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**ONTARIO FIRST NATIONS TECHNICAL SERVICES CORPORATION**

**Ontario First Nations Water and Wastewater Commission**

**Final Report**

**January 22, 2019**

**OFNWWC**  
**January 22, 2019**  
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This report has been provided based on feedback from a presentation to the Ontario First Nation Technical Services Corporation Board of Directors completed December 12, 2018. Based on feedback from that presentation, this summary has been provided.

## **BACKGROUND DISCUSSION**

Building a First Nation Water and Wastewater Commission (FNWWC) has been a topic of discussion among Ontario First Nation political entities since before the turn of this century. In 2013, the Chiefs in Assembly passed Resolution #13/19 that mandates OFNTSC to pursue the lead in exploring the creation of a First Nations Water Authority.

Creating the First Nations Water and Wastewater Commission has been elusive. One contributing factor is the diversity of Indigenous peoples throughout Ontario. Another significant factor has been lack of funding as well as provincial or federal policy and regulations that overstep treaty relations and are designed for Canadian municipalities.

Gaining political buy in from Ontario First Nation communities in the form of BCR's has not occurred as of yet.

The recent report dated April 2018, from the Technical Task Force on drinking water regulations, provides a possible technical and regulatory road map to guide First Nations on adopting or adapting current regulatory frameworks. A similar approach can be used in the formation of the FNWWC.

There are a number of entities providing water and wastewater training services to First Nations across Ontario. The CRTP is one such program managed by OFNTSC and the KO Centre of Excellence is another. The FNWWC will need to establish strong working/collaborative relationships with those entities.

Recently, OFNTSC contracted Neegan Burnside to complete a capital needs review for Ontario First Nations issues amid concerns for water and wastewater infrastructure. The November 2018 reports estimated in great detail the current capital need for outstanding water and wastewater needs to be \$845 million and \$340 million, respectively. Those estimates do not include O&M or training capital needs. A request was to be made to INAC to release all First Nation technical information to OFNTSC to assist in its initiatives. The FNWWC can be used to collate all First Nation technical water and wastewater information and potentially coordinate maintenance schedules, training requirements, upgrades as well as economies of scale for parts and offer planning and engineering services.

In 2018, the Atlantic First Nations established a First Nations Water Authority (AFNWA). Grippled with similar challenges as Ontario First Nations, the Atlantic First Nation Secretariat developed the AFNWA to provide technical services to member First Nations for water and

wastewater issues. Participation in the AFNWA was based on BCRs from each of the 23 member First Nations. To establish the AFNWA three separate reports were commissioned:

- Corporate Structure Analysis;
- Financial Analysis; and
- Life Cycle Analysis.

The AFNWA services 23 First Nations using a 'hub and spoke' approach, similar to the Ontario Clean Water Agency. It is scalable; other First Nations can join in. The non-profit entity has a CEO with 15 Board of Directors, 12 First Nation with 3 technical members. There is also a separate Elders Advisory Council to ensure the traditional values and culture are incorporated in the day to day operations.

Moving the FNWWC forward has to consider the following:

- the recent election of a Conservative Ontario government that has not presented a strong understanding nor consideration for First Nations concerns in general;
- Provincial funding cuts to First Nation entities including COO are likely as a result of the Ontario Conservative government;

### **RECOMMENDED NEXT STEPS**

Assuming COO continues to support the FNWWC, the OFNTSC should seek approval from COO to conduct a survey/poll for individual First Nation support for the FNWWC. That support should include a BCR from individual First Nations. Without a critical mass of individual FN political support the FNWWC will not be viable.

OFNTSC can conduct the survey/poll under the supervision of COO but at no cost to COO. Gaining individual political support will require COO leadership as well as a strategic marketing and outreach plan, which may include, draft BCRs, presentations, conferences as well as meetings with individual First Nations and PTO's.

OFNTSC should continue to assemble technical and financial information in relation to First Nation water and wastewater operations in Ontario. This information should be developed into a CRM type database that might include: location, type of water and wastewater technologies, maintenance schedules, training upgrades and requirements, capital requirements, water and wastewater operator information. This information could be used to support the FNWWC once it becomes established.

Once clear political support has been garnered for the FNWWC a similar trajectory can be followed in the establishment of the AFNWA:

- Corporate Structure Analysis;
- Financial Analysis; and

- Life Cycle Analysis

## **REASONING**

The historical relationship Indigenous people have had with water has been upset by resource development, science, technology and non-Indigenous societal and political constructs. These and other outside forces have alienated First Nations people from control over their water resources. Currently, consuming tap water or surface water in most communities is considered a safety issue. Yet Indigenous teachings are clear, 'water is life' and as such, water holds a sacred place in an Indigenous world view.

Indigenous Nations have come together in the past. Under the 'Dish with One Spoon', a pre-confederation treaty, Indigenous Nations shared and managed a common resource. The FNWWC is an opportunity to revisit a shared resource approach and put Indigenous values behind science and technology and restore their relationship of trust with water.

## **EXECUTIVE SUMMARY**

The Ontario First Nations Technical Services Corporation is the founding organization in Canada whose purpose is to provide technical and advisory services to all First Nations in Ontario, with a specific focus on those communities not affiliated with a Tribal Council. There are 7 Unaffiliated Northern First Nations and 11 Southern.

OFNTSC prepared a proposal for a *First Nation Water and Wastewater 2012 Commission (FNWWC2012)* in November 2012 and then a business plan for an *Ontario First Nation Operating Authority (OFNOA)* in June 2013. Resolution #13/19 mandates OFNTSC to pursue the lead in exploring the creation of a First Nations Water Authority (or Commission), with the stipulation that BCR's would be required of opt-in communities. The mandate remains from 2012, and this report provides an update to the activities within First Nation Water and Wastewater initiatives. Any updates to the OFNOA would require a secondary supplement to this update report.

## **THIS REPORT**

- Recognizes the need to update the Ontario First Nations Water & Wastewater 2012 Commission proposal from OFNTSC
- Considers recent changes to both Federal and Provincial legislation and policy to water and wastewater regime(s)
- Recognizes the Federal government's commitment (2016) to implement UNDRIP, particularly Free, Prior and Informed Consent for laws and regulations related to First Nations Water and Wastewater; and the UN recognized human right to water and sanitation

- Recognizes existing First Nation political support via resolutions (AFN SCA 07/18 and COO AOCC 13/19)
- Outlines an approach for consideration to create an autonomous Ontario Region First Nations Water and Wastewater Commission
- Provides an update on current technical contexts and considerations, with reference to the outcomes of the Regional Water Task Team’s regulatory analysis; including the formation of a body to review W/WW infrastructure and development standards & enforcement provisions
- Provides anecdotal reflection of existing Tribal Council-based Hub governance case studies
- Examines appropriate inclusion/consideration of traditional ecological knowledge (TEK), e.g. role of Women’s Water Commission
- references program linkages to the multi-barrier approach, source-tap-source, e.g. OFNTSC’s Source Water Protection Planning Training, etc.
- Provides an update on current technical contexts & considerations
- Considers extended and enhanced contributions beyond the CRTP mandate which support FN Operators
- Is in support of, but not exclusive to, the Ontario Region First Nations Water and Wastewater Operators who are receiving direct support from the Current Circuit Rider Training Program (CRTP)

## **LIMITATIONS**

While this proposal may recognize and consider law and regulatory authority; this document is primarily developed to update existing examples and options that would meet the future operational needs of First Nation Water and Wastewater infrastructure. An approach must maintain First Nation autonomy and support technical capacity development at the local First Nation level while supporting existing First Nation water-related organizations. This document provides a limited review of the following:

- Regulatory investigation or enforcement mechanisms and authorities
- Governance models
- Cultural Preservation
- Jurisdictional Land and Source Water Protection issues

## **NEXT STEPS**

The intent of this update report is:

- continue dialogue to develop a FN W/WW Commission framework;
- seek input from First Nations leadership and technical working groups including: recommendations by the OFTSC Technical Task Force to develop a body to review

W/WW infrastructure development standards and manage enforcement provisions (OFNTSC TTF May 2018).

OFNTSC's role in creating a FN Water and Wastewater Commission is limited to the technical/scientific-based delivery of services. Further, its priority focus is on *service delivery to 18 Unaffiliated Communities*.

Each Provincial Territorial Organizations (PTOs) will likely pursue their own approach to assume leadership roles in water and wastewater management. The Union of Ontario Indians (UOI) and the Association of Iroquois & Allied Indians (AIAI) have recently conducted independent facility, training and O&M assessments for their member communities. This is a continuation of effort from Ontario First Nations' Water Crisis Summits, held in October 2016 & April 2017 respectively.

All but a few of OFNTSC's primary unaffiliated client communities belong to one of the 4 PTOs. Hence, OFNTSC can only provide support to the client communities, as requested, towards this multi-organizational pursuit of establishment of First Nations' led Water Commission(s).

#### **SUMMARY OF POLITICAL EFFORTS AND SUPPORT FOR OFNW/WWC**

OFNTSC prepared a Proposal for a FNs Water & Wastewater Commission in November 2012 and then a Business Plan for an Ontario First Nation Operating Authority (OFNOA) in June 2013. In 2013, the Chiefs-in-Assembly passed Resolution 13/19, "Moving Forward with a First Nations Water Authority". Resolution #13/19 mandates OFNTSC to pursue the lead in exploring the creation of a First Nations Water Authority (FNWA) with the stipulation that BCRs would be required for all opt-in communities.

#### **2016 Regional Think Tank: Ontario First Nations Working Group on Water (OFNWGW):**

In the Spring of 2016, the Chiefs of Ontario (COO) Secretariat convened a multi-disciplinary Working Group/Think Tank meeting on water for which the establishment of First Nations-run agencies specific to all facets of water management was considered a top priority (Ontario First Nations Working Group on Water - OFNWGW). Resolution #13/19 continued to be relevant to OFNTSC's 2012 proposal to create a First Nations Water Commission (community participation via BCR).

Key recommendations derived from that meeting are consistent with previous national and regional sentiments for the pursuit of First Nation(s)-run water management entities. The meeting was planned and facilitated by COO in collaboration with AFN and OFNTSC staff and other experts and was attended by 20 participants from the OFNTSC Water Task Force and Board, Tribal Councils, PTOs, and COO Chiefs Committee on Environment (CCE) appointees. Participants included 6 political leaders, 14 technical staff, and over 7 experts in the areas such as traditional teachings, national water & infrastructure, engineering, and indigenous law. Over

the two-day meeting, the group discussed: source water protection; enforcement and compliance; legal standards; short, medium and long-term priorities; and options for First Nations water agencies. The Working Group identified several priorities:

- infrastructure investment
- operator training and certification
- appropriate inclusion of traditional knowledge (TK) protocols
- sustained assertion of inherent & human rights specific to water security/sovereignty
- culturally appropriate source water protection protocols, &
- proper monitoring

Technical roles identified would include:

- train system administrators
- support operator capacity & training
- build & support technical support networks, &
- provide technical support to repair & maintain systems and plants

### **First Nations Led Approach (Chiefs) Working Group**

Subsequent Ontario Regional First Nations' Water Crisis Assemblies were convened in the Fall of 2016 and again in the Spring of 2017. The creation of a First Nations Led Approach (FNLA) Work Group (WG) of Chiefs followed. As discussed earlier in this update report, the FNLA WG have met with the OFNTSC to confirm their approach to Water and Wastewater initiatives. Two First Nations' Water Crisis Summits were convened in (Oct. 2016 & April 2017) from which emerged the First Nations Led Approach (FNLA). On Nov. 16, 2016, the Anishinabek Nation Grand Council passed a Resolution supporting the FNLA. Subsequently, in Oct. 2016, a Terms of Reference (ToR) was created for a FNLA Working Group, comprised of (7) Chiefs Linda Debassige, Shining Turtle, Dean Sayers, Marcia Brown Martel, Steve Miller, Duke Pelletier & James Cutfeet. The Mandate & Role of this the FNLA WG is to develop defining principles for a "Governing Organization."

Subsequent to the First Nations Water Crisis Declaration made in October 2016, the Working Group, with the support of COO & OFNTSC, were charged with developing recommendations to the Chiefs on how to properly organize and create productive, strategically collaborative roles, order and communications among key players in water and wastewater management.

COO was to develop an Advocacy Work Plan to advance implementation strategies and the decisions of the Chiefs-in-Assembly. The Ontario Regional Chief (ORC) was to continue to advocate at both the regional and national level for non-discriminatory fiscal funding arrangements, proper Level of Services Standards and adequate funding that addresses previous gaps, as well as future needs for First Nations in Ontario.



In spring of 2018, OFNTSC requested to INAC (AANDC/ISC) a release of all First Nation technical information pertinent to existing water initiatives (OFNTSC TTF 2018). Follow-up to this request is required. A further request was made to COO for a release of the Advocacy Work Plan, and further follow-up from the November 2018 meeting held in November 2018 between OFNTSC, Ontario Regional Chief Archibald and the FNLAWG is required.

### **Current Progress**

In November 2018, OFNTSC held a meeting with Ontario Regional Chief Roseanne Archibald & the First Nation Led Approach (FNLA) Working Group Representatives Chiefs Debassige and Shining Turtle pursuant to the Anishinabek Nation Grand Council FNLA Resolution and Terms of Reference (November 16, 2016). The Working Group confirmed the charting of their own path for Water and Wastewater initiatives.

### **Walkerton Report Recommendations Related to First Nations Water & Wastewater**

Many recommendations related to First Nations Water and Wastewater issues were highlighted in the Walkerton Inquiry and final Commission report. They are as follows:

**Recommendation 1:** Drinking water sources should be protected by developing watershed-based source protection plans. Source protection plans should be required for all watersheds in Ontario.

**Recommendation 88:** Ontario First Nations should be invited to join in the watershed planning process outlined in Chapter 4 of the Walkerton Report.

**Recommendation 89:** First Nations and the federal government should formally adopt drinking water standards, applicable to reserves, that are as stringent as, or more stringent than, the standards adopted by the provincial government.

**Recommendation 90:** First Nations and the deferral government should consider moving to a quality management standard over time, even if the consequence is that several communities, perhaps both reserve and non-reserve, might collaborate on a regional basis, or that First Nations communities might choose to contract with other to manage their water supply systems.

**Recommendation 91:** The provincial government should require the Ontario Clean Water Agency (OCWA) to offer it services to First Nations band councils for operative on-reserve water systems on a normal commercial basis.

**Recommendation 92:** The provincial government should actively offer, on a cost-recovery basis, It's training facilities and curriculum to First Nations water system operators.

**Recommendation 93:** As a matter of principle, the provincial government should make technical assistance, drinking water testing, inspection, and enforcement available to First Nations communities on a cost-recovery basis, if requested.

Provincial policies, programs, legislation and regulations affect both the quality and quantity of community waters thereby establishing a strong potential for infringement on the inherent, treaty, Aboriginal title, international/domestic charter, and human rights of First Nations of Ontario.

## **SUMMARY OF REGULATORY AND TECHNICAL CONSIDERATIONS FOR OFNWWC**

Early in 2018, OFNTSC initiated a strategic 5 –year planning process to establish goals and actions to explore enhanced and extended programs, as well as innovative ideas concerned with organizational stability and growth. The plan will maintain mandated core services, and consider evolving client needs and community development. This planning exercise will be in tandem and consistent with the development of a multi-year business plan to create the First Nations Water & Wastewater Commission (FNWWC).

### **Technical Task Force Review of the Safe Drinking Water for First Nations Act Ontario Region, 2018**

The proposed *Safe Drinking Water for First Nations Act (SDWFNA)* incorporated provincial legislation by reference and in 2015, AANDC contracted the Institute of Organizational Governance (IOG) to review the SDWFNA and developed a report with 11 ‘essential regulatory components’. OFNTCS formed the Technical Task Force (TTG) to review the IOG report and determine possible implications for Ontario First Nations. The TTF met four times in 2015 and 2016 to review the individual analysis of the 11 elements with an Ontario-centric focus. Generally, the Task Force found that the elements relating to the conditions and treatment standards for the water itself were readily adaptable (and have already been recognized as best-practice) while the provincial administrative and governance superstructure established by Ontario to manage water related issues are not adaptable to First Nations.

The Task Force identified several consistent themes throughout their analysis:

- A significant capital investment is required in Ontario to bring the physical equipment up to the standard necessary to meet the identified standard in the regulation. As well a significant increase in O&M funding is required to ensure water and wastewater infrastructure is maintained at a level to ensure that infrastructure meets its design life.
- A training methodology is required to facilitate the ongoing training and certification of First Nation operators, with a special emphasis on efforts to conduct the training and examinations in indigenous languages.

The Technical Task Force made further recommendations in Spring 2018 that are adaptable to existing legislation:

- Develop First Nations capacity to complete inspections & enforce compliance
- Develop a process for monitoring and enforcement of the standards

- Form a body to review W/WW infrastructure development standards & manage enforcement provisions
- Develop a First Nation approved permit process for expansion to sewage works
- Identify a First Nation training entity, transition the Grade 12 requirements & translate training materials and exams into Indigenous language(s)
- SDWFNA standards as a best practice
- Investigate alternatives to laboratory testing in remote communities
- Continuous monitoring equipment
- Communication protocols & procedures and transition planning
- Enhanced education/training per requirements

The Technical Task force also highlighted 9 elemental regulatory components:

1. Protecting source drinking water
2. Drinking water systems (location, construction, O&M, decommissioning)
3. Distribution of drinking water and collection of waste-water by truck
4. Operator training & certification
5. Treatment standards
6. Monitoring, sampling, and testing
7. Collecting, recording, & reporting of information
8. Handling, use and disposal of wastewater treatment products
9. Emergency measures in response to the contamination of drinking water

## **Ontario First Nation Water Systems Capital Needs for Water, 2018, Neegan Burnside**

The Ontario First Nation Water Systems Capital Needs for Water in Ontario Report was completed November 23, 2018 by Neegan Burnside to understand the current capital issues and needs for First Nations in Ontario. This did not include communities on long-term boil water advisories as Actions Plans are already in place to address them.

### **Water Capital Need**

The findings indicate there are 926 Water Projects identified on 75 First Nations (excluding Six Nations), totalling \$472,860,000. 225 of these projects were categorized as operations and maintenance (O&M) and training projects, which are generally outside of this scope of work. The remaining 701 projects are Capital Projects, with a cost of \$464,456,000.

Out of the 701 projects, 645 (92%) qualify as “Minor Capital” projects by Indigenous Services Canada (ISC)’s definition of less than \$1.5 million. These minor projects have a total cost of \$58,964,000, 13% of the total capital need. Most of the minor capital projects are monitoring and reporting (22%), treatment (20%) distribution (14%), and building (12%).

Six Nations of the Grand River (Six Nations) have identified their capital water needs as \$200,500,000. This value is based on a 2015 engineers estimate to expand the water system to service 2,522 houses.

Total need was estimated as **\$844,553,000** by assigning an estimate of \$6,193,000 per community to 29 First Nations yet to be included in this study.

## **Ontario First Nations Wastewater Systems Capital Needs for Wastewater in Ontario, 2018, Neegan Burnside**

Neegan Burnside was retained to compile background information and interview stakeholders: First Nations managers and operators, tribal councils, and circuit riders to understand the current capital issues and needs for First Nations sewage systems in Ontario.

44 First Nations regarding 54 communal wastewater systems participated in the survey and the results are included in the Interim Report. The remaining First Nations will be contacted and included in the Final Report.

### **Wastewater Capital Need**

278 Wastewater (sewage) Projects were identified on the 44 First Nation communities, totaling \$213,234,000. 25 of these projects were categorized as operations and maintenance (O&M) and 33 were categorized as training projects, which are generally outside of this scope of work. The remaining 220 projects are Capital Projects, with a cost of \$210,885,000.

Out of the 220 projects, 189 (86%) qualify as “Minor Capital” projects by Indigenous Services Canada (ISC)’s definition of less than \$1.5 million. These minor projects have a total cost of \$25,437,000, 12% of the total capital need.

An estimate of \$106,329,000 was assigned to the 23 communities with communal wastewater systems to be contacted. An estimate of \$150,000 for a feasibility study and \$200,000 for septic field repairs were assigned for the remaining 66 communities on septic systems, totalling \$22,450,000.

The total capital need is estimated as **\$339,614,000**.

### **FEDERAL LEGISLATION WITH AFN INPUT, UPCOMING**

Currently, the Assembly of First Nations is coordinating First Nations co-drafting of new legislation along with Indigenous Services Canada (DISC). It is expected that that the regional regulatory review (First Nations Engineering Report) will serve as the base for any impending federal process (before the October 2019 federal election).

OFNTSC Recommends a second Ontario Regional Think Tank meeting be convened ASAP with invitations to Regional Hubs, Tribal Councils, Large First Nations, Unaffiliated FNs, FNLA Working Group of Chiefs and the Chiefs of Ontario to map out roles and responsibilities, vision and mandate development, corporate structure to create the inaugural Ontario Regional First Nations Water and Wastewater Commission.

## WATER PLANT OPERATOR TRAINING

### FEDERAL FIRST NATION WATER MANAGEMENT STRATEGY FRAMEWORK (FNWMS)

#### Quantifying Use and Quantity

In 2008, the Government of Canada produced a, “First Nations Handbook for Community Water Use (Conservation) Planning” tool for First Nations communities to assess their water use and plan and manage their water systems. The handbook production occurred within *the Framework for the First Nations Water Management Strategy (FNWMS)*, which claimed:

“A water use assessment is a key component of an overall community plan, not only because an assessment will help ensure the community is supplied with safe and reliable water, but because it can enable economic development. The water use assessment provides the baseline information necessary to make informed decisions with respect to the community's water supply.”

Included in that Handbook were details of pilot studies involving the *Chippewa of Nawash Unceded First Nation (Unaffiliated)* and the *Matachewan First Nation (Wabun Tribal Council)*.

The Ontario Clean Water Agency (OCWA) was retained to provide engineering and operational services to the Matachewan First Nation as part of the sustainable water use pilot project, which included the effectiveness of electronic work sheets and implementation of INAC's (then) Safe Water Operations Program (SWOT). To complete General Water Assessments for the community (60 people, 37 households), a chart recorder capable of continuous recording flows (flow totalizer) every hour on a daily basis was installed downstream the high lift pumps before the treated water enters the distribution system to obtain 24-hour flow readings. One-months' worth of data was assessed between November 9, 2007 and December 10, 2007. Treated water flow to the distribution system was collected on an hourly basis during this period. The source of the water (then) was from two (2) community wells.

[The General Water Assessment focuses on the estimation of per-capita water consumption and the night time flows. As per INAC's design range, the average per-capita water use should be 250 – 275 litres per person per day and the night time flows should be lower than the 15% of the average daily flow.]

Advances in technological remote sensing, recording and monitoring have reduced the quality of the data collection methodology in both pilot studies.

## **FIRST NATION BASED APPROACHES/MODELS FOR WATER AND WASTEWATER**

### **2017 Atlantic Policy Congress – Atlantic First Nations Water Authority**

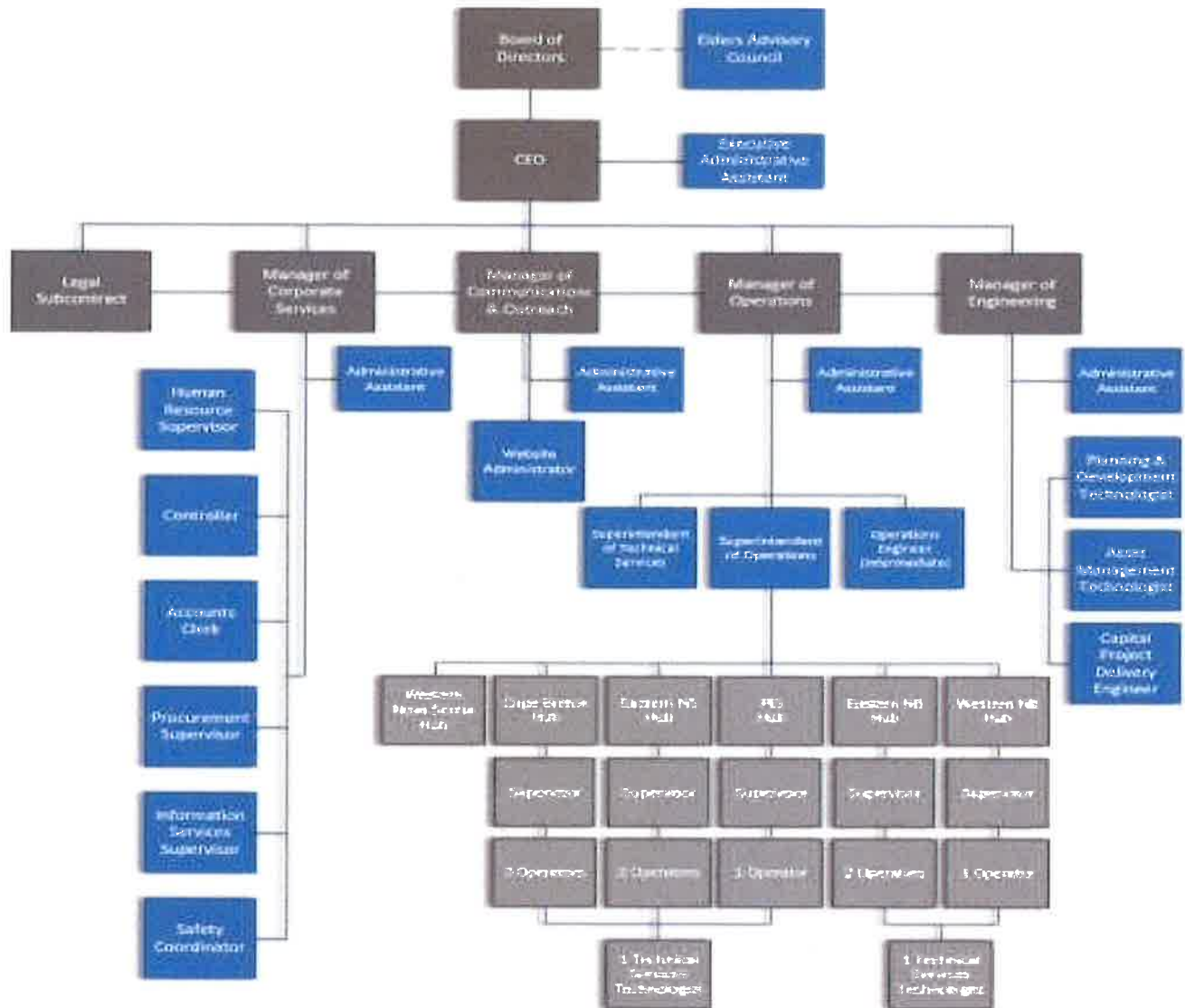
The Atlantic Policy Congress (APC) of First Nations Chiefs Secretariat welcomed the creation of an Atlantic FN Water Authority in spring 2018. The AFNWA was proposed to improve public health for First Nations communities and provide long-term economic opportunities for the Atlantic Region. The AFNWA in partnership with Dalhousie University, Halifax Water, Accelerator Inc., Ulnooweg Development Inc., and CBCL Ltd, have a preliminary 5-year Business Plan, Financial Analysis, Life-Cycle Analysis and Analysis of Community Water Safety Plans to provide a governance structure that will operate and maintain community water systems in the APC territory

(<http://www.watercanada.net/atlantic-first-nations-water-authority-appoints-board-of-directors/>)

The APC has selected the first members to serve as the Board of Directors to the AFNWA and has the support of “Water Canada” (watercanada.net). As part of the analysis leading up to the creation of AFNWA; governance frameworks and agreements were looked at with OCWA, EPCOR, SaskWater, OFNTSC, and Alberta FN water technicians to determine best practices. The final report leading to the creation of the AFNWA is titled: “Final Report: Corporate Restructuring for Atlantic First Nations Water Authority, August 2017.” See: [https://www.apcfn.ca/images/uploads/FINAL\\_REPORT - August 8 2017.pdf](https://www.apcfn.ca/images/uploads/FINAL_REPORT_-_August_8_2017.pdf).

The Corporate structure of the AFNWA includes a Board of Directors, Elders Advisory Council, CEO and several Management Teams comprised of Human Resource, Legal, Community Outreach & Engagement, Operations and Engineering Departments.

**Diagram 3: AFNWA Full Service Decentralized Corporation**



With respect to costing and the financial analysis, AFNWA reviewed actual costs, scope, and parameters to successful implementation and transition of the water authority. The engineering analysis involved a cost analysis for the infrastructure required to bring the existing water and wastewater assets, in the 21 participating First Nation communities across Atlantic Canada, into compliance with (provincial) regulations, and provide a high-level estimate of costs for on-going renewal of existing assets.

A third-party consulting firm finalized the Corporate Structuring for AFNWA, utilizing extensive community engagement and consultation workshops with First Nations Chiefs, Elders and water system operators. Consensus was built on the proper incorporation of traditional knowledge and culture, water provisions and wastewater services. It was recognized that, (as is the case with so many jurisdictions across the country), many of the First Nation communities have small systems and would need to rely on service agreements with neighboring municipalities.

External third-party service delivery agreements to deliver services continue to be utilized during the transition of the AFNWA, with the future goal of developing and adopting a full-service decentralized model. The AFNWA coordinates these activities which optimizes local benefits in relation to water and wastewater service delivery from the respective utility that reflects the communities it serves.

The key recommendations for the successful creation of the AFNWA have materialized and need to be highlighted for best practices to the potential creation of an Ontario First Nations Water and Wastewater Commission. The 8 AFNWA key recommendations are:

1. Adopt a full service. – decentralized model for the AFNWA incorporating a hub and spoke model for regional operations for optimal service delivery and stronger community relationships.
2. Locate the main office of the AFNWA within the service corridor between (Halifax and Moncton – could be replaced by Kenora/Thunder Bay/Toronto/Ottawa etc.) in a First Nation community to maximize local benefits and strengthen relationships. Regional offices associated with the decentralized corporate structure should also be located within First Nation communities to further maximize local benefits and strengthen relationships.
3. Contract a professional search organization to hire the CEO and senior managers to ensure top talent is retained.
4. Efforts should be made to hire all staff within one year after the decision is made to operationalize the AFNWA with a clear preference to hire from First Nations communities.
5. FNWA should adopt a formal training and development program for all staff employed by AFNWA.
6. Local operators should be hired wherever possible with an immediate focus on training and certification to align with skills-based pay.
7. HR strategies should recognize the experience and knowledge of staff currently employed in water and wastewater system operation and take a consistent approach to salaries, benefits, training and career development.
8. Communications and outreach are central to the success of AFNWA and full efforts must be made to engage communities in an open and transparent manner. To reinforce this principle, it is recommended that the Manager of Communications and Outreach report directly to the CEO and be an integral member of the senior management team.

## **TRIBAL COUNCIL HUBS**

### **THE KEEWAYTINOOK CENTRE OF EXCELLENCE -Water Quality training and monitoring via the Safe Water Project**

The Keewaytinook Okimakanak (Northern Chiefs Council) is a non-political Chiefs Council serving Deer Lake, Fort Severn, Keewaywin, McDowell Lake, North Spirit Lake and Poplar Hill First Nations. The organization is directed by the Chiefs of the member First Nations who form the Board of Directors. The Council provides services in the areas of health, education, economic development, employment assistance, legal, public works, finance and administration, and computer communications (K-Net Services). The Executive Director liaises with the six Chiefs, with the staff of the Council and with other organizations and governments. From 1997 to 1999, INAC provided infrastructure investments which allowed NEW water and wastewater treatment facilities to be built in EACH (KO) community, complete with distribution and collection networks.



The (KO) Centre of Excellence is a water operator training facility in Dryden, Ontario. It was established in 1999 to provide training and continuing education to water operators from First Nations, municipalities and the private sector. The Centre offers courses on water testing, treatment, and monitoring, and can certify operators to the level needed to manage water and wastewater treatment facilities without oversight. The Centre has been successful in assisting communities, private organizations and governments to preventively manage any water contamination event or threats to drinking water.

The KO Safe Water project is a First Nations initiative aimed at eliminating boil water advisories and empowering communities to manage their own drinking water. KO provides training, certification, operational support and technology to local First Nation water and wastewater operators. In order to achieve this self-sufficiency, the Safe Water Project offers local operators a range of training programs that recognize and are adaptable to the unique challenges faced by each community. The Project is currently operational in 19 First Nations, represented by four (4) tribal councils: Independent First Nations Alliance, Keewaytinook Okimakanak, Shibogama First Nations Council, and Windigo First Nations Council.

For communities that do not yet have fully certified water operators, the KO Centre of Excellence provides operational support to ensure that local water operators can carry out their work effectively and that communities can be confident in the quality of their drinking water. Fully certified water operators are on call 24/7 to offer support to local water treatment workers.

### **MOU: Keewaytinook Okimakanak/Northern Chiefs Council (KO) vs. OFNTSC vs. Walkerton Clean Water Centre (WCWC) [April 2017 – April 2020]**

The Core Objective of the MOU is to build capacity in First Nations communities through the design and delivery of water operating training, certification and mentorship to support the provision of safe drinking water.

The MOU contains provisions for the protection of intellectual property rights via non-disclosure agreements and training design and delivery will be customized to meet the needs of the participating communities. In addition, the develop of Continuing Education Programs with respective First Nation communities and/or Regional (Tribal Council) Hubs is being pursued.

Each collaborative initiative will be funded by provincial resources administered by the WCWC but certain initiatives may require cost-sharing provisions. In 2016, the Ministry of the Environment and Climate Change (MOECC) provided \$1.85 M for the development and delivery of training courses to benefit First Nations. Under the new Provincial Conservative government, this funding is not guaranteed beyond 2020, and may be facing funding cuts as early as fiscal year 2019.

### **Circuit Rider Training Program**

OFNTSC's Circuit Rider Training Program is the main vehicle by which most First Nations operators receive the required training to operate their systems. This program provides qualified experts who rotate through a circuit of communities, providing hands-on training for

the operators on their own system. Circuit rider trainers also help the First Nations with minor troubles and issues of operation and maintenance of their systems. ISC provides funds to support OFNTSC and engage circuit riders (third party water and wastewater system experts and OFNTSC in-house trainers who provide water and wastewater system operators with on-site, mentoring, training, and emergency assistance).

### **INAC's Safe Water Operations Program (SWOP)**

INAC established the Safe Water Operations Program (SWOP) in 2008. The program provided funding for First Nations to hire third party agencies to address ongoing water and wastewater issues. For example, if a community operator was having difficulty maintaining chlorine levels in treated water (a chemical process routinely used to kill bacteria), that community could access SWOP funding to hire a certified operator from an agency to address the problem. INAC ended the SWOP in March of 2015.

### **First Nation Source Water and Quantification Approaches**

#### **Source Water Protection Planning Training**

OFNTSC's Environmental Advisory, Technical and Training Delivery Services include a newly developed program open to First Nations relating to Source Water Protection Planning. The Program was developed in collaboration with the Institute for Watershed Science. Funding to-date has been provided by both INAC and MOECC (MECP). The training program is delivered over six month cycles and includes 2 in-class sessions (Nov. 2017 and March 2018). At present, OFNTSC is also collaborating with the province (MECP) in the development of an on-line Source Water Protection Planning Tool-kit.

#### **Health Canada, FNIHB Ontario Region Watertrax Boil water Advisory Report, November, 2018**

As of November, 2018, there were 70 boil water advisories effecting 42 different First Nations in Ontario, some of which have been in effect since 1995 and 1997. There are also seven (7) Do Not Consume advisories affecting another five (5) First Nations.

#### **The National Assessment of First Nation Water and Waste Water Systems Report, 2011, Neegan Burnside**

The National Assessment of First Nation Water and Wastewater Systems Report completed by Neegan Burnside in 2011 identified that of the 158 First Nation water systems inspected in Ontario, almost half (46%) the systems in the province were found to be considered high risk. Of the 77 wastewater systems in Ontario, 66 or 85% were considered to be of medium or high risk while up to 30% of private septic systems inspected were found to have operational concerns.

## **First Nation Traditional Responsibility and Relationship to Water**

### **Women's Water Commission**

The Anishinabek Women's Water Commission is a group of women from the Union of Ontario Indians member communities formed in 2003. The Women's Water Commission has taken a leadership role in raising the awareness of the quality and need for protection of the Great Lakes and beyond. Grandmother Josephine Mandamin and many others have championed water awareness through numerous Water Walkers journeys. Since 2003, women and their supporters have travelled around the 5 Great Lakes on foot. Beginning with Lake Superior in 2003, the women have journeyed around Lake Michigan in 2004, Lake Huron in 2005, Lake Ontario in 2006, Lake Erie in 2007, and Lake Michigan in 2008. Besides raising awareness about the condition of water in the Great Lakes, and the importance of caring for the water, these women also view the Water Walk as a way of fulfilling their role as women to care for the water, and to raise awareness about the spiritual and cultural significance of the water through ceremony (McGregor, 2007). Although the Women's Water Commission began as an informal, grassroots organization, members of the Women's Water Commission have emerged as important leaders and now provide advice to the First Nations leadership and beyond on issues related to water and the environment.

### **The "Water Declaration"**

The First Nations of Ontario have endorsed their own version of a supreme, spiritual- based Water Declaration. This "Water Declaration" is specific to the inherent rights & title, authority and jurisdiction of First Nations to the very essence of life – water.

The Water Declaration advocates and supports the recruitment of independent experts, e.g. hydrogeologist, legal advisors, human rights advocates, and others. With respect to water security for First Nations, a FNWWWC would include the enhancement of source water protection planning training to include training on water quantity, i.e. water budget science.

### **The Anishinaabe Water Law, 2013**

A gathering of Anishinaabe elders from Manitoba and Northern Ontario in 2013 offered some traditional insight into Anishinaabe Water Law, *Anishinaabe nibi inaakonigewin*. "Water is living and water is life, in a spiritual and physical way". Because this fundamental component is not only part of Anishinaabe teachings but the Haudenosaunee and most other Ontario First Nations, if the Ontario First Nation Water and Wastewater Commission focuses solely on science, technology and does not bring some understanding of traditional roles and responsibilities toward water it may not effectively service the needs of its target audience.

## **PROVINCIAL WATER LEGISLATION IMPACTING ABORIGINAL SAFETY AND INDIGENOUS RIGHTS**

### **Ontario Water Resources Act (OWRA)**

The former Liberal government of Ontario passed (water quantity) Regulations under the Ontario Water Resources Act (OWRA) that failed to adhere to its Honour of the Crown and Duty to Consult to Ontario First Nations. Consequently, the Ontario Crown's policy and regulatory actions contradict the federal government's endorsement "without qualification" of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), including Free, Prior, Informed Consent (FPIC) and "redress" principles.

While the Ontario Clean Water Act (OCWA) launched more stringent legislative requirements as it pertains to source water protection planning in Southern Ontario via Southern Ontario municipal-based Conservation Authorities, it conveniently avoided formal application across Northern Ontario watersheds given the province's economic mining interest, e.g. Ring of Fire Chromite Mining Projects, De Beers Diamond Mining Project, etc.

The OCWA also deflected application to protect northern Ontario watersheds. For example, the MOECC promoted a Showcasing Water Innovation (SWI) project (at a cost in excess of \$1 M) with the Attawapiskat First Nation to test-pilot the fynn-membrane technology. This was viewed by many as a deliberate stall tactic by the province to divert attention away from the Attawapiskat First Nation plan to move its water intact to the Attawapiskat River (Genivar Report recommendations). Engineers would later acknowledge their foresight that there was "zero chance of success with the exploratory membrane system given the water chemistry was such that the reagents required to rinse the membrane daily could never be logistically or cost effectively shipped on a regular basis to the remote, fly-in community." This however did buy time for the diamond mining operations to continue releasing effluents of mercury and other chemicals beyond the parameters of the Ontario Drinking Water Objectives since no Northern Community, e.g. Attawapiskat First Nation was drawing source drinking waters from the River. Other examples of provincial exclusion to First Nation water rights exist and are captured in the COO report to the United Nations Committee on the Elimination of Racial Discrimination, which was considered in the Trillium hearing in 2017.

### **Water Security**

In February 2017, COO released a report titled: "*Spirit Comes First: Water Security for Future Generations*") which highlighted how national and provincial climate change models, water budgets, source water protections plans, etc., do not include First Nations. Three core messages from the presentations from the COO meeting report state:

- 1) Any discussion about water must begin with ceremony and spirit. This is the basis of First Nations understanding of our relationships to water. Such understandings are based in our laws, protocols and ways of life.
- 2) The broader societal systems are failing First Nations and water security, and action must be taken at multiple levels in multiple ways. Climate change and water security are multi-

dimensional, and any path forward must consider multiple ways of addressing current and future challenges.

3) UNDRIP, Human Rights Advocacy Organizations, FPIC, Duty to Consult and Accommodate are all tools that can advance First Nations interests, concerns and priority in relation to climate change. One tool will not work, multiple strategies and tools must be engaged.

### **Costing**

Numerous national and regional PTO/Tribal Council/First Nations-based facility and operation and training needs assessments have been completed and/or are near completion. Through the Tri-lateral Working Group, the province (MECP), at the invitation of respective PTOs has completed assessments in 69 FN communities, none of which are certified to the provincial standards levels. 45 of these communities belong to a Hub.

The First Nation Water and Wastewater Action Plan as detailed in the Federal Economic Action Plan 2014, and updated in 2016, need to provide the opportunity for OFNTSC to engage in quantifying a 5-year business plan for the creation and transition of a FNWWW Commission.

The development of the First Nation Water Wastewater Commission would need to do the following:

- Deliver water and wastewater operational support to high risk First Nation's;
- Develop regional hubs of expertise that would support and monitor First Nation water and wastewater systems;
- Support the prioritization of capital investments that would target high risk systems.

### **O&M**

In February 2017, INAC RDG, Anne Scotton, informed the Chiefs of Ontario of an interim federal measure that would secure up to \$9.1 M in enhanced O&M contributions and would be available to eligible FN recipients for the 2017-18 fiscal year. This represents an enhancement of the previous First Nations Water and Wastewater Action Plan (FNWWAP).

AFN is overseeing a national O&M pilot program: 2 per region. Several Ontario Tribal Councils have voiced their opinions and feel strongly that AFN national efforts do not adequately address Regional issues, priorities and timelines.

### **CONCLUSION**

A vision statement drawn from traditional teachings in relation to water will help bring a Ontario First Nation Water and Waste Water Commission (OFNWWC) into an Indigenous context and distinguish it from other entities providing similar services. It will also assist the OFNWWC to reach out to its target audience, Ontario First Nations. As with any entity business or otherwise, the vision statement 'breathes purpose and life" into it, it makes it real.

## “Water is Life”

Guidance should be sought to bring Ontario’s First Nations to a source-tap-source approach to water management.

In terms of potential structure, we can look at the recommendations from the Atlantic First Nation Water Authority (AFNWA) and what has materialized is a need to highlight best practices in the potential creation of an Ontario First Nations Water and Wastewater Commission. The 8 AFNWA key recommendations are:

1. Adopt a full service. – decentralized model for the AFNWA incorporating a hub and spoke model for regional operations for optimal service delivery and stronger community relationships.
2. Locate the main office of the AFNWA within the service corridor between (Halifax and Moncton – could be replaced by Kenora/Thunder Bay/Sudbury/Toronto/Ottawa etc.) in a First Nation community to maximize local benefits and strengthen relationships. Regional offices associated with the decentralized corporate structure should also be located within First Nation communities to further maximize local benefits and strengthen relationships.
3. Contract a professional search organization to hire the CEO and senior managers to ensure top talent is retained.
4. Efforts should be made to hire all staff within one year after the decision is made to operationalize the AFNWA with a clear preference to hire from First Nations communities.
5. AFNWA should adopt a formal training and development program for all staff employed by AFNWA.
6. Local operators should be hired wherever possible with an immediate focus on training and certification to align with skills-based pay.
7. HR strategies should recognize the experience and knowledge of staff currently employed in water and wastewater system operation and take a consistent approach to salaries, benefits, training and career development.

OFNTSC will rely on the recommendations of their Technical Task Force. OFNTSC’s role in a proposal to create a FNWWC should consider the following:

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- provision of a technical framework to support the technical development of First Nations’-run agencies;
- provision of a multi-tiered business plan, literature review & a memo of legal considerations;
- technical advice and reflection of outcomes of regional & national Think Tanks, Chief’s and National Chief’s Committee deliberations/recommendations, e.g. CCoHI, COO CCE, etc.;
- sharing of CRTP service delivery evaluations and enhancement considerations;
- technical review of costing models assessed by Tribal Councils, PTOs and Large First Nations;
- advice on drafting of governance models; and
- advice and dedication on potential enhanced roles and mandates for expanded O&M of FNs-run facilities.

By utilizing the reports from the creation and transition plan of the AFNWA, OFNTSC can further develop a business plan and transition plan to compliment best practices in a proposal and business plan for the creation of a FNWWC.

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