



# 2<sup>nd</sup> Annual AFN National Water Symposium and Tradeshow:

*First Nations and Water in the 21<sup>st</sup> Century*  
February 26-28, 2019

Scotiabank Convention Centre  
6815 Stanley Ave.  
Niagara Falls, Ontario

## SYMPOSIUM PROGRAM



## 2<sup>nd</sup> Annual AFN National Water Symposium and Tradeshow: "First Nations and Water in the 21st Century"

Building upon the dialogue from the 1<sup>st</sup> National Water Symposium and Tradeshow "Reconciliation Through Sustainable Water Management", this year the theme will be "First Nations and Water in the 21st Century".

Access to safe water and proper sanitation is a human right. Most importantly, it is our inherent right to the use and protection of our waters and lands. The protection of water and all living beings that depend on it is the sacred responsibility entrusted to us by the Creator. It is the responsibility of Canada to implement Article 25 of the United Nations Declaration of the Rights of Indigenous Peoples which states,

*"Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard."*

### Acknowledgements:

The Assembly of First Nations would like to acknowledge the following sponsors of the 2<sup>nd</sup> Annual AFN National Water Symposium and Tradeshow:



Indigenous Services  
Canada

Services aux  
Autochtones Canada



A commission for the Assembly of First Nations, this pin writ large represents the struggle for the protection of our most sacred and at-risk resource. The main symbolic shape is a water droplet. It is adorned inside by abalone shell depicting imagery in Coast Salish design. This abalone itself is meant to represent water and its shape: a wave. Eagle and Bear are embodied in the design as representative of the Assembly of First Nations' symbols of strength. You will see eyes throughout the design. These are the eyes of our ancestors always upon us, guiding us. There are four accentuating crescents within and outside the abalone. These are often described as ripples that come from a drop in the water. Here they indicate the effects that emanate from our actions. They are in groups of 4 which is a very sacred number reflecting many things: 4 seasons, 4 stages of life (infant, youth, adult, elder), but most importantly the 4 corners - Unity within Diversity and the strength and wisdom that come from this.



## Welcome from National Chief Perry Bellegarde

On behalf of the Assembly of First Nations (AFN) and the Executive Committee, it is my pleasure to offer greetings to all of you attending the AFN 2nd Annual National Water Symposium and Tradeshow here on the shared territory of Niagara Falls.

Building on the successful 1st National Water Symposium and Tradeshow in 2018, the theme of this year's symposium is "First Nations and Water in the 21st Century." The symposium will hear from people across our Nations who are engaged in work related to sustainable water management; innovative technologies and new training methods; the 'standing up' of First Nations water laws; climate change adaptation; and from people who are leading their own approaches to care and control of water and wastewater.

The AFN has been advocating diligently to ensure that First Nations have access to safe water and proper sanitation. This is not only an important objective for our people and families, it is a fundamental human right. In order to fulfill this essential need, there needs to be significant investments made in water and wastewater infrastructure, long-term sufficient and sustained funding, and co-development of the repeal and replacement of the Safe Drinking Water for First Nations Act. The AFN, through resolutions passed by the Chiefs-in-Assembly, have established a Chiefs Committee on First Nations Safe Drinking Water Legislation to advise a Joint Working Group on Safe Drinking Water for First Nations. A Preliminary Concepts paper has been developed as a working document to support First Nations engagement on our vision of the legal future for First Nations and water.

There is much work to be done to address the serious water and wastewater issues facing First Nations. Although the federal government has made investments to address the long-term Drinking Water Advisories, aging infrastructure is an impending, serious problem for First Nations that requires additional investments and a long-term strategy.

Recent news reports on homes that lack proper water and wastewater infrastructure have helped put a spotlight on the growing, dangerous health and safety issues that arise from the current situation. We must work with government, academia, the public and private sectors to determine the best ways to make progress on a better quality of life for our families and children.

The federal government has made clear commitments on this urgent matter and they must work in partnership with First Nations to achieve them. They must support our governments in driving change, consistent with First Nations rights and the United Nations Declaration on the Rights of Indigenous Peoples.

The AFN will continue to advocate for resources and approaches that provide safe and clean drinking water for our people. First Nations leaders and representatives will hold all governments to their obligations to work with us to foster healthy citizens and strong First Nations.

I commend the commitment and dedication of all of you gathered here for this symposium. I commend those of you who travelled far, including our international delegates. This is the collective expertise we need to advance our shared objectives.

Your work over the next three days will provide direction and help carry us all forward. I wish you well in your discussions and deliberations.



*Perry Bellegarde*  
*National Chief*



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### Welcome from Regional Chief Kevin Hart, Manitoba

As the Assembly of First Nations Portfolio Holder for Housing, Infrastructure, and Emergency Services, I am pleased to welcome you to the 2019 2nd Annual AFN National Water Symposium and Tradeshow as we gather under the theme "First Nations and Water in the 21st Century".

The symposium provides an opportunity to discuss water quality and its impacts on health and quality of life, sustainable water management and new trends in water issues and water governance. Sharing information, networking and creating partnerships can help contribute to identifying approaches and collaborative ways to address safe drinking water for First Nations.

At the 2018 1st Annual National Water Symposium and Tradeshow we heard support for the goal of effective First Nation led legislation to ensure safe drinking water and proper sanitation. Participants emphasized that water is connected to many aspects of life, including the economy and the environment. Future legislation must focus on safe drinking water goals and recognize

the cultural significance and sacredness of water. Recognition and application of First Nation laws was identified along with the need for mandatory funding to accompany new legislation to meet the diverse needs of First Nations.

The federal government has made commitments to end long-term drinking water advisories for public systems on reserve by March 2021. Information from February 2019 indicates 78 have been lifted since November 2015 and 62 remain. Since September 2018, Indigenous Services Canada advised there are 383 water and wastewater projects that need to be repaired, upgraded or require infrastructure. As well, an up to date, comprehensive, national assessment of water and wastewater is required to identify the current state of First Nations infrastructure needs and the resources required to bring them up to comparable standards as the rest of Canada.

Since the last symposium, the Chiefs-in-Assembly passed two notable resolutions: Resolution 01/2018 First Nations Led Process to Develop New Federal Safe Drinking Water Legislation. This resolution calls for AFN to immediately communicate to the federal government the need to keep their commitment to reconciliation and a joint legislative co-development process and mandate in full partnership with First Nations; for AFN to appoint a Chiefs Committee on First Nations Safe Drinking Water Legislation that will advise the development of a Terms of Reference for the creation of a Joint Working Group on Safe Drinking Water for First Nations; for the AFN to develop a framework on safe drinking water legislation; and to develop and convey a funding proposal to the federal government to support these initiatives.

Resolution 26/2018, Support for a First Nations Drinking Water Legislation Preliminary Concepts, calls for support for the Concepts Paper as a working document to support engagement with First Nations, and for AFN to proceed with national engagement to develop the First Nations Safe Drinking Water Legislation Draft Framework. It calls for the AFN to advocate for First Nations and Canada to co-develop new First Nations safe drinking water and wastewater legislation in a manner that affirms and ensures protection for First Nations rights, interests, aspirations, inherent rights and laws, standards, guidelines and processes.

I hold up our women, who are the protectors of water. This symposium acknowledges the role of women and water which is why we have dedicated time to women's voices on water in the form of the plenary dialogue on First Nations women and water, led by the inspiring Autumn Peltier.

I welcome our brothers and sisters from Aotearoa/New Zealand who will share with us their story on the granting of personhood to their ancestor, the Whanganui River. We are honoured to hear for the first time in Turtle Island the 'voice' of that ancestor, the first river in the world to be recognized as a legal person.

I am happy to see that we are reaching across the big water, ChiGamiing, once again as we did at our 3rd Annual Housing Forum in Vancouver when we welcomed Victoria Kingi, from Papamoa, New Zealand.

I thank each of you for taking the time to attend, participate and contribute to this symposium. I wish everyone a good three days as we discuss the health and wellbeing of our First Nations people.

*Manitoba Regional Chief Kevin Hart*



## Welcome from Regional Chief RoseAnne Archibald, Ontario

As the Assembly of First Nations (AFN) Co-Lead for the Housing, Infrastructure and Emergency Management Services Water Portfolio Holder, I welcome you to our region as we host the AFN 2nd Annual National Water Symposium and Tradeshow taking place here on shared territory and recognize the many Nations who walked this land in the past and those who walk it today. I acknowledge the great and ongoing work of my Co-Lead, Manitoba Regional Chief Kevin Hart as well as our Chiefs Committee on Housing and Infrastructure co-chair, Chief Lance Haymond and to the Chiefs on the Housing and Infrastructure Committee.



Water is life. It is recognized that women are the sacred keepers of the water and know that it's a gift that connects all life. Water is significant to our way of life and livelihoods and we recognize our inherent responsibilities as caretakers to protect water. Our responsibilities and our rights include all aspects to the use of water, jurisdiction and stewardship over use and access to water and the protection of water.

Article 25 of the United Nations Declaration of the Rights of Indigenous Peoples states: "Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationships with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard".

Many First Nations continue to deal with unsafe drinking water and inadequate sanitation. The Ontario region in particular continues to face a high number of long-term drinking water advisories. We continue to advocate for access to safe water and proper sanitation as it is our human right and it's essential in order to build healthy communities. We know the solutions required for our communities. First Nations require adequate and sustained financial resources to develop capacity and skills, operations and maintenance funded at 100%, new and/or upgrades to outdated and aging water and wastewater infrastructure, and effective federal Safe Drinking Water Legislation developed in collaboration and partnership with First Nations.

In a time of reconciliation, and as we gather here at this symposium, we look forward to your dialogue and discussion on ways to work together in partnership to ensure that First Nations have equity in water quality standards and equity in water access.

I want to recognize our brothers and sisters from New Zealand who will be sharing their work in the protection of their rivers and waters. We will hear the 'voice' of the first river ever to be granted legal personhood and we are honoured to host them in our region.

Ninaskamon all for attending and participating in this important symposium and wish you a wonderful visit and stay in our Region. Ninaskamon is a Cree/Ininuk word that means "I am grateful, I am thankful, I thank you."

*Wishing you Peace beyond all understanding,  
RoseAnne Archibald  
Ontario Regional Chief*



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### SYMPOSIUM INFORMATION

#### **Symposium Tradeshow**

There will be a tradeshow taking place both in the Fallsview Theatre/Junior Ballroom and in the foyer. Come and see the many water and infrastructure companies who would like to share some information on their products and services. There are some great chances to win some prizes and also make some connections that may assist you in your work in your First Nation.

#### **Symposium Social Activities**

The Assembly of First Nations will host a Welcome Reception on the evening of February 25, 2019, from 6pm to 8pm in the Peller Estates Ballroom Foyer area, just down the hall from the Symposium Registration Area. Come by and register for the Symposium and then stop by and meet with your colleagues from across Canada, have some refreshments and listen to the wonderful music of James Wilson from Six Nations of the Grand River.

James Wilson, an Indigenous singer/songwriter, has performed at many venues and competitions around Canada and the United States. In 2017, he had the great opportunity to sing back-up for “Lorde” at the Much Music Video Awards. He is currently recording his first full-length album with producer Jace Martin at Jukasa Studios. The album is set to release in the summer of 2019.

#### **Symposium Evaluation Form**

AFN looks forward to hearing your feedback on the 2nd Annual AFN National Water Symposium and Tradeshow, please complete the Symposium Evaluation Form, which you can find in your meeting kit. Drop your completed evaluation form off at the Registration Area for a chance to win a great prize at the end of the Symposium. Remember, you need to be in the plenary room at that time to win!

#### **Simultaneous Interpretation**

Please note that simultaneous interpretation into French is available in the Peller Estates Ballroom – ABCD (Main Plenary). In addition, there will be one workshop during each workshop period that will be interpreted into French. Please consult the program agenda to see what sessions will take place in the main plenary. Headsets can be picked up inside of the Peller Estates Ballroom – ABCD in the back of the room.



## SYMPOSIUM AGENDA

The 2nd Annual AFN National Water Symposium and Tradeshow continues the dialogue on First Nations and water at the national level. This year the focus is on First Nations and Water in the 21st Century and will focus on the past, present and future for First Nations water and wastewater. This is an opportunity to hear updates on the recent developments and trends that impact First Nations and water; engage in dialogue with others on key issues and the future directions for First Nations water governance and water/wastewater infrastructure; and to interact with the latest water related product and service providers.

The symposium will include plenary addresses from thought-leaders and government representatives including Te Pou Tupua, the official voice of the Whanganui River (Aotearoa/New Zealand), the first river ever to possess formal legal personhood. In addition, there will be technical workshops, dialogue sessions and an extensive tradeshow offering delegates the opportunity to learn, share, and network. Join us to add your voice to the discourse on our shared water future as First Nations.

### Monday, February 25, 2019

4:00 p.m. – 8:00 p.m.

**Symposium Registration** in the Theatre/Junior Ballroom Foyer at the Scotiabank Convention Centre

6:00 p.m. – 8:00 p.m.

**Welcome Reception** in the Peller Estates Ballroom (ABCD) Foyer at the Scotiabank Convention Centre

### Day 1 – Tuesday, February 26, 2019

*Theme: How Did We Get Here?*

8:00 a.m.

**Registration**  
**Hot Breakfast**  
**Tradeshow Open**

Fallsview Theatre/Junior Ballroom Foyer  
Peller Estates Ballroom (ABCD)  
Fallsview Theatre/Junior Ballroom

9:00 a.m.

**Opening Ceremonies/Welcoming Remarks**

Location: Ballroom ABCD

*Drum Group: Ohnia:kara Singers*

- Opening Prayer
- Welcome Remarks
  - o Chief Ava Hill, Six Nations of the Grand River
  - o Chief Stacey Laforme, Mississaugas of the New Credit First Nation
  - o Ontario Regional Chief RoseAnne Archibald, Water Lead Holder



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9:30 a.m.	<b>Remarks by National Chief Perry Bellegarde</b>
9:50 a.m.	<b>Symposium Opening Remarks</b> <ul style="list-style-type: none"> <li>Manitoba Regional Chief Kevin Hart, AFN Housing, Infrastructure and Emergency Services Portfolio Holder</li> <li>Dr. Paulette Tremblay, Chief Executive Officer, Assembly of First Nations</li> </ul>
10:30 a.m.	<b>Setting the Context for the Symposium</b> <ul style="list-style-type: none"> <li>Irving Leblanc, P. Eng., Director of Housing, Infrastructure and Emergency Services, Assembly of First Nations</li> </ul>
10:45 a.m.	<b>Keynote Presentation: Te Pou Tupua, Voice of the Whanganui River</b> <i>Dame Tariana Turia and Whanganui Iwi Poukōrero (tribal historian) Turama Hawira, Aotearoa/New Zealand</i>
11:30 a.m.	<b>Networking in the Tradeshow</b> located in the Fallsview Theatre/Junior Ballroom <ul style="list-style-type: none"> <li>Come network with your colleagues, grab a coffee and see the Exhibitors we have in our tradeshow</li> </ul>
12:15 p.m.	<b>Lunch Provided</b>
1:30 p.m.	<b>First Nation Women and Water Dialogue Session</b> <ul style="list-style-type: none"> <li>Ms. Autumn Peltier, Youth Activist</li> <li>Regional Chief RoseAnne Archibald, Ontario</li> <li>Dame Tariana Turia, Aotearoa/New Zealand</li> </ul> <i>Followed by Question and Answer Session with Delegates</i>
2:30 p.m.	<b>Dialogue Session Indigenous Services Canada: Canada's Approach to Supporting Clean Drinking Water in First Nations</b> <i>Presenter: Chad Westmacott, Indigenous Services Canada</i> Access to safe, clean, and reliable drinking water for First Nations is a priority for the Government of Canada. This session will provide an overview of the Department's work with First Nations partners to close water and wastewater infrastructure gaps, an update on the progress towards eliminating long-term drinking water advisories, and will discuss current and future steps as we collectively move towards First Nations care and control of water infrastructure. <i>Followed by Question and Answer Session with Delegates</i>
3:15 p.m.	Health Break in Tradeshow





3:30 p.m.	<p><b>Assembly of First Nations Legislative Reform Update - Safe Drinking Water for First Nations Act – Issues and Options</b></p> <ul style="list-style-type: none"> <li>• Issues with the Safe Drinking Water for First Nations Act <i>Presenter: Allison Thornton, Koch Thornton LLP</i></li> <li>• AFN Update on the Safe Drinking Water for First Nations Act <i>Caleb Behn, Assembly of First Nations</i></li> <li>• Delegate Participation – Next steps in Legislative reform?</li> </ul>
4:15 p.m.	<p><b>Regional Snapshots:</b> An Overview of Selected Regional Water Initiatives</p> <ul style="list-style-type: none"> <li>• Ms. Kathleen Padulo, Chiefs of Ontario</li> <li>• Mr. James MacKinnon, Atlantic Policy Congress of First Nations Chiefs</li> <li>• Ms. Melanie Debassige and Mr. Wes Bova, Ontario First Nations Technical Services Corporation</li> </ul>
4:45 p.m.	Wrap Up Summary and Adjourn for Day 1

**Day 2 – Wednesday, February 27, 2019**

*Theme: Where Are We Now?*

8:00 a.m.	<p>Registration Hot Breakfast Tradeshow Open</p>	<p>Fallsview Theatre/Junior Ballroom Foyer Peller Estates Ballroom (ABCD) Fallsview Theatre/Junior Ballroom</p>
9:00 a.m.	Call to Order/Overview of the Day	
9:15 a.m.	<p><b>Empowering First Nations Women, Youth and Communities through Partnerships, Training and Innovative Water Management Infrastructure</b> <i>Presenter: Ms. Jill Timushka, UA Canada, Mr. Larry Villeneuve, LiUNA and Ms. Sara Loft, Ishkonigan, Fontaine Strategic Solutions</i></p> <p>This multi-faceted presentation will focus on the discussion of long-term partnerships with First Nations through training and apprenticeship opportunities offered by the Labourers International of North America (LiUNA) and the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada (UA Canada). Representatives will also highlight current innovative water infrastructure projects in Canada, and speak about the partnerships, employment and training involved in these projects. This presentation will also touch on personal stories of women and youth who have chosen trades and the union as a career path and the differences they are making within their communities.</p>	



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10:00 a.m.	<p><b>Aboriginal Water and Wastewater Association of Ontario (AWWAO) – Supporting First Nation Water and Wastewater Operators since 1995</b> with Mr. Wes Morriseau, Vice-Chair, Aboriginal Water and Wastewater Association of Ontario</p> <p>The Aboriginal Water and Wastewater Association of Ontario’s (AWWAO) goal is to attain assurance that First Nations water and wastewater treatment plant operators are confident, efficient and effective in managing the purification of the water and the treatment of wastewater in their community. AWWAO acts as a voice and forum for First Nation plant operators in Ontario and to promote communications and networking among plant operators. This presentation will highlight the current objectives and supports available to operators to promote the importance of safe potable water supply; to promote the development and delivery of continuing education and training programs; to promote the importance of certification and licensing of plant operators; and the importance of establishing an effective operations and maintenance management plan.</p>
10:30 a.m.	Health Break in Tradeshow
10:45 a.m.	<p><b>Concurrent Workshop Sessions:</b></p> <p><b>Workshop #1</b> <span style="float: right;">Location: Peller Estates Ballroom (ABCD) <i>Simultaneous Interpretation into French Available</i></span></p> <ul style="list-style-type: none"> <li>• <b>Medium-Term Action to Improve Water and Wastewater in First Nations Communities</b> with Mr. Chad Westmacott and Mr. Nelson Ferguson, Indigenous Services Canada This workshop will focus on actions that can be taken between now and 2021 to improve water and wastewater conditions for First Nations. Continuing from Indigenous Services Canada’s plenary presentation, ISC will share updates and seek feedback on initiatives to support water and wastewater operator training, work on supporting alternative service delivery models, and other innovations in the field of water and wastewater. There will be a discussion on further innovative actions and new approaches that could be taken to support the long-term sustainability of water and wastewater infrastructure for First Nations communities and what roles the Federal Government could take in supporting these actions.</li> <li>• <b>State of Drinking Water in Ontario’s First Nations Through a Regulator’s Lens</b> with Ms. Indra R. Prashad, P.Eng., Ministry of the Environment, Conservation and Parks As First Nations in Canada move towards a rights-based framework for water management on reserves, the presenter is interested in sharing their experience in working with First Nations in Ontario on resolving drinking water advisories, developing sustainable approaches to water management and implementing strategies for operator training.</li> </ul>



### Workshop #2

Location: Room 221, 2nd Level

- **Advanced, Lab-Equivalent Microbiological Methods Successfully Implemented in Quebec for Local Control and Maximum Protection of Water Quality and Human Health** with Mr. Eric Marcotte, TECTA-PDS, Dr. Stephen Brown, Queen's University and Mr. Larry Jacobs, Kahnawake Shakotiiia'takehnhas Community Services

Microbiology is being revolutionized by advanced technologies that allow for lab-equivalent testing to be done locally, leading to improved water quality, reduction of drinking water advisories and improved protection of human health. This presentation will review how 25 Quebec-based First Nations have utilized fully automated, lab-equivalent and easy-to-use TECTA testing systems, assisting them to take both responsibility for and authority over their final drinking water testing.

### Workshop #3

Location: Room 222, 2nd Level

- **Water First Internship to Address Local Water Challenges in First Nation Communities** with Ms. Kendra Driscoll, Water First, Mr. Eric Vautour, Sheguiandah First Nation and Ms. Naomi Mandamin, United Chiefs and Councils of Mnidoo Mnising  
Water First will present the final outcomes of its pilot project, the Water First Internship. The Water First Internship collaboratively addresses local water challenges in First Nations communities by providing young adults with a 15-month paid internship opportunity. Participants are offered customized skills, training and tutoring to obtain recognized certifications in drinking water treatment and environmental water quality monitoring. The pilot Internship program was developed through in-depth collaboration with the project's partners: United Chiefs and Councils of Mnidoo Mnising (UCCMM); Wiikwemkoong Unceded Territory; and Union of Ontario Indians. Together, the partners successfully piloted the program with all seven First Nations on Manitoulin Island, Ontario.

- **Developing Indigenous Environmental Keepers** with Ms. Cheryl Recollet and DIEK Participants

The Developing Indigenous Environmental Keepers Program is a meaningful capacity development initiative created by Atikameksheng Anishinabek, Sagamok Anishinabek and Wahnapiatae First Nation. The program focus is on fostering the development of environmental stewards in our Nations. Industry and government partners provide site tours, specialized lectures and internship opportunities.



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### Workshop #4

Location: Room 223, 2nd Level

- **Implementing Safe Drinking Water Programs for First Nation Communities: Lessons Learned** with Mr. Ryan Boyd and Mr. Bill Ironstand, Battle River Treaty 6 Health Centre

The Safe Drinking Water Program developed by Battle River Treaty 6 Health Centre (BRT6HC) was one of the first of its kind, beginning in 1997, and continues to serve the First Nations serviced by BRT6HC. Facilitated primarily by in house water technicians, this Safe Drinking Water Program provides weekly monitoring of distribution systems, annual chemical analysis of raw and treated water, and monitoring of disinfection byproducts. It also provides testing and inspection of cisterns, individual wells, and water delivery trucks. An important part of this service is the investigation of water quality issues and supporting the efforts of their First Nations' to provide members with high quality potable water.

- **Southern Chiefs' Organization's Collaborative Approach for Environmental Governance** with Grand Chief Jerry Daniels, Ms. Gabriela Jimenez and Mr. Steve Strang, Southern Chiefs' Organization

Southern Chiefs' Organization (SCO) has been developing key partnerships to overcome environmental challenges in the region, especially on water issues. The Grand Chief brings his leadership to others to create opportunities for collaborative work to strengthen the communities' objectives and to focus on the solutions needed. These partnerships are building bridges between First Nations and all levels of governments in order to find solutions that work for all. Thus, in this presentation, they will speak to the need of standing up to have an active role in water governance, and the importance of a collaborative approach with Indigenous and non-Indigenous organizations to achieve SCO's environmental and political goals.

### Workshop #5

Location: Room 225, 2nd Level

- **Kikawinaw Askiy: Source Water Protection Planning at Okanese First Nation, Treaty 4** with Dr. Robert Patrick, PhD, MCIP, RPP, University of Saskatchewan, Mr. Cade Tuckanow-Starr, Okanese First Nation and Ms. Penny Tuckanow, Okanese First Nation

Climate change threatens Kikawinaw Askiy (Mother Earth)—our lands, water, fish, and plants—all that gives life. Okanese First Nation aspires to achieve reconciliation with Kikawinaw Askiy by restoring our sacred ecology of how to live on the land in a respectful and life-sustaining way. In 2018 Chief Marie-Anne Day Walker-Pelletier and Council gave approval for a source water protection plan with the goal to protect source water for future generations. Groundwater is our only source of drinking water. Climate change and past land use practices threaten our sacred and life-giving water. This planning process has partnered with the University of Saskatchewan in knowledge sharing and relationship building.



12:15 p.m.	Lunch Provided
1:15 p.m.	<p><b>Concurrent Workshop Sessions:</b></p> <p><b>Workshop #6</b> <span style="float: right;">Location: Peller Estates Ballroom (ABCD) <i>Simultaneous Interpretation into French Available</i></span></p> <ul style="list-style-type: none"> <li> <p><b>Highlights on Various Governmental Authorities and First Nations Communities and the Success of The Circuit Rider Training Program in Quebec</b> <i>with Eric Sioui and Phi Dung Phan, Regroupement Manit-Innuat</i></p> <p>Moderated by the representatives of Regroupement Mamit Innuat, a tribal service provider for the Circuit Rider Training Program (CRTP) of Quebec, this presentation will inform the participants about the program’s history and evolution noted among First Nations during the past 18 years. The presentation will highlight the importance and priority given on the program by various Governmental authorities and First Nation communities across the country. It will also contain a brief assessment of the training program, and boil water advisories listed at the regional level.</p> </li> </ul> <p><b>Workshop #7</b> <span style="float: right;">Location: Room 221, 2nd Level</span></p> <ul style="list-style-type: none"> <li> <p><b>Indigenizing a Technical Program – How to Transfer Process to Water Technology</b> <i>with Ms. Sarah Imran, MacPhail School of Energy, Southern Alberta Institute of Technology (SAIT)</i></p> <p>A collaboration between Indigenous communities, Industry and SAIT led to the development of the Indigenous Pipeline Monitoring program. The goal was to improve the program through Indigenization to begin teaching the Indigenized version to both Indigenous and non-Indigenous learners. In this presentation, the presenters will share their successes, student’s stories, lessons learned, and engage the audience in interactive exercises for applying this approach to their projects and content. They will also share their strategies on using this method with the Water and Wastewater Operator Certificate and the Integrated Water Management diploma which are being launched in the spring of 2019.</p> </li> </ul> <p><b>Workshop #8</b> <span style="float: right;">Location: Room 222, 2nd Level</span></p> <ul style="list-style-type: none"> <li> <p><b>Implementing Reconciliatory Calls to Action</b> <i>with Dr. Madjid Mohseni, University of British Columbia, and Mr. Irving Leblanc, P.Eng, Assembly of First Nations</i></p> <p>Historically in Canada, corporations, government agencies and even universities were influenced by geo-political and cultural barriers that separated Indigenous and non-Indigenous people. The presenters will describe the establishment of a new centre for mobilizing innovation and the subsequent formation of 15 strategic groups of regional Indigenous communities (anchors) as part of its mandate. Each anchor systematically collects and assesses existing knowledge of potential solutions, while capturing and weighing the perspectives of all rights-holders and stakeholders involved in water governance.</p> </li> </ul>



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### Workshop #9

Location: Room 223, 2nd Level

- **Medium-Term Action to Improve Water and Wastewater in First Nations Communities** with Mr. Chad Westmacott and Mr. Nelson Ferguson, *Indigenous Services Canada*)

This workshop will focus on actions that can be taken between now and 2021 to improve water and wastewater conditions for First Nations. Continuing from Indigenous Services Canada's plenary presentation, ISC will share updates and seek feedback on initiatives to support water and wastewater operator training, work on supporting alternative service delivery models, and other innovations in the field of water and wastewater. There will be a discussion on further innovative actions and new approaches that could be taken to support the long-term sustainability of water and wastewater infrastructure or First Nations and what roles the Federal Government could take in supporting these actions.

### Workshop #10

Location: Room 225, 2nd Level

- **Integrated Water Management – Monitoring Aquatic Environments using Indigenous Knowledge and Western Science in Conjunction** with Mr. Richard Nesbitt, *Hutchinson Environmental Sciences Ltd.*

The Canadian aquatic environment is affected by multiple stressors; understanding their individual influences are central to developing sustainable water management strategies and evaluating a variety of proposed projects in both developed and undeveloped watersheds. The presenter will describe how they have developed an innovative approach to assess the aquatic environment that integrates Indigenous Traditional Knowledge and western science into "One Voice", allowing Indigenous communities to have an even stronger input into Environmental Assessment and in the creation of water management strategies on title land and waterways.

2:45 p.m.

Health Break in Tradeshow

3:00 p.m.

### Concurrent Workshop Sessions:

#### Workshop #11

Location: Peller Estates Ballroom (ABCD)  
*Simultaneous Interpretation into French Available*

- **Operations and Maintenance (O&M) Policy Review /Asset Management Planning Pilot Studies** with Mr. Craig Baker, P.Eng. and Elmer Lickers, *Ontario First Nations Technical Services Corporation*

A status update to the O&M policy review currently being undertaken jointly with the AFN and ISC. There is general acknowledgement the current ISC O&M policy is dated and does not ensure that capital assets reach their design life. Thus this review is intended to reset O&M policy with the intent to ensure sustainable infrastructure for First Nations. The Ontario First Nations Technical Services Corp. is currently assisting 3



First Nations in Ontario with the preparation of their asset management plans. The strategies to complete the plans, the status of development of the plans and the anticipated deliverables will be discussed.

#### **Workshop #12**

Location: Room 221, 2nd Level

- **Overview of Fisheries Act and the Wastewater Systems Effluent Regulations for First Nations** with Ms. Sarah Radovan, Environment and Climate Change Canada and Mr. Nelson Ferguson, Indigenous Services Canada

The Wastewater Systems Effluent Regulations (WSER), made under the authority of the Fisheries Act, came into force on June 29, 2012, through a phased approach. Owners and operators of wastewater systems that are subject to the Regulations need to achieve the effluent quality standards, indicative of secondary wastewater treatment, by January 1, 2015. Those not meeting the standards need a transitional authorization and will have until the end of 2020, 2030 or 2040 to upgrade, depending on the level of risk associated with their wastewater effluent and the sensitivity of the receiving environment. This presentation will present the legislation and discuss the applicability of the WSER to First Nations and share current projects underway to support compliance with the WSER in First Nations as well as presenting an overview of funding programs for First Nations available from Indigenous Services Canada and Infrastructure Canada. There will also be an opportunity for First Nations and other participants to convey their views on the challenges and needs going forward regarding the WSER.

#### **Workshop #13**

Location: Room 222, 2nd Level

- **Ontario First Nations Technical Services Corporation's Circuit Rider Training Program (CRTP)** with Mr. Glen Goodman, Ontario First Nations Technical Services Corporation

The Ontario First Nations Technical Services Corporation's Circuit Rider Training Program (CRTP) provides all of Ontario's First Nation's Operator's with water and wastewater systems training. Supported by Indigenous Services Canada, the CRTP facilitates training services aligned with the Province of Ontario's licensing requirements. In both classroom & workplace settings, OFNTSC's team of Circuit Rider Trainers provide a curriculum of Certified Education Units (CEU's) and On-the Job-Training (OJT's). The CRTP allows First Nation operators to focus on maintaining their water and wastewater licenses and attain higher levels of qualification while ensuring that their communities water and wastewater systems are maintained in a sustainable manner.

- **Tri-Lateral Update on Status of Long-Term Drinking Water Advisories in Ontario, Water Plant Operator Salary Survey & Water and Wastewater Capital Needs in Ontario** with Ms. Tricia Hamilton, Ontario First Nations Technical Services Corporation  
OFNTSC completed a comprehensive, province-wide survey of the condition and capital needs of First Nation water and sewage systems in Ontario. 75 First Nations were



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interviewed on the status of their water systems and 44 on the status of their sewage systems. Tricia will be presenting these interim findings, which include the % of systems which appear to not comply with regulations, prevalence of common water quality exceedances based on Health Canada sampling, overall system age and condition, safety issues, and overall areas of concern. Part of this work including surveying the salaries of operators and comparing what First Nation operators are paid against standard operator salaries for municipalities. Tricia will also provide an update of the trilateral group and its work in monitoring the status and ensuring action plans are in place for every long-term drinking water advisory in Ontario.

### Workshop #14

Location: Room 223, 2nd Level

- **Old Systems and New Management Ideas – How Can Your Management and Care of Water & Wastewater Assets Support an Asset Management Plan?** *with Mr. Jason Speers, Ontario Clean Water Agency*

Join us for an update of what is happening with the management of water and wastewater systems as it relates to the evolving world of asset management planning. We will discuss the recent experience in Ontario regarding the setup of a work management system and the value it can bring for community system owners. Using the data from the maintenance system supported by field condition assessments, asset planning moves from “just another report on the shelf” to a real working guide for the sustainable future.

### Workshop #15

Location: Room 225, 2nd Level

- **Receiving Water and Fisheries Assessments for Sewage Treatment Plants** *with Ms. Deborah Sinclair and Mr. Brent Parsons, Hutchinson Environmental Sciences Ltd.*  
Regulatory approvals for wastewater treatment facilities often require an Assimilative Capacity Study (ACS) to identify and predict impacts of wastewater treatment plant (WWTP) effluent on the receiving waters and to set effluent limits that will be protective of water quality and aquatic habitat. Fisheries assessments are commonly completed in tandem with ACSs to a) identify sensitive habitats and species; b) develop mitigation measures (e.g. construction timing windows); and c) identify preferred design solutions (e.g. effluent outfall location). The presenters have recently completed two studies (Driftpile First Nation and the Town of Erin) that successfully combined these assessments to set effluent limits and select appropriate effluent outfall locations.

4:30 p.m.

Adjourn for Day Two

**Day 3 – Thursday, February 28, 2019**

*Theme: Where Do We Want To Go?*

8:00 a.m.

Hot Breakfast  
Tradeshow Open

Peller Estates Ballroom (ABCD)  
Fallsview Theatre/Junior Ballroom





8:45 a.m.	Call to Order/Overview of the Day
9:00 a.m.	<p><b>Concurrent Workshop Sessions:</b></p> <p><b>Workshop #16</b> <span style="float: right;">Location: Peller Estates Ballroom (ABCD) <i>Simultaneous Interpretation into French Available</i></span></p> <ul style="list-style-type: none"> <li> <p><b>First Nations and Water in the 21st Century – Environmental Operators Certification Program - Planning for Success</b> <i>with Ms. Kalpna Solanki, Environmental Operators Certification Program, and Mr. Warren Brown, Lytton First Nation</i></p> <p>While there has been a great deal of discussion on the need for infrastructure dollars, an essential part of the solution, the Operators, is often overlooked. Yet, the research shows, over and over again, that Operators are vital for the success of any drinking water system. This presentation aims to provide information on why Operators are necessary to safeguard the health of a community, why an ongoing investment in Operator training and certification is imperative, and the importance of communication between Operators, the Band, and the members.</p> </li> </ul> <p><b>Workshop #17</b> <span style="float: right;">Location: Room 221, 2nd Level</span></p> <ul style="list-style-type: none"> <li> <p><b>Climate Change Resiliency and Adaptation considerations in Water System Design</b> <i>with Ms. Anna Comerton, Ph.D., P.Eng., and Mr. Jeff O’Driscoll P.Eng., IRP, Associated Engineering</i></p> <p>In support of Canada’s commitment to reduce emissions by 2030, Infrastructure Canada recently published a guidance document outlining the new assessment requirements for a range of large (&gt;\$10M) federally funded projects as well as projects qualifying for Disaster Mitigation and Adaptation funding, called Climate Lens. The overarching goal of Climate Lens is the facilitation of climate-focused behavioural change at the project level. Within the context of the design and operation of water systems, including water treatment plants and their processes, the benefits of climate resiliency and mitigation go beyond the minimization of risk. This presentation will provide a brief overview of the new Climate Lens guidance document, highlight opportunities for incorporation of climate change adaptation and mitigation measures in the design of water systems, and demonstrate these examples through case studies.</p> </li> </ul> <p><b>Workshop #18</b> <span style="float: right;">Location: Room 222, 2nd Level</span></p> <ul style="list-style-type: none"> <li> <p><b>Ammonia Permits and Lagoons: First Nations Communities and the Options Available for Beating Nutrient Limits</b> <i>with Mr. Francis Bordeleau, Nexom</i></p> <p>Ammonia limits are becoming commonplace in lagoon-based wastewater treatment facility permits nationwide as regulators seek to protect wildlife in receiving waterways. This is forcing First Nations in western Canada to make an often-difficult decision: can lagoons meet tight limits, even when water temperatures plunge? This was in fact the same question faced by Lake St. Martin, Manitoba. Through the lens of the case</p> </li> </ul>



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of Lake St. Martin's lagoon-based wastewater treatment facility, constructed in 2016, this presentation digs into the many local and scientific factors that can influence this decision. This presentation will also draw on the stories and experiences of other First Nations, namely Long Plain First Nation and Denesuline First Nation, and their initiatives to establish an upgraded WWTF that is not only relatively simple to operate but also discharges effluent safe for fish and other wildlife for years to come.

### Workshop #19

Location: Room 223, 2nd Level

- **The Role of Water Operators in Innovation** with Ms. Candace Cook, University of British Columbia

The core value of operators' participation in water innovation processes is now widely appreciated, yet industry has been slow in implementing appropriate mechanisms to facilitate their participation and harness the contribution of the operators in new product and service developments. This presentation introduces the Community Circle™, an award winning strategic model for innovation that places the operators at the heart of the innovation cycle, incorporating their insights at the early stages of problem solving and throughout the entire process. This presentation will look at several case studies that illustrate successful implementation of the model through the continuous engagement of water operators.

### Workshop #20

Location: Room 225, 2nd Level

- **Advancing Collaborative Water Stewardship: DataStream's Open Data Platform** with Ms. Carolyn DuBois and Ms. Lindsay Day, The Gordon Foundation

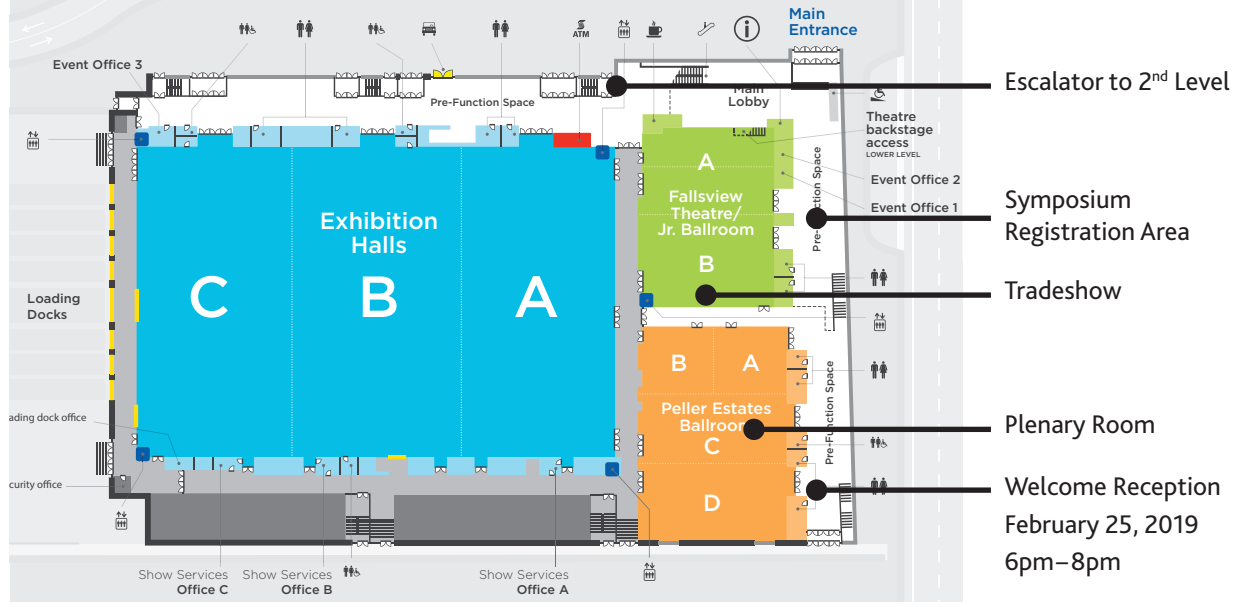
Taking care of water is a shared responsibility. Across Canada, diverse monitoring programs led by Indigenous and non-Indigenous governments, communities, watershed groups and academics are generating valuable information to track the health of freshwater ecosystems. Yet these datasets can be difficult to access and, in some cases, are not available at all. This is especially true for water quality data relating to ecosystem health. DataStream is designed to address this challenge by providing an open access, online platform for sharing and accessing water quality data.

10:30 a.m.	Health Break
10:45 a.m.	<b>Armchair Discussion: Te Pou Tupua &amp; Nancy Doubleday The Rights of Nature - The Rights of Humans in the 21<sup>st</sup> Century: Implications for Indigenous Peoples?</b> Followed by Question and Answer Session with Delegates
11:45 a.m.	Closing Remarks by Regional Chief Kevin Hart (Manitoba) Passport to Prizes Closing Prayer by Elder
12:30 p.m.	Symposium adjourns

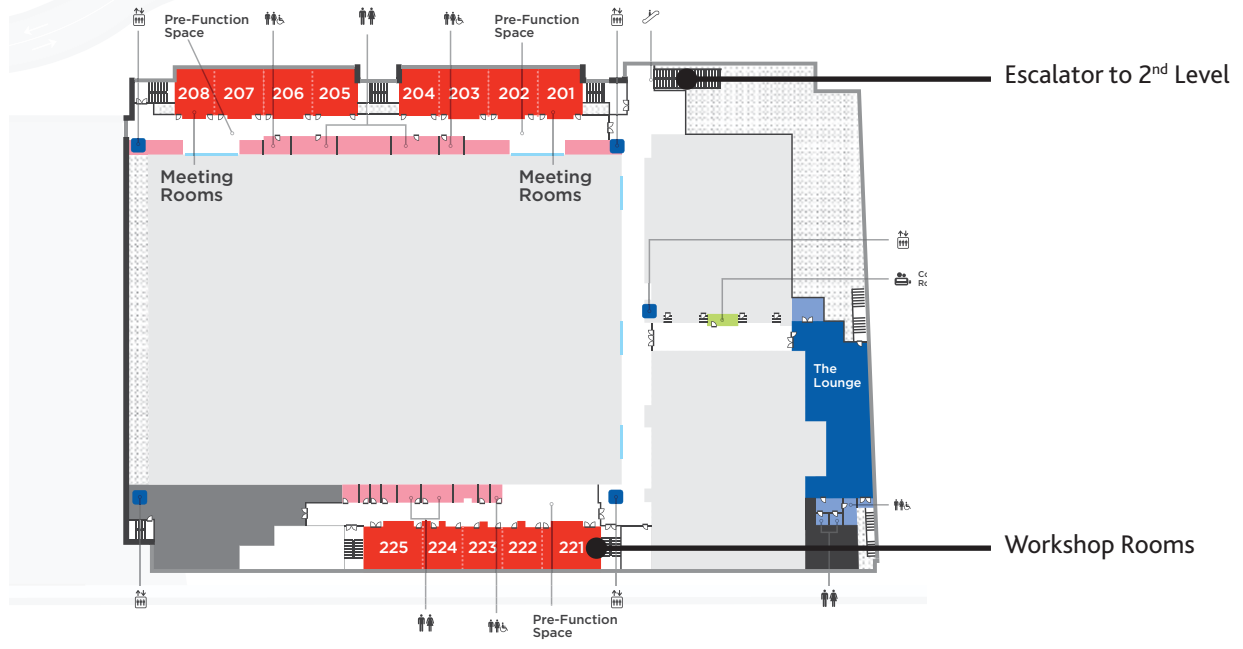


**THE SCOTIABANK CONVENTION CENTRE**  
6815 Stanley Avenue, Niagara Falls, Ontario

**Main level**



**Second level**





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### 2nd Annual AFN National Water Symposium and Tradeshow:

The Tradeshow is taking place on the Fallsview Theatre/Junior Ballroom, just down the hall from the plenary room, near the Registration Area. Please drop by and check out all the exhibit booths and artisans. Coffee/tea and snacks will be served in the Tradeshow throughout the Forum. You could win a great prize by visiting the exhibitors, having them sign your Passport to Prizes (available in your meeting kit) and handing this in for a draw during the Symposium Closing Activities on Thursday, February 28, 2019. Remember you need to be in the Plenary room during the Closing Activities to win!.

#### Exhibitor Listing:

Booth #	Exhibitor	Booth #	Exhibitor
1	Reed Manufacturing Co.	22	Associated Engineering
2	Ontario First Nations Technical Services Corporation	23	Near North Supply
3	Nexom	24	49N Clean Water Group
4	Canadian Accreditation Council	25	CLAW Environmental Services
5	AFN Health Sector	26	Aboriginal Water and Wastewater Association of Ontario
6	Metcon Sales	27	Colliers Project Leaders
7	Bionest	28	Epcor Utilities
8	Sapphire Water	29	Living Sky Water Solutions
9	LGL-Ltd	30	Napier Reid
10	Canada Tank Solutions	31	Tecvalco Ltd
11	Enviro-STEP Technologies Inc.	32	A6N AECOM - Six Nations
12	RJ Burnside	33	Environmental & Climate Change Canada
13	Chamberlain Artisan	34	Sediment Research & Minerals Ltd
14	BI Pure Water	35	Hutchinson Environmental Services
15	Nickel Institute	36	Dyna Pro Environmental
16	OXYL CLEAN	37	Global Water Futures
17	Pathogen Detection Systems	38	Arcadis Canada Inc.
18	Corix Water Products	39	Greatario Engineered Storage Systems
19	Walkerton Clean Water	40	S. Burnett & Associates Limited
20	LiUNA	41	Dreamcatcher Promotions
21	UA Canada		



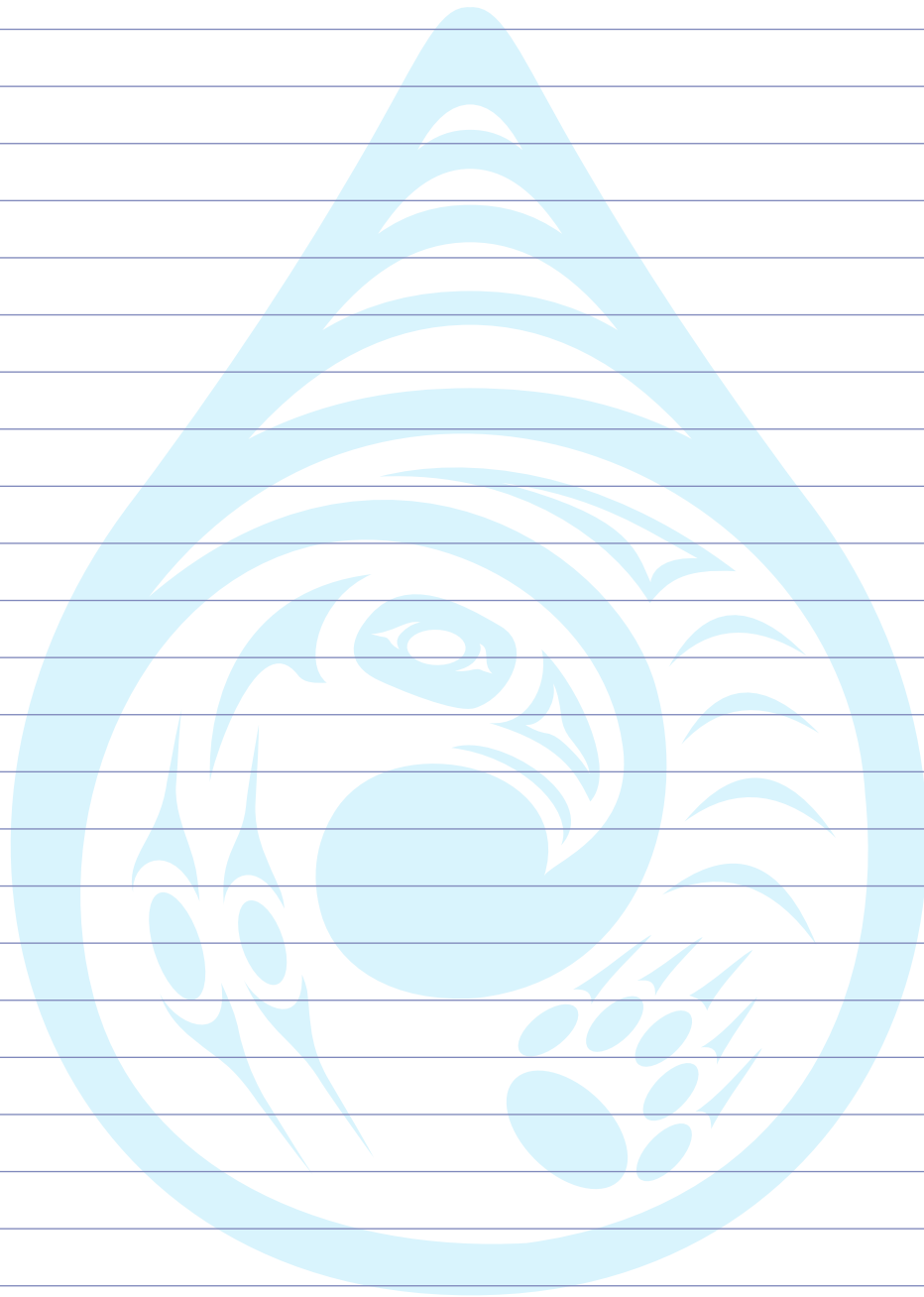
NOTES

A series of horizontal blue lines for taking notes, overlaid with a large, light blue, stylized graphic of a water drop containing a circular swirl pattern.



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### NOTES





NOTES

Lined area for taking notes, featuring a large, light blue water drop graphic in the center.



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