



Columbia Basin
TRANSBOUNDARY
CONFERENCE

COLUMBIA BASIN TRANSBOUNDARY CONFERENCE:
One River, One Future

2019 SUMMARY

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- The more than 20 volunteers who helped with the on-site logistics, ran microphones around the room and did so much more to keep the conference moving.
- The conference sponsors, whose contributions helped keep the conference affordable for participants, including scholarships for young professionals and students.
- The artists and performers who inspired and entertained participants with their works, words and music.
- The 280 participants, representing all corners of the Columbia Basin in Canada and the United States, who took time to lend their voices to this unique, collaborative conversation about the international Columbia River Basin.



Introduction

The Columbia River Transboundary Conference: One River, One Future took place in Kimberley, British Columbia, from September 12 to 14, 2019. It brought together leaders, researchers, policy makers, government representatives, Indigenous peoples, industry stakeholders and scientists. Over the course of three days, participants explored a wide range of topics related to the Columbia River.



The goal was to help participants grow their appreciation and knowledge of one another and the river that binds them. By bringing people together to listen, learn and strengthen understanding, the conference supported collaboration, culture and conversation—essential components in finding solutions and sparking actions that require interdisciplinary, international and inter-institutional coalitions.

Participants came from Canada and the United States—from Valemount, British Columbia, in the northeast to Portland, Oregon, in the southwest—reflecting the magnitude of the Columbia River Basin and how the river connects the people who live along it. It truly is one river with one future.

The conference offered sessions on eight broad topics, plus a half-day field trip. These discussions and activities are summarized in the following pages.

Climate Change and Related Impacts

Moderators

- **Brian Menounos:** Professor, Geography, Canada Research Chair in Glacier Change, University of Northern British Columbia
- **Crystal Raymond:** Climate Adaptation Specialist, University of Washington

Session Description

Climate change and the impacts associated with those changes are fundamental in talking about the future of the Basin. This session introduced the projected climate changes in the Basin. Discussion then focused on what can be done and what's already being done to address, mitigate and adapt to climate change as it relates to the ecosystem, energy production and stream flow in the Basin, as well as how climate change impacts the present situation and the future.



Session Synopsis

Presenters highlighted how the long-range climate models have not changed significantly in the last decade and still predict declining snowpack, increasing winter rain, increasing summer drought and rising temperatures. With higher stream flows, habitat for fish and wildlife will be affected as higher runoff increases erosion and carries larger amounts of sediment. In particular, climate change may:

- alter the timing and magnitude of water storage in the Basin's glaciers, snowpack and streams
- increase stream temperatures, first at lower elevations and areas that are already marginal for cold-water fish
- increase the disturbance of forest ecosystems, with implications for stream temperatures and flows.

The presenters highlighted that the trends are clear and the confidence in these trends is high enough to act.

In breakout sessions, participants discussed three topics:

1: Impacts to Ecosystems

Facilitators

- **Meredith Hamstead:** Coordinator, Columbia Basin Trust Climate Action Program
- **Ingrid Leipa:** Coordinator, Columbia Basin Trust Climate Action Program

Session Synopsis

The discussion mentioned how a paradigm shift is required for change. Climate change knowledge needs to be incorporated into aspects like land management, response to invasive species, education, conservation and, most importantly, governance and policy. Climate change science often highlights water, which is integral to residents in the Basin in Canada and the U.S., and impacts the reintroduction of salmon. Climate change is complex and dynamic and any reduction in greenhouse gas emissions will be important for the future of the Basin's ecosystems.



2: Energy Production

Facilitators

- **Karen Studarus:** Resilience Team Lead, Electricity Infrastructure Group, Pacific Northwest National Laboratory
- **Ben Kujala:** Director of Power Planning, Northwest Power and Conservation Council

Session Synopsis

Public awareness and education are required to help people in the Basin understand how climate change impacts energy. Regions, rivers, energy grid systems, economies and culture are interconnected, and climate change may affect all of them. By stressing many uses of the river, it affects everyone. But there is a myriad of choices, and some changes can be addressed now.

For example, the reservoirs behind dams are slow moving, and on warm, sunny days—particularly a succession of such days—they can heat to temperatures that are lethal to cold-water fish like salmon. In fact, this happened in 2015 and resulted in the deaths of more than a quarter million adult sockeye salmon. If water moved through the reservoirs more quickly, fish would be exposed to higher water temperatures for a shorter time, increasing their chances of survival and perhaps cooling the water temperature. But that would require operational changes at the dams. In turn, this could affect electricity production if more water were spilled over the dams and less went through turbines.

As well, higher river flows could increase the flood risk in communities close to rivers. Conversely, in drier times of the year, when river flows are lower, docks and other submerged infrastructure could be affected. In a region so dependent on hydropower, changes in river flows affect energy production *and* many other areas of the economy.

Also, some people envision a future in which they rely less on large power plants, regardless of the type of generation. One possible scenario for the security of electricity is a decentralized power supply; this means gradually moving away from a small number of large power plants toward smaller generating plants that may be situated within communities and close to power consumers.

In addition, climate change adaptation needs to consider how some communities may be more vulnerable to the impacts. This is particularly true for those that rely heavily on rivers for irrigation, municipal water supply, recreation, fishing (commercial, tribal and recreational) and transportation.

3: Stream Flow

Facilitators

- **Ben Pelto:** PhD Candidate, University of Northern British Columbia
- **Tim Hicks:** Senior Manager, Delivery of Benefits, Columbia Basin Trust



Session Synopsis

Low stream flow in the summer months will impact hydroelectric energy production and salmon restoration. However, winter flows may increase due to more rain on snow and warmer temperatures. All these changes will have economic impacts. Stream flows affect

water temperatures in tributaries, but scientists aren't yet sure what other impacts the change in runoff will have, including on fish and wildlife. American and Canadian agencies are working on the same issues, but not necessarily using the same protocols.

There are opportunities for more action. For example, decision-makers can collect additional data on the current changes so they better know how to adapt. Also, traditional knowledge from Indigenous peoples can help everyone better understand climate change science and how they can transform their relationships with water. This includes knowledge about:

- conserving water and its economic and spiritual values
- conserving water in the face of diminishing or changing supplies
- restoring and improving fish and wildlife habitat
- making other investments that boost the value of the region's so-called "natural capital."

Impacts of and Response to Invasive Species

Moderators

- **Justin Bush:** Executive Coordinator, Washington Invasive Species Council
- **Martina Beck:** Unit Head, Invasive Fauna, BC Ministry of Environment and Climate Change Strategy

Presenters

- **Michael Zimmer:** Fisheries Biologist, Okanagan Nation Alliance
- **Kate Wilson:** Invasive Species Outreach Coordinator, Montana Department of Natural Resources & Conservation
- **Thomas Woolf:** Aquatic Invasive Species Bureau Chief, Montana Fish, Wildlife and Parks
- **Catherine MacRae:** Invasive Plant Specialist, BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development

Session Description

This session focused on the significance and impacts of aquatic and terrestrial invasive species in the Basin, including northern pike and zebra and quagga mussels. For each species, discussions focused on opportunities for transboundary solutions and collaborations.

Session Synopsis

A significant issue facing the Basin is the proliferation of invasive species, including zebra and quagga mussels, northern pike, aquatic plant species like flowering rush and terrestrial species like feral pigs. These can significantly impact the economy, the environment and human health, changing the ecosystem and affecting irrigation, hydropower and municipal water infrastructure.

Flowering rush, for example, interferes with water flow, reduces water quality and availability, displaces native aquatic and riparian species, and alters valuable fish and wildlife habitat. Northern pike assertively competes against every other fish species in the same water body and is an aggressive predator.

Many of these invasions have been caused by humans, which means humans are a large part of the solution. To manage and keep these species at bay, aspects like these are essential: legislative support (particularly adequate and stable funding), supportive management, dedicated trained staff, enforcement support, coordination and collaboration.

The Columbia River Treaty

Moderators

- **Cindy Pearce:** Executive Director, Columbia River Treaty Local Governments Committee
- **Jim Heffernan:** Policy Analyst, Columbia River Treaty, Columbia River Inter-Tribal Fish Commission

Remarks by

- **Sylvain Fabi:** Executive Director, U.S. Transboundary Affairs, Global Affairs Canada
- **Katherine Dhanani:** U.S. Consul General in Vancouver, B.C.

Session Description

This session offered an update on Columbia River Treaty negotiations from both Canada and the U.S. and enabled participants to hear and offer multiple perspectives on the treaty. The key topics included flood control, downstream benefits and ecosystem function.

Session Synopsis

The Columbia River Treaty was initiated in 1944, signed in 1961 and implemented in 1964. In 2014, either Canada or the U.S. could have given 10 years' notice to terminate the treaty (in 2024), but both decided to continue it, with modifications. This means that, in 2024, the approach to flood risk management may change dramatically.

In this session, **Sylvain Fabi**, lead Canadian negotiator for the treaty, highlighted the mutual respect and spirit of collaboration that exists among the negotiators for Canada and the U.S. as they work on a revision of the treaty. Both countries want an equitable sharing of hydropower benefits and see flood risk management as a high priority. Fabi asked participants to consider what constitutes “equitable.” The details of flood risk management remain a matter for discussion. He stated that both countries want an agreement that is fair and addresses issues in the first treaty.



Katherine Dhanani, the U.S. Consul General in Vancouver, noted Canada is a close neighbour and friend, like a family member. Canada and the U.S. have different approaches to many things, including the treaty, but the U.S. is eager to move forward in defining how everyone will continue to benefit from the treaty. Both countries benefit from coordinated flood control and hydropower operations, and the treaty remains extremely important, but she said it can be improved. The treaty is a model for transboundary water cooperation and has led to mutual economic benefits. The two countries seek an equitable sharing of

benefits from hydropower operations, but the two sides need to agree on what is truly equitable. Both countries have a mutual interest in the Basin's shared ecosystem, and there is a desire to work through ecosystem issues together, including climate change impacts.

Participants engaged in table discussions on several topics:

1: Ecosystem Function

Participants felt that ecosystem function could be expanded to include agriculture activities in the Basin. Ecosystem function also needs to be defined with measurable metrics, which may help prevent changes, like increased flows, that benefit some species but may actually harm others. The definition should incorporate the non-monetary contribution of ecosystems. The treaty should be modernized to be flexible and adaptable with respect to ecosystem function and include an enforcement mechanism to ensure that dam operators follow guidelines for flows that enhance the ecosystem. The current treaty has no provision for regular reviews, but if the revised treaty called for periodic reviews, the two countries could better coordinate dam operations, river flows and treaty policies.

2: Flood Risk Management

To manage floods, the treaty must become more adaptive so it can better address climate change and changes to reservoir management. Forecasting and modelling technology could be used to balance flood mitigation, plus help the two countries agree on acceptable flood levels. Educating the public about flood risk management and its relation to the treaty could be improved.

3: Indigenous Perspectives

Both Canadian and American Indigenous nations must be fully represented throughout the renegotiation and implementation of the modernized treaty. The treaty needs to acknowledge, respect and protect Indigenous voices. This could be done by allocating funding to Indigenous youth programs with a focus on building knowledge of science and culture in the Basin. Also, the reintroduction of salmon into the river will renew the cultural importance of the river.

4: Mutual Benefits

The current treaty negotiations need to include more participants than only the Canadian and U.S. governments, such as First Nations and tribes in the Basin. The benefits and costs are different today than in 1961, and the modernized treaty must address parameters such as ecosystem function, water quality and salmon habitat integrity and viability. It must also address upstream losses caused by downstream benefits.

5: Other Interests

Other interests with regards to the treaty may include the following:

- Agriculture and irrigation
- Transportation and navigation: Waterway navigation is important, and this needs to be considered and coordinated as many groups need to access water
- Recreation: This is often viewed as an externality, but it is an authorized purpose of some of the Columbia River dams in the U.S. and so needs to be assessed and accounted for
- Climate impacts: As hydropower dams age, they could be replaced with renewable power resources
- Forestry
- Equitable consideration for water storage
- Water quality
- Acknowledgement of cultural losses caused by the inundation of reservoirs behind the dams
- Health of the river

Salmon Restoration and Reintroduction: U.S. and Canadian Perspectives

Moderator

- **Mark Thomas:** Councillor, Shuswap

Presenters

- **Bill Green:** Lands Special Initiatives Advisor, Ktunaxa Nation Council
- **Howie Wright:** Fisheries Program Manager, Okanagan Nation Alliance
- **John Sirois:** Committee Coordinator, Upper Columbia United Tribes

Session Description

The session began at the Kimberley Conference Center with presentations on salmon reintroduction and restoration by First Nations and Columbia Basin tribes. Delegates then travelled by bus to Tilly Park at Columbia Lake, the headwaters of the river, where experts were available to discuss the work in detail.



Session Synopsis

“Why salmon restoration?” This was the opening question posed by moderator Mark Thomas from the Shuswap Indian Band.

Salmon are fundamental to the life and culture of Indigenous peoples in the Basin, whose identity is often defined by the Columbia River. Impacted tribes and First Nations have already done a lot of pivotal work and collaboration regarding salmon restoration.

Salmon life cycle modelling predicts there is enough habitat to viably reintroduce salmon in the river above Grand Coulee and Chief Joseph dams. It also predicts this would be a worthwhile investment, especially since the technology to enable spawning passage exists.

Another assessment has looked at the feasibility of reintroducing salmon in the Upper Columbia. The results indicate this portion of the river has suitable habitat for significant numbers of fish, and that suitable donor stocks are likely available.

It is the responsibility of Columbia River First Nations and tribes to ask for healthy salmon populations. Return of salmon would rekindle connections between these people, salmon and their cultures, while salmon fishing is linked to the identity and experiential education of Indigenous youth. Salmon reintroduction is about reconciliation.

The 2007 United Nations’ Declaration of Responsibilities to Indigenous Peoples recommends that governments shall provide compensation for actions that dispossess Indigenous Peoples of their lands, territories, or resources such as salmon.

Field Trip

General Description

A half-day field trip to the Columbia River headwaters featured subject-matter experts, researchers and members of Canadian First Nations and U.S. tribes, who facilitated on-the-go discussions and breakout sessions against the spectacular backdrop of Columbia Lake at Canal Flats, BC.

Participants learned about the past, present and future of salmon in the Columbia River. The trip included cultural and spiritual ceremonies, as well as a variety of other activities, displays, performances and talks. Participants engaged with researchers, topic experts and traditional knowledge keepers to learn about the history, importance, challenges and potential future of salmon in the Basin, as well as the reintroduction of salmon into the Columbia River above Chief Joseph and Grand Coulee dams in Washington and into British Columbia.

1: Canal Flats: Salmon Restoration and Reintroduction Discussions, Columbia Lake Headwaters Tours

Presenters

- **Tom Biladeau:** Habitat Restoration Biologist, Coeur d'Alene Tribe
- **Steve Dearden:** Vice-President Sales, WHOOSHH Innovations
- **Tobias Kock:** Research Fish Biologist, U.S. Geological Survey
- **Howie Wright:** Fisheries Program Manager, Okanagan Nation Alliance
- **Jill Hardiman:** Fish Biologist, U.S. Geological Survey
- **Will Warnock:** Senior Aquatic Biologist, Canadian Columbia River Inter-Tribal Fisheries Commission
- **Casey Baldwin:** Senior Research Scientist, Colville Confederated Tribes
- **Conor Giorgi:** Anadromous Program Manager, Spokane Tribe of Indians
- **Richard Bussanich:** Senior Fisheries Biologist, Okanagan Nation Alliance
- **Misun Kang:** Aquatic Ecologist, Canadian Columbia River Inter-Tribal Fisheries Commission
- **Clint Alexander:** President, Practice Area, Water Resource Management, Essa Technologies

Session Synopsis

Participants bused to Tilley Memorial Park in Canal Flats and engaged with experts on the elements of salmon restoration and reintroduction. Participants were provided information on the salmon life cycle, fish passage and reintroduction examples in the Columbia River. They were also provided information on salmon species selection, habitat assessment and collaboration.

During the field trip, two buses took participants from Tilley Memorial Park to the headwaters of the Columbia River for guided tours. Members of the Ktunaxa Nation Council and Shuswap Indian Band, and local historians, provided commentary that engaged participants on various topics in front of this beautiful and meaningful setting. The field trip also gave context to the telling of the Ktunaxa creation story later that day.

2: Cultural and Spiritual Ceremony

Activities and Presenters

- **Horse Ceremony:** Ktunaxa Dance Troupe
- **Storytelling:** Joe Pierre Jr., Nasuʔkin (Chief), ʔaʔam
- **Storytelling:** Kenthen Thomas, Secwepemc Storyteller, Shuswap

Session Synopsis

In Canal Flats, participants watched a touching ceremony given by representatives from three First Nations. After each performance, the performers passed along the mic and gave space for the next performer in a respectful way, displaying gratitude for each nation's story and part in the ceremony.

The Ktunaxa Dance Troupe shared a spiritual and cultural ceremony that included youth paddling to the shores of Columbia Lake, a horse ceremony, dancing and prayers. Nasuʔkin (Chief) Joe Pierre of ʔaʔam shared the Ktunaxa creation story. Kenthen Thomas shared humorous Secwepemc stories of coyote, including how kindness taught him how to make a tree fall in love with him, which left the crowd laughing and wanting to hear more.

Indigenous Voices

Moderator

- **Joe Pierre:** Nasuʔkin (Chief), ʔaʔam

Presenters

- **Jaime Pinkham:** Executive Director, Columbia River Inter-Tribal Fish Commission
- **DR Michel:** Executive Director, Upper Columbia United Tribes
- **Chad Eneas:** Chief, Penticton Indian Band
- **Alfred Joseph:** Nasuʔkin (Chief), ʔakisʔnuk
- **Wayne Christian:** Kúkpíʔ (Tribal Chief), Shuswap Nation Tribal Council

Session Description

This powerful session highlighted the perspectives, interests and issues of Canadian First Nations and Columbia Basin Tribes.

Session Synopsis

The presenters were asked, “What does the Columbia River mean to your sovereign nation?”

Jamie Pinkham, Executive Director of the Columbia River Inter-Tribal Fish Commission and a member of the Nez Perce Tribe, said the Columbia River is important to the Nez Perce like the atmosphere is important to breathing, paraphrasing the language of a 1905 United States Supreme Court decision.

He said public policy over the long term didn’t get it right. The failure was to exclude ecosystem-based functions from the Columbia River Treaty, focusing only on hydropower and flood control. It’s good to bring tribes and First Nations into the treaty negotiations, as they bring cultural, political, scientific and business expertise to the negotiating table.



DR Michel of the Upper Columbia United Tribes (UCUT) said the tribes his organization represents lost their access to salmon at their traditional fishing locations when Grand Coulee Dam and later Chief Joseph Dam blocked salmon passage. The UCUT tribes are still honouring the salmon missing from the Columbia River.

Salmon is the future, he said. People shouldn’t look at the cost of reintroduction, but at the cost of not having salmon. If people can look for water on Mars, they should be able to get a fish over a dam. If people set this as a priority for politicians, it can be done.

Chad Eneas, Chief of the Penticton Indian Band, said First Nations members today are continuing to say the same thing as their ancestors did, and continue to be unheard. Local governments are willing to recognize Indigenous titles to land, which Indigenous peoples never relinquished, but higher levels of government aren't. He said that people don't have dominion over other living things on this planet.

Alfred Joseph, Nasu7kin (Chief) of 7akisqnuq, responded the Columbia River is an important water source. Since the dams blocked the river, the wildlife has changed. There are not as many muskrats, beavers and mink. He asked what effects on our lives "progress" has had, and said Indigenous peoples are responsible for the Earth.

Kúkpi7 **Wayne Christian**, Tribal Chief for the Shuswap Nation Tribal Council, responded with the recognition there have been 150 years of great harm to First Nations people in Canada.

In 1961, when the Columbia River Treaty was signed, Indigenous peoples weren't considered citizens and hadn't ceded, sold or surrendered the land and its resources. The treaty didn't recognize Indigenous peoples, and that needs to change. Now they need to be part of the negotiation process and considered to hold the land and resource rights.

Christian said Western and traditional science must coexist. Salmon passage has to be introduced into the treaty, creating life where it wasn't before and creating new ecosystems above the dams. People also have to think about climate change; otherwise, 50 years from now, the climate won't be liveable.

The Future of Energy

Moderators

- **Ben Kujala:** Director of Power Planning, Northwest Power and Conservation Council
- **Paul Wieringa:** Executive Director, Electricity Branch, BC Ministry of Energy, Mines and Petroleum Resources

Presenters

- **Mike MacDougall:** Vice-President, IT & Trade Policy, Powerex
- **Karen Studarus:** Resilience Team Lead, Electricity Infrastructure Group, Pacific Northwest National Laboratory
- **Ann Rendahl:** Commissioner, Washington Utilities and Transportation Commission

Session Description

This session featured a discussion on three main topics: how energy markets are changing, innovation in renewable energy and progressive technology, and decarbonization. Experts from Canada and the U.S., representing a variety of backgrounds and interests, shared their perspectives on these topics. Discussions looked through a forward-thinking lens and focused on innovative solutions to existing challenges.

Session Synopsis

Mike MacDougal, Vice-President of IT & Trade Policy for Powerex, a subsidiary of BC Hydro, explained that the current power grid must meet the demands of consumers. This means there is a complex interplay in the power market in which energy is continuously bought and sold to meet both immediate and projected demands. There are many buyers and sellers that vary widely in size and impact on the energy market. The cost of solar power has been going down in recent years and now rivals the cost of power from thermal power plants. Solar is all about capital costs—there are no fuel costs. Power prices spike in the morning and evening, with lower prices during the day, when the sun shines.

Karen Studarus from the Pacific Northwest National Laboratory explained there is a continual dance in the system that keeps everything in balance. Power flows as needed across many jurisdictional boundaries: national, state, county and provincial. It is an exact and instantaneous interaction of supply and demand and a foundation of the successful daily functioning of societies. How do people keep this balance tomorrow, and in 20 years or 50 years? Studarus explained there are several innovations in tools and resources to help. How to choose which resources to keep the dance going is important. It is important to think about the “what if” questions about the future: regulations, fish, power supply, power resources. The tools are coming; power generators and consumers are increasingly engaged and there are developments for better modelling, forecast planning and accuracy.

Ann Rendahl, a member of the Washington Utilities and Transportation Commission, explained how societies around the globe must commit to reducing carbon emissions. Efforts toward decarbonization involve changing to clean, reliable, affordable energy sources. Energy efficiency is recognized as a clean source of energy. We are developing more clean electricity: renewables, carbon capture, energy storage. Even new nuclear power is under consideration because it does not use fossil fuels and therefore does not release greenhouse gases. The efficiency of electricity use continues to improve, and there are plans to continue to electrify vehicles. Also, many homes and businesses are converting from natural gas to electricity for heating and air conditioning. Low-carbon fuels are being developed. There is innovation in clean fuels, energy generation and carbon capture to allow further decarbonization and energy storage. There is a lot of work right now on

batteries. Any new power source needs to be clean and sustainable.

Presenters spoke about political focus and actions already in place. Governments have a responsibility to develop policy and enforcement strategies, but there must be a willingness to capture knowledge from all stakeholders affected by the energy production sector and a commitment to rely on science to develop energy strategies and policies.

To achieve sustainability of the power system, considerations include:

- how to reduce the footprint of the power grid
- the impacts of energy production on ecosystems and all the organisms within them
- the sacrifices made by upstream people when priority is given to the needs of downstream people.

Transboundary Water Governance: The Future of Water Management

Moderators

- **Kathy Eichenberger:** Executive Director, Columbia River Treaty Review, BC Ministry of Energy, Mines and Petroleum Resources
- **Barb Cosens:** Professor of Law, University of Idaho

Presenters

- **Adam Wicks-Arshack:** Lawyer and PhD Student, University of Idaho
- **Richard Paisley:** Director, International Waters Governance Initiative, University of British Columbia
- **William Barquin:** Attorney General of the Kootenai Tribe of Idaho
- **Jon O’Riordan:** Strategic Water Policy Advisor, POLIS Project on Ecological Governance, University of Victoria

Session Description

This session highlighted innovative proposals and approaches to water governance in the Basin. It fostered discussion and ideas and featured unique perspectives on current gaps and how they can be addressed. It proposed models for international water governance and adaptive management to meet future challenges in the Basin.

Session Synopsis

Governance is about people coming together to make decisions and adapt to changes.

Adam Wicks-Arshack presented the conclusions of a paper he wrote with input from the experts who designed this session at the conference. It called for an adaptive management approach to dealing with future changes. This could happen by creating an International River Basin Organization (IRBO) for the Columbia River, modelled after other IRBOs in other international river basins around the world. Issues like climate change may require changes in dam operations in the Columbia River Basin and to the Columbia River ecosystem. To adapt to these changes, governments and policies related to the river need to have the flexibility to change and adapt.



Through the Columbia River Treaty process, people have asked for transparency, asked for flexibility in how the impacts of climate change are managed, and expressed a desire to address emerging social and ecological issues. Wicks-Arshack asked which issues, ecological and otherwise, can be better managed through enhanced international coordination and cooperation? It is possible to manage an international watershed while optimizing ecosystem-based functions alongside flood control and hydropower.

He said that next steps include ongoing education and dialogue, modernizing the treaty and establishing an IRBO as a “holistic governing body” in the Basin. A forum should

coordinate and address objectives about ecosystems as they relate to the use of storage water and river flows at the border—this would address the multitude of issues and objectives that fall outside the scope of the treaty.

The governance session included a spirited debate on the efficacy of an IRBO for the Columbia Basin. Those opposed to the idea said the IRBO would impose another layer of bureaucracy on river operations with an uncertain impact on the treaty and no legal authority. They also argued that moving immediately to form an IRBO without a better understanding of the legal context and authority an IRBO would have, not to mention whether existing legal authorities in both countries would agree to its creation, would probably make the effort a waste of time.

Those who favoured an IRBO said governance of the Basin should align with emerging and urgent imperatives. These include:

- climate change
- active and adaptive management of ecosystem functions and services
- water quality
- changing energy markets
- meaningful participation of local governments and stakeholders in decision making
- critical recognition of the rights of First Nations and tribes to self-determination and to their land titles and resources.

Starting to form an IRBO is the first step toward improved river governance. Those who live in the Basin must adapt to climate change, changing energy markets, shifts in land use and a changing society. All will therefore benefit from the formation of a forum that responds to social and ecological change.

Conclusion

The conference provided participants with a venue to connect and collaborate on transboundary issues and, more importantly, opportunities for the future of the Basin. The stories and discussions, the sharing and talking, allow each nation to plan for a connected future. It is important to collaborate to move forward, understanding there is one river and one future that binds all those who live in its Basin.