iSEE Critical Conversation Fall 2022: Climate (In)Securities in Great Lakes Communities

Summary of Discussion
By The Institute for Sustainability, Energy, and Environment (iSEE)
University of Illinois Urbana-Champaign

Overview

On Sept. 19-20, 2022, iSEE hosted academics, industry leaders, nonprofits, and government and NGO representatives at the University Club of Chicago for a conversation about climate insecurities in the Great Lakes region. More than 50 representatives from organizations such as the International Joint Commission, the Michigan Economic Center, the Milwaukee Metropolitan Sewage District, We the People of Detroit, Current Water, the Alliance for the Great Lakes, Menīkānaehkem, and the Sierra Club all shared their unique perspectives on the climate-related issues affecting the Great Lakes communities. Our participants represented various regions surrounding the Great Lakes, across both the United States and Canada, which are Illinois, Indiana, Michigan, Minnesota, New York, Ontario, Wisconsin, and Québec.

A list of the full event attendees, as well as the detailed event agenda, are available in the Appendix (starting on Page 11).

This safe space for frank, unattributed discussion was a positive step toward exploring the complexities of climate change's impacts in this region and how to best approach these impacts.



After the opening remarks of University of Illinois System President Tim Killeen, keynote speaker Pierre Béland (pictured above), Canadian Chair of the International Joint Commission(IJC), kicked off

the conversation on the evening of Sept. 19. The event continued with three panel and breakout sessions the following day. Chancellor Robert Jones of the University of Illinois Urbana-Champaign gave the opening remarks of the full-day workshop.

Critical Conversations are paid for by a generous donation from the Alvin H. Baum Family Fund, iSEE's founding benefactor. The Fund is administered by Joel Friedman and Loretta Namovic. The 2022 Critical Conversation also has received generous funding from the <u>Great Lakes Higher Education Consortium (GLHEC)</u>, thanks to a grant and ongoing collaboration with the United States Mission in Canada. iSEE would also like to acknowledge its collaborators from the University of Illinois Urbana-Champaign, McGill University, the University of Windsor, and the University of Toronto Scarborough in organizing this event.



About this Document

The following sections outline the major talking points of each of the three topical discussion sessions on Sept. 20 (pictured above). This is by no means a comprehensive listing of the ideas shared, but it serves as a summary of the points the more than 50 participants spent the most time talking about. Our aim was to offer a look into the multitude of viewpoints and opinions about the nature of the problem and its possible solutions that were expressed.

Session 1: Identifying Climate Insecurities

What climate-related insecurities exist in the Great Lakes Region, and how do they intersect and vary across communities?

The first session of the Critical Conversation centered on identifying climate insecurities present in the Great Lakes region. The session began with a panelist discussion between Molly Flanagan, Alliance for the Great Lakes; Glenn Benoy, International Joint Commission; John Austin, Michigan Economic Center; and Erma Leaphart, Sierra Club.

Major talking points

Key intersections among climate insecurities

- Differing perspectives and narratives depend on a person's age, experiences, background, etc.
- Race Racism is real, and it matters. If you're Black and Brown, you're not going to be
 prioritized. In an integrated neighborhood, call on your white neighbors to fight the
 development of polluting industries. White folks must also take the initiative to support
 theirBlack and Brown neighbors.
- Environment and business We need to understand and rebuild the connection with the environment because that is what sustains us. Use the education system to teach this because economy always comes first. Traditional knowledge can help as we are currently doing things backward.
- Marginalized groups and economic burdens There can be success of consolidation. Have conversations about economic burdens and make commitments to our communities.
- Tribal nations exist within other political boundaries but have little to no input on the other entities' decisions and actions. Example: Roads running through tribal lands are not owned by those nations.
- Politics and science Christians often reject science; faith and tradition can be a hindrance.
 Example: The threat to Christianity through science in contrast with Indigenous spirituality andtraditional knowledge.
- Intersections between food systems/agriculture and water —The potential of Michigan is to be extremely food secure: high agricultural diversity and proximity to water sources.
- There's the challenge of dealing with uncertainty. We want to plan ahead, but capitalism does not allow for adaptation with changing conditions. It also causes economic uncertainty and inflation. (How do we adapt to what we know will be increasingly uncertain?)
- The legacy of industry and health impacts on vulnerable communities
- If the water quality is degraded near you, how does that shape your connection to the lake/river?

These intersections may amplify existing insecurities

- Impacts on public health and the disproportionate effects to those who cannot adapt. A lot of
 cities in the Great Lakes are unique in that air conditioners are a seasonal commodity. Heat
 island effects impact low-income folks the most.
- Vicious cycle Economic insecurity causes people to leave; then the area doesn't have the population to address the problems.
- More flood-prone areas are also those that are economically disadvantaged; people that can afford to will move.
- Cost as a barrier to participation; we must make community engagement possible for everyone without imposing an additional burden.
 - Solutions: Compensation (pay for time, provide food, childcare), hosting this
 engagement in their neighborhoods, contexts they are comfortable with, having
 moderators that look like them and are from their community, Language consideration
- Community level narratives There are different narratives out there for how we think about the Great Lakes. How do we share these narratives? Especially in the contemporary loss of local journalism?
 - Messaging is critical; how will the public receive the message of what resources are there? The community has so much to offer as far as skills and strengths, and these resources are not necessarily drawn out yet.
 - How to communicate risk? The news on TV is no longer a particularly effective medium of reaching some audiences.
- Water infrastructure is a basic right. Basic needs come first, but they're not disconnected from things like mental health and ecology.
- There is a need to step back and look at what values underpin the system we're trying to manage? Do these values need to change?
- How do we know when a community is in a resilient state? How do we measure it? How do we get institutions responsible for that to measure it in that way?
- Systematic problems Our system is destroying the planet. We need to make those early
 interventions (like education), but the participant doesn't know how you move outside of
 this system. "Socialism's a dirty word."
- Lack of motivation We need a motivator because operating out of fear does not give us the satisfaction that we as humans need.

Impacts vary across communities and regions

- The decision makers have no idea what the affected communities truly need. Need to talk to the people and understand what their priorities are.
- Marginalized communities are the most affected, often due to developers and growth.
- Wherever economy is put first to accommodate growth, environment is most at risk (quickly populating areas). This is increasing sewage going into the lake.
- There is a gradual public disconnect from nature, but this varies with culture, wealth, etc.
 Perhaps providing access will allow some natural activities to flourish (kayaking, for example, has skyrocketed recently).
- There's a group with a natural affinity for lakes (fishers, kayakers, etc.), while there's another group whose relationship with the lake is mainly just as a source of water. Both of these groupsneed a seat at the table when it comes to policy.
- Identity living in a polluted place versus a beautiful beach on Lake Superior.
- Manufacturing communities are the most segregated in the Great Lakes region.
- Investment Cost is a priority, so some people are left behind when no one is willing to make expensive investments.

- Racism is real, and it matters. If you're Black or Brown, you're not going to be prioritized. In an
 integrated neighborhood, call on your white neighbors to fight the development of polluting
 industries. A small, Black neighborhood was bamboozled, and they would have hundreds of
 diesel trucks in their neighborhood every day. They were lied to (by the industry).
- Knowledge Indigenous communities have thousands of years of experience to inform our current situation, and the Western world should turn to them for guidance.
- Community Every community is different, but look at the tribes in your area and learn about their concerns. Engage with Indigenous people and help them if you can.
- Indigenous people First Nations in Canada have been treated so poorly, you've seen the
 residential schools and the boil order advisories, but nothing is going to happen in a meaningful
 nature without the input of First Nations people. It's getting better, but it's going to be a long
 time. "It won't be within my lifetime," but (change) has to come from the youth. Unfortunately,
 there is a fear that the young people will not do anything because they value Earthly possessions
 like cell phones, too much.

Session 2: Responding to Climate Insecurities

How have responses from governments, NGOs, academic institutions, and industries responded to climate insecurities in the Great Lakes region, and how effective have these responses been?

The second session of the Critical Conversation centered on how various parties may respond to climate insecurities, and the effects of these responses. The session began with a panelist discussion between Dawn Wells-Clyburn, PUSH Buffalo; Howard Learner, Environmental Law & Policy Center; Kevin Shafer, Milwaukee Metropolitan Sewage District; and Ryan Bergstrom, University of Minnesota Duluth.

Major talking points

Regional/national government

- Governments are not doing an adequate job of holding industry accountable for their role in climate impacts and making the necessary adjustments.
- There is a disconnect between federal and local governments: Difference in funding, in priorities and agendas.
- Lack of federal government at conferences to share and hear perspectives.
- Research side of government Looking at components in isolation and making decisions based on that, rather than the cumulative impacts and more holistic decision making.
- "I think they're all garbage." Governments are not really geared toward things like inclusivity. A lot of those types of acts and policies got us in the situation we're in. Sometimes people don't take the time to recognize that the language they're using carries a lot of baggage.
- Governmental approach is more effective when there's a lot of public awareness of the issue.
 Internal dialogue struggles to get anywhere, but moving a topic public will pressure elected officials to act.
- Whether it's national or local, we still have not shifted away from capitalism. "It's like putting Band-Aids on cancer." Acknowledging the past harms against marginalized communities is necessary — existing structures are built on the marginalization of these communities.
- Government should provide more funding to communities that need it, and allow those communities to decide where that money is needed most.
- It's distressing that there are so many leaders who are still not on board that climate change is human-caused and a threat. Ignorance is powerful.

- It would help to move away from hierarchical structures of governance and return to structures pre-colonization of joint decision-making.
- Very conservative legislature in Michigan is going to make conservative moves and destroy things just for political points.

NGOs

- It's complicated There are big nonprofits and small ones. They do a lot of good things, but
 they may also be a barrier to the changes these communities might be wanting to make. The
 funding that should be going to the communities that need it might end up going to these NGOs
 instead, and the NGOs may not always choose ways to spend it in a way that the community
 wants. The NGOs may be disconnected from the communities they're attempting to serve.
 - Example: Fighting against the Dakota Access Pipeline. A local tribe was trying to control
 the narrative as best they could, but big greens would steal the spotlight and take their
 own spin on things. We cannot take trust for granted; it must be built.
- One thing that NGOs can do well is education, but they need to be careful of who they're speaking for. Are they speaking *over* anyone?
- Different authorities hold sway in different communities business, philanthropy, political.
- Nonprofits need to bring academia in and ask them to get involved When there is space and
 time to do this, it can work in a positive way. When papers are written in a certain way between
 the two, it could enact change (tell the story in an academic way, but to a larger community
 group and including people that may not have been traditionally thought of in this space).
- We are able to bring back stories from community history and experiences to groups that can provide funding. Centering changes conversations.

<u>Academia</u>

- Academics struggle with connecting the wealth of knowledge to layperson audiences.
 - o Research and research papers are inaccessible to the average person.
- Academic institutions have historically not been built for marginalized communities. How do we navigate academic institutions as a member of a marginalized community?
- The academic system is defined by success, and very specific measurements of success, at that (it's measured in things like tenure, rather than the impacts of your work).
- Integrate in every subject an environmental focus so that everything you learn has something to do with the outside world, with the Earth.
- We must find a way to transform knowledge into tangible tools for communities.
- There is uncertainty in academic work and we must address the challenge of communicating that uncertainty to the public.
- Academia should find the community champions we need to move the needle to enact systemic change.
- There's been a history of academia coming into Indigenous communities, asking all these questions, and then never following up. Because of that history, there's a lot of skepticism in academia. Education without wisdom is empty.
- Each program teaches you how to speak in a certain language (discipline-based), thus when
 discussing climate change there is only a discussion of data this should be bridged with
 indigenous storytelling.
- Providing students with specific skills as a trained messenger makes them successful ambassadors for their research.
- People who are from a white, conservative background may distrust academics because they
 believe academics are pushing their agenda on the public. This is all part of deeper, systematic
 issues that are going to overtake pressing social and climate issues.

Industry

- Utility companies don't listen to the marginalized communities; they decide for them what is needed and when it will be provided.
- A lot of restaurants looking at green infrastructure; looking to take more local approaches, getting their food from close and small farms. The idea is to tighten up supply chains.
- Breweries in the GL region are really paying attention to water quality. That's a positive example. Dow is a negative example: The company is big into plastics, and its interest is in making more plastics, using more oil.
- Huge failure In the metal working industry, the water used to cut metals is supplied by an external company that has no financial incentive to cut usage.
- Nestle Greenwashing; it's taking water and bottling it in plastic.

Session 3: Collaboration

What barriers to progress exist, and how might collaboration foster solutions?

The third session of the Critical Conversation centered on collaboration as a means to address climate insecurities in the Great Lakes region. The session began with a panelist discussion between Elaine Ho-Tassone, NORDIK Institute; Kerry-Ann Charles, Cambium Indigenous Professional Services (CIPS); Monica Lewis-Patrick, We the People of Detroit; and Robert Jones, Chancellor, University of Illinois Urbana-Champaign.

Major talking points

Barriers to progress and how to approach them

- We should approach communities by addressing local projects, specific topics, rather than just saying "Come to a climate change meeting."
- Government structure for water is a barrier because there isn't a single entity for one watershed and thus no one common goal (different regulating authorities for drinking water/wastewater, etc). If one oversaw all, this would help.
- Deadlines are placed on spending of funds.
- Decision makers don't want to spend funds on monitoring; they prefer to put it into bricks and mortar.
- Money often isn't available until a significant amount of time after a plan or law has been put in place. Some grants are considered "loans," not actual grants.
- Communities don't have access to knowledge of universities and universities don't use their knowledge.
- A lot is done in communities by business in response to profit rewards that we feel powerless
 over. The way to overcome it is to vote and through politics, but don't always have guts or
 political majority.
- There is a cultural barrier between thinking as an individualistic society, and a society and language that is entirely based on the group, the present and the future.
- A barrier in academia is the need to remain impartial, the lack of advocacy, and not much connection to the real world and action.
- When academic papers are behind a paywall, fewer people are able to read and use the knowledge.
- Academia discourages having a broad research background and categorizes it as wishy washy.

- When we think about infrastructure, we think of buildings, but we need to talk about social infrastructure as well. We need to bring marginalized groups to the table in a meaningful way.
- Policy and funding happen at such a high level, which is a barrier to community-based change.
- There are huge parts baked into academic systems that discourage engagement with community outreach.
- Meetings are often hijacked by certain individuals and become aggressive; this turns other people off from showing up. We need a way to have all voices heard and not allow hijacking.
- Authorities are making no efforts toward restorative justice or healing from past wrongs.
- A lack of trust leads to less participation, which is a circular issue.

Potential future collaborations

- We must set up events to bring people together (like this critical conversation!) to discuss these wicked problems and collaborate toward solutions.
- Realigning Avoid entities under separate silos, where they don't interact or collaborate.
- Always include community partners in a non-token way.
- Giving time for this collaboration, allowing us to align incentive and reward systems.
- In academia at least We need training on how to do this engagement and co-creation of knowledge (have a facilitator?).
- Communities will have their own priorities that may not align with a researcher's expertise or
 funding. We must create a structure to have a portfolio of researchers that work in a particular
 context, set up the infrastructure to have flexible funding, and work with a community's needs.
- Include parks and recreation departments, who have the ability to foster this connection between people and environment.
- People take a step back to respect sovereign governments, but federal government folks don't really have that respect; they'll just swing around their political power. The lack of those connections is a huge barrier; we must establish these connections without disrespect.
- People at the top need to listen to those at the bottom and be willing to rock the boat and maybe even take what would be considered "radical" actions.
- From the government side, we can benefit from listening to the community more; have more
 meetings with communities on a regular basis to build up trust. Regular conversations, a steady
 stream of dialogue, are needed rather than in times of crises. Decisions tend to be too topdown, and we can benefit from bottom-up. Environmental justice is important with socioeconomic disparity as a systemic, overarching issue.

Voices that are not yet "at the table"

- There was a lack of industry and agriculture folks in this particular Critical Conversation forum.
 - We must do more research to see if there's a connection to draw them to the table.
 - Difficulty engaging corporations in this conversation capitalistic greed is at odds with environmental justice.
- Social services, recreation and tourism and education.
- Religious leaders.
- General need for the "right messengers," local champions, allies.
- Need for USDA, EPA, etc., need people from the federal level who have significant influence.
- Social scientists.
- Recreation and tourism: This sector will be continuously hard-hit by climate change and variability.
- Political sector is also missing. We often criticize political sector for what they do or don't do, but it would be interesting to have that input in these conversations.

- Venture capitalists, people who know how to create and scale businesses and solutions.
- Young and old people.
- One of the most important things is actually going out to the community and seeing the place and talking to community members.
- Bring artists / creatives / facilitators / communicators to the table to aid with communication.

Conclusion

The Critical Conversation wrapped up with an opportunity for participants to summarize their thoughts on sticky notes. Everyone responded to six prompts. The ideas generated by this exercise are summarized below.

What were your top insights today?

- Importance of storytelling
- Those closest to the problem are best placed to have solutions
- Indigenous science should be fundamental to solutions
- Academics face barriers between different disciplines
- Importance of community empowerment through methods such as data access, decision making, funding, and strong leadership
- Long-term benefit of connecting youth to nature
- Just because you have a seat at the table, doesn't mean you have a voice Need for meaningful
 engagement
- Environmental and economic security are linked, and do not have to be at odds
- Importance of building mutually positive relationships, especially in places where trust may be a barrier due to historic injustices
- Acknowledging we don't know everything, and learning from the people experiencing the problem first-hand

What would you like to see us do next?

- Report out on discussions
- Training on effective community engagement
- Establish web-based platform for reporting on mitigation/adaptation experiences
- A follow-up session to develop a communication strategy applicable to industry
- An action plan
- Take model of this workshop and apply it to a local scale
- Develop an informational video about climate insecurities in the GL region for laypeople

If we were to write something that captures this day's discussion, what would it include? Where would you have it distributed?

- Address existing disparities/inequalities before pursuing growth opportunities
- Ideally the results of this conversation would be given to media (TV, newspapers, etc.) for public info and action
- Research and actions must be led in partnership with local communities. Communities are the experts on their own experiences and contexts

- How to bridge the gap between academia and communities? How to build trust and relationships built on genuine care and interest in each other's issues?
- Distribute via regional newspapers, NGO newsletters, universities in the GL region, and social media
- Multiple choices and solutions need to be identified and opportunities created to meet people where they are

What other actions would you like to see? Do you want our support/involvement?

- Another chance to connect/meaningful follow-up
- Map to see what work is happening, who is doing it, and a way to connect
- Inclusion of people/sectors/communities that we've identified are not at the table
- Ongoing discussion on funding, policy, and specific tangible items via a shared forum
- Integrate/support university faculty in critical community work
- List priorities for responding to high lake levels (waste sites versus others)
- Organize the funders to center impacted communities and loosen requirements for funding
- Critical conversation community Slack server? Other way to keep these conversations going?
- Embed community leadership and research direction in institutions though funding requirements, promotion criteria, etc.
- Hearing from multiple Indigenous community members by showing it is safe and meaningful to do so

Are there any specific collaborations you'd like to see? Are there any you would support/lead/participate in?

- Collaboration with Indigenous NGOs and tribal nations
- Would like to see iSEE collaborate with Chicago EJ Network and Illinois Clean Jobs Coalition (ICJC)
- Local governments and NGOs with discussion centered on a specific context or problem
- iSEE provide a mechanism to support collaborations, such as a toolkit and/or repository of resources to connect and collaborate
- Academic and NGO collaboration
- Federal agencies and NGO collaboration
- Politicians and business leaders
- More opposing views
- Get academics working with local communities
- Connection between researchers and communicators to get the word out about the work that's being done

Other thoughts?

- This topic is too important to stop! Next year can we have a follow-up event?
- Communications training?
- Stakeholder engagement training?
- Adaptations to this kind of forum are needed if we want to create a space for meaningful intercultural voice/contributions

iSEE Critical Conversation Fall 2022: Climate (In)Securities in Great Lakes Communities Sept. 19-20, 2022 Madison Room, University Club, Chicago

Detailed agenda

Monday, Sept. 19 (Day 1)

4-5 p.m. - Check-in and Refreshments

5-5:30 p.m. – Opening Remarks

- Madhu Khanna, Alvin H. Baum Family Fund Chair and Director, iSEE
- Tim Killeen, President, University of Illinois System

5:30-6:30 p.m. – Keynote Address

Pierre Béland, Canadian Chair & Commissioner, International Joint Commission

6:30 p.m. - Reception

Tuesday, Sept. 20 (Day 2)

7-8 a.m. - Check-in and Breakfast

8-8:30 a.m. - Welcome and Introductions

- Madhu Khanna, Alvin H. Baum Family Fund Chair and Director, iSEE
- Robert Jones, Chancellor, University of Illinois Urbana-Champaign
- Sarah Fisk, Facilitator, Community At Work, San Francisco

8:30-10 a.m. - Session I: Climate-related Insecurities in the Great Lakes Region

- **Focus:** Sharing perspectives on prevalent Great Lakes regional economic, environmental, and social insecurities currently exacerbated by a changing climate
- Panelist Remarks: 8:30-9 a.m.
 - o John Austin, Director, Michigan Economic Center
 - o Glenn Benoy, Director of Science and Engineering, International Joint Commission
 - Molly Flanagan, Chief Operating Officer & Vice President of Programs, Alliance for the Great Lakes
 - Erma Leaphart, Organizer for the Great Lakes Region, Sierra Club, Michigan Chapter

Panelist Questions:

- John Austin: How might climate change threaten key economic sectors and/or livelihoods across the Great Lakes?
- Glenn Benoy: What are your top three concerns about how climate change is affecting the Great Lakes, from your perspective - (generally or locally)?
- Molly Flanagan: What are your top three concerns about how climate change is affecting the Great Lakes, from your perspective - (generally or locally)?
- Erma Leaphart: Where (and how) do you see climate change impacting communities across the Great Lakes?
- Group Conversation: 9-10 a.m.

10-10:30 a.m. - Break

10:30 a.m.-noon - Session II: Responding to Climate-related Insecurities in the Region

- **Focus:** Sharing perspectives on the roles that different governmental and non-governmental institutions, industry, and organizations play in addressing Great Lakes regional insecurities
- Panelist Remarks: 10:30-11 a.m.
 - o Ryan Bergstrom, Associate Professor, University of Minnesota Duluth
 - o Howard Learner, Executive Director, Environmental Law & Policy Center
 - o Kevin Shafer, Executive Director, Milwaukee Metropolitan Sewage District
 - o Dawn Wells-Clyburn, Deputy Director, PUSH Buffalo

• Panelist Questions:

- Ryan Bergstrom: What are the climate change-related challenges we face in academia ("what keeps me up at night?")? - and secondly, where do we think we should be putting our focus? Are we?
- Howard Learner: What are the climate change-related challenges we face in the nonprofit sector ("what keeps me up at night?")? - and secondly, where do we think we should be putting our focus? Are we?
- Kevin Shafer: What are the climate change-related challenges we face in government ("what keeps me up at night?")? - and secondly, where do we think we should be putting our focus? Are we?
- Dawn Wells-Clyburn: What are the climate change-related challenges we face in community-based work ("what keeps me up at night?")? - and secondly, where do we think we should be putting our focus? Are we?
- Group Conversation: 11 a.m.-noon

Noon-1:15 p.m. – Lunch

1:15-2:45 pm – Session III: Critical Collaborations to Address Insecurities in the Great Lakes Region

- **Focus:** Considering cross-sectoral, cross-national, and cross-institutional responses that are needed for climate security in the Great Lakes Region
- Panelist Remarks: 1:15-1:45 p.m.
 - Kerry-Ann Charles, Environmental Partnership Co-ordinator, Cambium Indigenous Professional Services (CIPS)
 - o Elaine Ho-Tassone, Director of Operations, NORDIK Institute
 - Robert Jones, Chancellor, University of Illinois Urbana-Champaign
 - Monica Lewis-Patrick, Chief Executive Officer & President, We the People of Detroit

Panelist Questions:

- Kerry-Ann Charles: What cross-sector conversations would help increase economic security?
- Elaine Ho-Tassone: What cross-sector conversations would increase environmental resilience?
- Robert Jones: What cross-sector conversations would further the contribution of universities towards improving climate security?
- o Monica Lewis-Patrick: What cross-sector conversations would decrease social insecurities?
- **Group Conversation:** 1:45-2:45 p.m.

2:45-3 p.m. – Break

3-4 p.m. – Wrap Up and Next Steps

• **Goal:** Identify key insights and directions for actionable research and stakeholder interactions in the future

Our Keynote Speaker: Pierre Béland

Monday, Sept. 19, 5:30-6:30 p.m.



Presentation Title: "Climate (In)Securities in the Great Lakes: Insights from Across the U.S.-Canada Transboundary"

Abstract: As a binational institution the IJC has a unique role in assisting the governments with the oversight of U.S.-Canada boundary waters — their levels and flows, water quality, and aquatic ecosystem health. Since these lakes and rivers, and their watersheds, represent a very significant percentage of continental water supplies under different natural regimes, they offer an opportunity for the

development of broad management models in response to climate change. As part of its mandate from both federal governments, the IJC has a duty to provide opportunity for interested parties to be heard on any matter before the Commission. When the IJC undertakes studies at the request of the two governments it typically consults widely on the questions being studied, and brings together representatives from various levels of governments, local interests, communities, and Indigenous people on advisory boards in individual basins. Insights from across the transboundary that can be applied and reinforced in the Great Lakes include supporting local and regional action through unique governance arrangements, grafting socio-economic considerations to more traditional hydrological models, building acceptance of and willingness to actively support common goals, and promoting a shift from traditional hard engineering infrastructure-based approaches to a consideration of ecosystem services, among others. By adopting practices that are adaptive to changing conditions and fluctuating water regimes, we can better manage risk and vulnerabilities as global climate change plays out locally.

Speaker Bio: Béland's involvement in Great Lakes issues came from his past work as a scientist in environmental ecology and the impact of toxic manmade chemicals in the Great Lakes/St. Lawrence food chains. He has published books, and numerous scientific and popular articles, hosted a TV series on the environment, and participated in several documentary films. He has chaired public hearings for various agencies such as the Quebec Environmental Hearings Board, Parks Canada, Fisheries and Oceans Canada, Quebec Energy Efficiency Agency. Previously he headed the Fisheries Ecology Research Center with the Department of Fisheries and Oceans Canada, and was a paleoecologist with the National Museum of Nature. From 1995 to '98, as an IJC Commissioner (and Acting Chair) he was lead Commissioner on Remedial Action Plans for Areas of Concern in the Great Lakes St. Lawrence basin. Béland holds a B.A. and a B.Sc. from Laval University (Quebec City), and a Ph.D. in marine sciences from Dalhousie University (Halifax, Nova Scotia). He was a Postdoctoral Fellow at ORSTOM Centre, New Caledonia, and at the University of Queensland, Australia. He is fluent in French and English and proficient in Mandarin.

Our Event Participants

Members of the event's organizing committee are also marked with an asterisk (*)

Α

Alaina Harkness, Executive Director, Current Water

Alita Kelly, Founder, South East Market and Co-Founder, West Michigan Farmers of Color Land Fund Andy Mitchell, Assistant Vice Chancellor, University of Illinois, Chicago

April Wendling, Communications Specialist, Institute for Sustainability, Energy, and Environment

*Ashish Sharma, Climate and Urban Sustainability Lead at the Discovery Partners Institute, University of Illinois System

В

Basia Latawiec, Research Project Coordinator, Institute for Sustainability, Energy, and Environment

Brenden Rauch, Communications and Outreach Manager, Commissioner Cameron Davis, Metropolitan Water Reclamation District (MWRD)

D

Dawn Walker, Chief of Staff for Commissioner Cameron Davis, Metropolitan Water Reclamation District (MWRD)

Dawn Wells-Clyburn, Deputy Director, People United for Sustainable Housing (PUSH Buffalo) Deidre Peroff, Environmental Social Scientist, Wisconsin Sea Grant

Ε

Elaine Ho-Tassone, Director of Operations, NORDIK Institute

Elizabeth Murphy, Managing Director, Institute for Sustainability, Energy, and Environment *Emily Varga, Graduate Student, University of Windsor

Erin Kirby, Senior Director of Advancement, University of Illinois Urbana-Champaign Erma Leaphart, Organizer for the Great Lakes Region, Sierra Club, Michigan Chapter

G

Glenn Benoy, Director of Science and Engineering, International Joint Commission (IJC) Guy Reiter, Executive Director, Menīkānaehkem

Н

Howard Learner, Executive Director, Environmental Law & Policy Center

J

James O'Brien, Director of Budget & Policy, Commissioner Cameron Davis, Metropolitan Water Reclamation District (MWRD)

Jay Walsh, Vice President for Economic Development and Innovation, University of Illinois System Jennifer Josephs, Postdoctoral Research Associate, National Research Council and U.S.

Environmental Protection Agency

Jennifer Vanator, Policy Analyst/Great Lakes Program Coordinator, Great Lakes Indian Fish and Wildlife Commission

Jeremy Guest, Associate Professor, University of Illinois Urbana-Champaign Jisu Hong, Associate Vice President, University of Illinois System Joel Brammeier, President & CEO, Alliance for the Great Lakes

^{*}Jan Adamowski, Professor, McGill University

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*Johanna Dipple, Graduate Student, McGill University John Austin, Director, Michigan Economic Center José Acosta Córdova, Doctoral Student, University of Illinois Urbana Champaign Julia Petersen, Doctoral Student, Michigan Technological University

K

Katie Smothers, Senior Sustainability Manager, Ingredion Incorporated
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