOTE: We are pleased to welcome Dr. John England, one of Canada's preeminent Northern researchers as the keynote speaker. Dr. England's talk "*Physical and Human Geographer are Inseparable: Unexpected Lessons from a Half-Century of Arctic Research*" promises to be outstanding. The talk is being held on **Friday March 9th @ 7:00pm in CCIS 1-440**.

CAMPUS MAP: University of Alberta campus is well signed and we'll do our best to have signs and volunteers providing extra help, however, please find the attached campus map.

BANQUET: The banquet will be held at Yellowhead Brewery. Directions to Yellowhead can be found at <https://cms.eas.ualberta.ca/wdcag/>

IMPORTANT DETAILS: In case of an emergency on campus, whether medical, police, fire or hazmat, call 911 immediately. For non-emergency concerns, call University of Alberta Police Services 24/7 at [780-492-5050](tel:780-492-5050).

PROTECTION OF PRIVACY – This is a public event. Photographs/video recordings of this event may be made. The personal information which may be recorded is collected under the authority of Section 33 (c) of the Alberta Freedom of Information and Protection of Privacy Act and will be protected under Part 2 of that Act. If gathered, it will be used for the purpose of promotion. If you do not wish to have your image taken/recorded please identify yourself so you may be redirected or given a tag that will identify you to the editor(s) so that you are not filmed. Direct any questions about this collection to: Leith Deacon, Assistant Professor, EAS, University of Alberta, 780-248-5761; deacon1@ualberta.ca

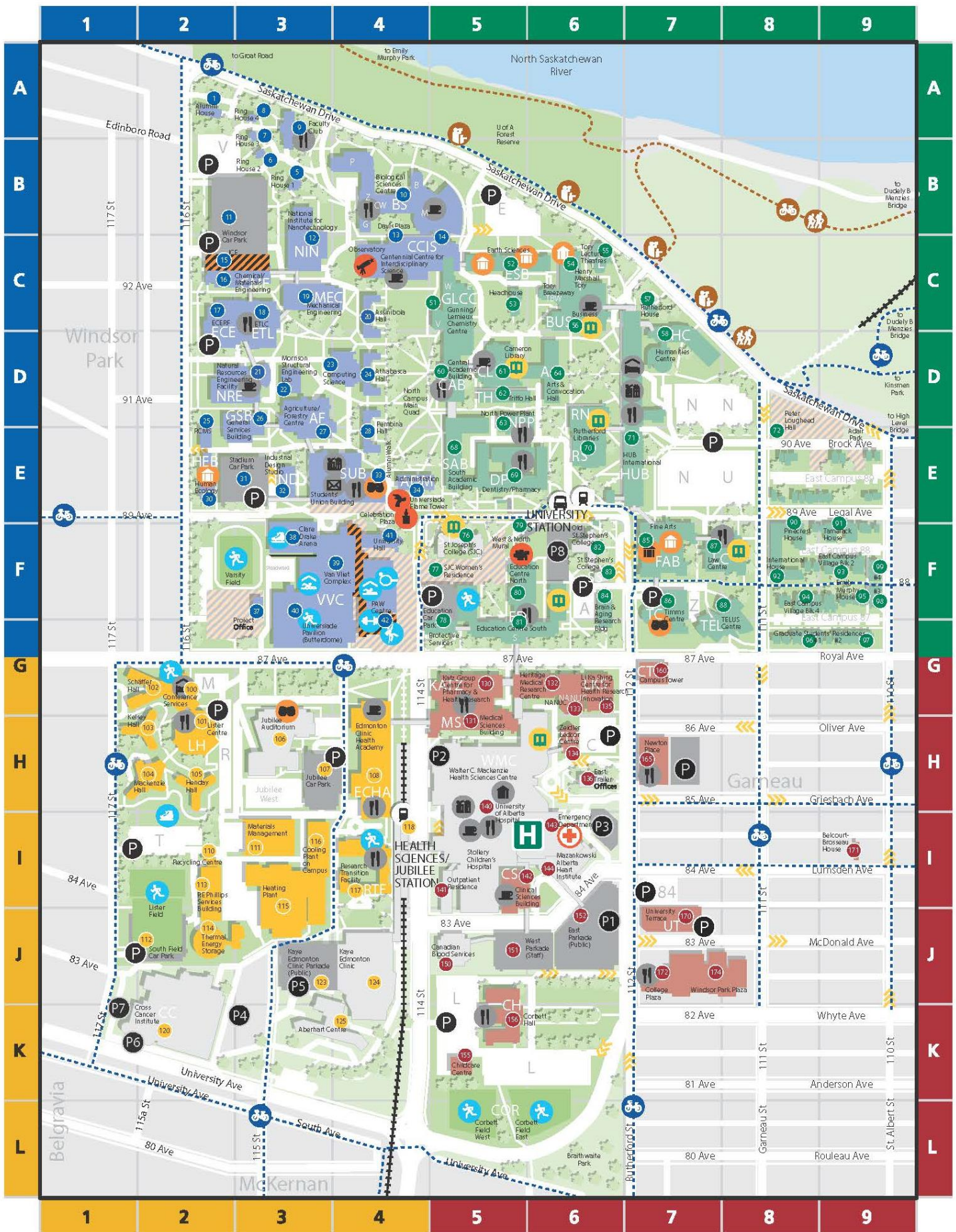
SCHEDULE OF EVENTS

Friday March 9, 2018

08:30 – 10:00	Registration (Atrium next to CCIS 1-440)	
09:30 – 12:30	From Landfill to Resource Recovery – the Edmonton Waste Management Centre Leaves from: North Saskatchewan Drive, North of Earth Sciences Building	
09:30 – 12:30	Edmonton on Ice: the record of late quaternary glaciation exposed in the North Saskatchewan River Valley Leaves from: North Saskatchewan Drive, North of Earth Sciences Building	
09:30 – 12:30	Elk Island National Park: island of conservation? Leaves from: North Saskatchewan Drive, North of Earth Sciences Building	
10:00 – 12:30	Mill Creek Ravine Hike and Muttart Conservatory Leaves from: North Saskatchewan Drive, North of Earth Sciences Building	
17:00 – 19:30	Registration (Atrium next to CCIS 1-440)	
19:00 – 20:30	Official welcome Keynote presentation: Dr. John England “Physical and Human Geography are Inseparable: unexpected Lessons from a half-century of Arctic research”	CCIS 1-440
20:30 – 23:00	Informal Social	Dewey’s Pub on Campus

Saturday March 10, 2018

07:30 – 15:30	Registration	ECHA 1-152
08:30 – 10:00	Session I: First Concurrent Sessions	
10:00 – 10:30	Refreshment Break & Poster Session	ECHA 2-490
10:30 – 12:00	Session II: Concurrent Sessions	
12:00 – 1:00	Lunch	ECHA 2-490
12:30 – 13:00	Poster Session	ECHA 2-490
12:00 – 13:00	WDCAG Executive Meeting	ECHA L1-230
13:00 – 14:30	Session 3: Concurrent Sessions	
14:30 – 15:00	Refreshment Break & Poster Session	ECHA 2-490
15:00 – 16:30	Session 4: Concurrent Sessions	
17:00 – 18:00	WDCAG Annual General Meeting	ECHA 2-430
18:30 – 00:30	Banquet (Yellowhead Brewery, 10229 105 St NW, Edmonton)	



SATURDAY, MARCH 10th 2018

REGISTRATION: 07:30 – 15:30

ECHA 1-152

CONCURRENT SESSION 1: 08:30-10:00

1.1 Climate risks and resilience planning in Canadian coastal communities – 1-182

- S. Jeff Birchall: Climate change risks and adaptation planning in coastal communities
- Nicole Bonnett: Local scale climate vulnerability in Surrey, British Columbia
- Bryan J. Mood: A dendrohydrological analysis of the Greater Vancouver Regional District's water supply
- Dianne Gillespie: Between a Rock and a Hard Place - Planning for Sea Level Rise in Bedford, Nova Scotia

1.2 Panel: Field-based Teaching: Lessons Learned – 1-190

- Chair: Tom Johnston
- Panellists: Shawn Bubel; Craig Coburn; Stacey Gaudette-Sharp; Dan Smith; Tom Waldichuk

1.3 Geographies of Pollution – 2-150

- Takuma Mihara: A Spatial Analysis of Air Pollution and its Relationship to Weather in the Lower Fraser Valley
- Chibuike Onwukwe: Wind dependency of ambient fine particulate matter in the Terrace-Kitimat valley of north-western British Columbia
- Madelaine Bourdages: Presence of Microplastics in the Fraser River, British Columbia
- Josh Tawse: The Importance of Spill Response and the Canadian Coast Guard on Canada's Pacific Coast

1.4 Transport Planning; Climate Adaptation – 2-420

- Mindy Wing Yin Chan: The First Mile, Last Mile Challenges for Seniors: Does Transit Go Where Seniors Want to Go?
- Elena Moezzi: Modes of Transportation amongst Immigrants across Canada
- Cellina Heang: Incorporating Climate Change Adaptation into Future Planning Policy for Coastal Communities: The Case of Comox Valley Regional District, Canada
- Vada Antonakis: Planning for Resilient Heritage: Policy Adaptation Strategies in Charlottetown, Canada
- Derek Macdonald: Immediate Climate Change Vulnerabilities: A Planning Policy Evaluation in Churchill, Manitoba, Canada

1.5 Geographies of Health – L1-220

- Anika Vassell, Valorie Crooks, Jeremy Snyder: What is lost, missing, sought, and hoped for: Exploring narratives of Canadians' Lyme disease crowdfunding campaigns
- Georgia Betkus: The role of telehealth in supporting healthy aging in rural communities

- Charlene Nielsen: Spatiotemporal Patterns of Babies Born Too Small in Urban Alberta
- Lisa Schroeder: Unconventional movements: feminist/activist use of creative spatialities to increase access to safe abortions

1.6 International Justice – L1-230

- Julie E. E. Young: Locating refugee deterrence around the Canada-US border
- Benjamin Dosu Jnr: Drinking Water Security in Rural Ghana: Implications of Community Experiences for Sound Policy Development
- Lukas Bosch: Evaluating Corporate Social Responsibility Policies of Canadian Mining Companies in Chile from an Environmental Justice Framework
- Marina Aitcheson: The Power of Speech Acts in Re-Imagining De-Colonial Geography

REFRESHMENT BREAK & POSTER SESSION 10:00 – 10:30

ECHA 2-490

CONCURRENT SESSION 2: 10:30-12:00

2.1 The Many Facets of our Forests: Trees in Western Canada I – L1-220

- Brooke Howat: How will climate change effect the radial growth of four shelterbelt species across the brown, dark brown, and black soil zones of Saskatchewan?
- Colin P. Laroque: Now you see them, now you don't. Determining shelterbelt removal by remote sensing in Saskatchewan
- Rafaella Mayrinck: Predicting annual diameter changes through time by using annual increments: How many cores, is too many cores?

2.2 Glaciers – L1-230

- Trevor Dickinson: The Impacts of Avalanche Activity and Snowpack Creep on Vancouver Island Marmot Habitat in a Changing Climate
- Marzieh Mortezapour: Simulating winter glacier mass balance with a distributed snow model for alpine glaciers in the Interior Mountains, British Columbia Canada
- Lukas Jakober: Automating confluence angle calculation in dendritic systems using GIS glacier geometry
- Travis Gingerich: Optical Dating of the Postglacial Marine Regression, Savary Island, British Columbia

2.3 Public Participation and Activism – 1-182

- Glen Hvenegaard: Wildlife stewards for the future: Attracting and nurturing the next generation of bluebird trail keepers
- Mark Groulx: Rubber boots and climate action: Learning outcomes in nature-based citizen science programs
- Haneen Ghebari: Have Your Trash and Eat It Too: A Dialogue on Dumpster Diving and Waste Reclamation

- Darcy Reynard: Beg Buttons: Public Participatory GIS and Open Data in Community Engagement

2.4 Sense of Public Place – 2-420

- Sydney Gross: Drawing People to Public Space in Downtown Edmonton - A Research Proposal
- Andres F. Canavera H.: The Revitalization of Jasper Avenue, a Case Study of the Planning Process
- Nathalia Osorio: Enhancing walkability in multilevel cities: an Edmonton case study
- Yashashwinee Parmar: Small Public Urban Parks: A Systematic Review

2.5 City and Transportation Planning – 1-190

- Lazar Ilic: Neoliberal Transit Planning in Capital's Metropolis
- Rajan Sandhu and Benjamin Felstein: Student Housing: Analyzing the Value of Proximity, Affordability and other Social Factors at the University of British Columbia
- Kurt Borth: Location Efficiency – How WHERE you live affects your energy use as much (or more) than HOW you live.
- Pradeep Sangapala: Reproduction of space: A spatial narrative of an Indian neighbourhood

2.6 Sustainable Land Use – 1-430

- Christian Sprinkhuysen, Tom Johnston: Effectiveness of voluntary environmental stewardship programs in agriculture: An assessment
- Garry Fehr: Food Security, Technology, and Economy: Ensuring a Sustainable Agricultural Land Reserve
- Kayla Harris: A Land Use Change Detection Analysis of Wetlands and their Potential Connection to Groundwater Recharge: Case Studies in the Regional District of Nanaimo
- Kayla Stan: Deforestation and secondary growth in Costa Rica along the path of development

LUNCH 12:00 – 13:00

ECHA 2-490

POSTER SESSION 12:30 – 13:00

ECHA 2-490

WDCAG EXECUTIVE MEETING 12:00 – 13:00

ECHA L1-220

CONCURRENT SESSION 3: 13:00-14:30

3.1 The Many Facets of our Forests: Trees in Western Canada II – L1-230

- Jay Maillet: Multi-Scale Investigations of Boreal Carbon Allocation in Central Saskatchewan
- Zachary Person: Get the lead out: Synchrotron investigations of lead in the environment of St. John's, NL
- Beckett Stark: Interspecific and Topographic Tree Climatic Response: a Story from Nain, Labrador

3.2 Panel: Appreciating Diversity in Academia – L1-220

- Chair: Leith Deacon
- Panelists: Zoë Meletis; Sandeep Agrawal; Margaret-Ann Armour; Michelle Driedger

3.3 Indigenous Perspectives I – 1-182

- Maura Hanrahan: Assigning Place: Inuit and Explorers in Arctic expedition narratives
- Jake Papineau: Examining the Relationship Between Innovation-Based Employment and Well-Being in Canada's North
- Dawn Hoogeveen: Indigenous Rights and Environmental Impact Assessment in Canada
- Sean Robertson, Gita Ljubicic: Nunamii'luni quvianaqtuq ("It is a happy moment to be on the land"): feelings, freedom and the spatial political ontology of well-being in Gjoa Haven and Tikiranaquq, Nunavut

3.4 Land Use Planning – 2-420

- Thomas Lippiatt: Proposed zoning modifications to support mixed-use and high density development in Edmonton
- Kristen Knudskov: The Role of Population Density in Municipal Annexation Outcomes
- Mike Vivian: Infill Development in Edmonton: Measuring Perception and Attitude in Neighbourhoods That Have Experienced Infill Development
- Julie Paquette: Planning for Federal Legalization of Recreational Cannabis Industries: An Analysis of Municipal Land Use/Zoning Strategies in Canada

3.5 Travel and Learning – 1-190

- Forrest Battjes: Religiosity to Spirituality: A Closer Look into Western Pilgrimage
- Cindy Ann Rose-Redwood, Reuben Rose-Redwood: Internationalizing Canadian Geography: The Experiences of International Students in Geography at a Research University in British Columbia, Canada
- Jessica Craig: Adventures in geography education with grandchildren and grandparents; summer camp at Vancouver Island University

3.6 Political Economy – 2-150

- Nicholas Parlato: Mining the Closed Regime: Western Knowledge Production on Russia's Informal Political Economy
- Spencer Douglas Bradbury: Colombian cosmetic surgery: The performative production of neoliberal subjects
- Kris Carrier: An Economic Geography of the New Silk Road

REFRESHMENT BREAK & POSTER SESSION 14:30 – 15:00 – 10:30

ECHA 2-490

CONCURRENT SESSION 4: 15:00-16:30

4.1 Remote Sensing – L1-220

- Trilby Buck: Inter-annual changes in sea ice phenology using MODIS imagery near Cambridge Bay and Kugluktuk, Nunavut, Western Canadian Arctic
- Greg M. King: Vegetation productivity and phenology across the Bathurst caribou range
- Dylan Hillis: Stable Isotope Analysis of a Nuu-chah-nulth Wool Dog Provides Insight into Past Human Resource Use in Barkley Sound, British Columbia
- Jackson Baron: Automated Detection of Yellow Flag Iris Using Learning Algorithms and UAVs

4.2 Local and Regional Geographies – L1-230

- Kim Naqvi: Regional Geography from within: Comparing a Political Memoir to Geographies of Tourist Guides and Textbooks
- Richmond Ho Shing Yu: Wind Water and Harmony: Examining How Feng Shui Influence Feeling of Comfort at Thompson Rivers University
- Michael Lait: Gatineau Park: The failed national park near Canada’s national capital

4.3 Indigenous Perspectives II – 1-182

- Muhammad-Arshad K. Khalafzai: Spring Flooding and the Case of Kashechewan First Nation in Northern Ontario, Canada
- Charles Burnett: Cedar Box and the Case for Integrated Indigenous Data Management Tools
- Rebecca DeLorey: “There’s no meaningful communication when it’s just on paper”: Problematizing Aboriginal Consultation on Nadleh Whut’en First Nation Territory
- Tstatia Adzich: Generative Refusal in Canada and Siberia: Considerations of Urban Indigenous Women’s Experiences

4.4 Governance – 2-420

- Joshua Culling: The Relationship of Long-term Perspective to Strategy
- Jared Candlish: Adaptive Governance and Resilience in Complex Social Ecological Systems: A Case Study of Communities in the Canadian Rocky Mountains
- Eden McDonald-Yale: An Evaluation of Integrated Community Sustainability Plans in the Regional District of East Kootenay, BC
- Denise Baikie: A cumulative effects framework for land use planning in Nunavut

4.5 On-Reserve Housing and Land-Use Planning: Weaving Experience with Academia to foster Equity for the Esk’etemculecw – 1-190

- Chair: Panceena (Sarah Lynn Harding)

WDCAG ANNUAL GENERAL MEETING: 17:00 – 18:00

ECHA 2-430

POSTER PRESENTERS

ECHA 2-490

1. Hayley Burns, Michelle Ochsner: Street Art: Placemaking through Political and Environmental Contestation
2. Maeva Gauthier: Food Security, Social and Environmental Justice and Resilience in the Canadian Arctic, using Participatory Video Method
3. Steven Shuttle: DIY Urbanism: Influences & Impacts on Community Planning
4. Lindsay Wong: Water Quality Data to Support Cumulative Effects Decision-Making in the Mackenzie Valley, Northwest Territories
5. Daniel Ripmeester, Joshua Kirylchuk: Minimizing harmful effects of fences on wildlife: A case study on the reintroduction of Bison into Banff National Park
6. Nicole Peletz-Bohbot: Increased shipping in Canadian Arctic waters: Is Canada ready?
7. Claire Brandenburg, Erin Postma: Bill C-69: An improvement in public participation for Indigenous peoples and the Canadian public?
8. Ilona Mihalik: Costs of North American Big Game: testing effects of species rarity and costly signalling qualities
9. Kaelin Koufogiannakis: Rethinking Zoning: An Alternative to Rigid and Complex Land Use Bylaws
10. Bridget Kinsley Dr. Zoë Meletis: How do you view the grizzly hunt? Investigating Social Climate, Science and Other Influences on the 2017 BC Grizzly Bear Hunt Ban
11. Dmitri Giannoulis: Space, Power, and Street Performers: The Effects of Regulation and Exclusionary Space in Victoria, B.C.
12. Hamidreza Shams, Faran Ali: Land use change impacts on the flow regime in Redfish Creek watershed
13. Dare Sholanke: Mapping Waste Governance in Two Canadian Cities in Relation to the Informal Recycling Sector
14. Danielle Main: Clean drinking water in Indigenous communities across Canada – a sustainable solution for a wicked problem
15. Kendra Hutchison, Kailyn Wiebe: Saving the Swamp? An Evaluation of the Alberta Wetland Policy
16. Bruce Pagnucco: A Creative Cities Analysis of Artists in Vancouver

17. Kayla Harris: Barriers and Benefits to Bio-diesel use in Commercial and Industrial Vehicle Fleets in the Regional District of Nanaimo
18. Delia D. Anderson; David Clements: Changes in pH of the Surface and Subsurface Waters in Blaauw Eco Forest
19. Selena Schut, BA: Mitigation of Bird and Bat Fatalities Due to Onshore Wind Turbines
20. Sarah Leslie: Synergy between Oyster Reefs and Sea Level Rise in the Mississippi River Delta (MRD)
21. Madelaine Bourdages: Water Geochemistry and Bacteria Analysis of the Willband Watershed, Abbotsford, British Columbia
22. Cacey Cottrill, Karambir Singh: Killing to Save?
23. Joel Knoop, Samuel Vriend: Bridging the Gap
24. Theresa Westhaver: Mapping Below Sea Level Bedrock Topography of Taku Glacier and Tributaries on the Juneau Icefield, Alaska with Low-Frequency Ground Penetrating RADAR
25. Darcen Esau, Eva-Lean Lang, Chea Elton: The Landscape Identity of the North Okanagan: Using Physical Geography, Climate, and History to Create a Distinctive Wine Region
26. Bethany Thiessen: Understanding Arctic marine impacts and mitigation: Environmental assessment as a tool for knowledge brokerage
27. Jamie Shippit: Reflecting on protein: 2017 Field Season
28. Nicholas Wawryk, Erin Wassing: Creating Valleys; Wildlife Impacts of the Valley LRT
29. Brandon Turner: Internet of Trees: Secure and Affordable Internet of Things for Environmental Monitoring
30. Brie Dinsdale, Narain Spolia: Analyzing the Three Pillars of Sustainable Development in the Rural-Urban Fringe in Canada
31. Christy Brandon, Madison McGregor: Economics of Geoengineering
32. Kaitlin Japp: Libby Dam and its Effects on the Kootenay Region
33. Yu, R., Hughes, A., Lane, L., Li, D., Ness, V., Rookes, C., Turner, B., Waldichuk, T.1, Welychko, N., Woolverton, N., & Zhou, Z: The Tourism Walking Routes of Bunkyo Ward, Tokyo: Foreign perceptions of walkability

34. Rebecca Ferris: The Q'eqchi' Resistance: The Impact of Indigenous Women in Land Defense Against the Violence of Canadian Mining
35. Michelle Chiang: The Helping Behaviours of Individuals in Response to Natural Disasters With a Focus on Student Populations
36. Melissa Koyanagi: Public Perception of Proposed Adaptation Strategies for Sea-level Rise in Crescent Beach, BC
37. Travis Gingerich: Optimizing the Placement of Indoor Waste Stations using GIS Techniques
38. Steven J. E. Marsh: Seasonal variation in water chemistry in the Clayburn – Willband watershed, Abbotsford, British Columbia
39. Tania Hulscher: The Effects and Solutions of Toxins in the Columbia River Gorge
40. Kristina Bell & Stephanie Pawluk: Death by Disease in The City of Chicago

Banquet: 18:30 – 00:30am

YELLOWHEAD BREWERY

Cocktails: 18:30 – 19:00

Greetings, Announcements, and Presentation of Awards: 19:00 – 19:30

Dan Shrubsole, President, Canadian Association of Geographers

Leith Deacon, President, Western Division of the Canadian Association of Geographers

Buffet Dinner: 19:30 – 21:00

Dancing: 21:00 – 00:30

DJ Fozzle, Str84ward Entertainment and cash bar