



ONTARIO FIRST NATIONS  
TECHNICAL SERVICES  
CORPORATION



*The Role and Position of the OFNTSC  
in Improving Technical Services for  
First Nations in Ontario*



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ONTARIO FIRST NATIONS  
TECHNICAL SERVICES  
CORPORATION

## **Asset Condition Reporting System (ACRS)**

### *Challenges and Opportunity for Improvement*

Prepared by: Ontario First Nations Technical Services Corporation  
Date: October 02, 2019

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## 1. Introduction

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Indigenous Service Canada (ISC) allocates funding for the construction and maintenance of community infrastructure to First Nations through two streams, the Capital Facilities Maintenance Program (CFMP) and the First Nation Infrastructure Fund (FNIF).<sup>1</sup> Contributions to eligible recipients under the CFMP provide financial assistance to plan, construct and/or acquire and operate and maintain community capital facilities and services (infrastructure, including schools) and housing (residential) consistent with approved policies and standards.<sup>2</sup>

Adequate operation and maintenance (O&M) help ensure assets reach their full life cycle, which is crucial to protecting long term health and safety. ISC has three asset reporting systems used for O&M: the Asset Condition Reporting System (ACRS), the Integrated Capital Management System (ICMS), and the Conditional Asset Inventory System (CAIS).<sup>3</sup>

ACRS is the primary inspection tool used by ISC to monitor First Nations O&M performance objectives and provides a process that identifies asset deficiencies levels. Every three years, a First Nation hires an engineer or architect to inspect only on-reserve community assets that receive operations and maintenance (O&M) funding from ISC using an ACRS inspection template, which is then submitted to ISC and to the First Nation.

While ACRS inspections is useful to ISC with planning, budgeting, and decision-making<sup>4</sup> it does not encourage First Nation to be self-sufficient because of the reliance on outside contractors, a requirement that contradicts ISC’s commitment to making First Nations self-determining entities. The following paper will provide a background of the ACRS program, discuss the emerging movement in federal policy towards improved asset management, highlight the challenges and opportunities with ACRS, and provide recommendations to improve the overall reporting framework.

## 2. Background

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### 2.1 Overview of ACRS

ACRS was implemented nationally in the 1990-1991 fiscal year as a response to the Treasury Board request for a better method of determining “asset recapitalization requirements,” rather than being formula driven<sup>5</sup>. Prior to 1990, there was no formal system to identify the maintenance and asset replacement projects on-reserve.<sup>6</sup>

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<sup>1</sup> AANDC, 2016, Contributions to Support the Construction and Maintenance of Community Infrastructure

<sup>2</sup> Ibid.

<sup>3</sup> OFNTSC, Infrastructure, <https://ofntsc.org/resources-programs/technical-services/core-services/infrastructure/>

<sup>4</sup> INAC, 1996, ACRS Status Report, pg. i

<sup>5</sup> Asset Condition Reporting System Manual, Ontario Version 2.0, 2018, Section 1 - Introduction

<sup>6</sup> Asset Condition Reporting System Manual, Ontario Version 2.0, 2018, Section 1 - Introduction





According to the Asset Condition Reporting System Manual, ISC has a responsibility to run inspections for “all ISC O&M funded non-residential on-reserve assets”<sup>7</sup> once every three years.<sup>8</sup> Infrastructure assets reported through ACRS include water, wastewater, roads & bridges, solid waste, electrification & distribution and public access buildings including schools and fire protection facilities and, depending on the asset, the inspection includes location, estimated remaining life (ERL), general condition rating (GCR), inspector’s remarks, existing project status, and Class “D” needs identification.<sup>9</sup>

Table 1: roles and responsibilities for ACRS inspections<sup>10</sup>

ISC Regions	ISC Headquarters	Consultant	First Nation
Coordinate ACRS inspections; provide advice and assistance.	Provide ACRS advice and assistance to regions as required	Meet with the First Nation and Project Manager; acquaint themselves with the community and community assets	Provide access to the consultant and work with ISC and the consultant to complete the ACRS inspections
Provide First Nations or Tribal Councils with an annual listing of assets to be inspected	System development and revisions	Review, confirm, and validate all existing information; make any necessary changes.	
Ensure the integrity of the information provided by First Nations and Tribal Councils; input the data into the ICMS system	Update the national system	Inspect each asset using the standard ACRS inspection report form.	Provide access to the consultant and work with ISC and the consultant to complete the ACRS inspections
Submit an annual update of ICMS and ACRS to Headquarters.	Compile national data	Identify maintenance needs; produce an estimate for all proposed maintenance, estimated remaining service life and year of construction.	
	Provide input into the Long-Term Capital Plan and the Multi-Year Operational Plan	Complete specific tasks as required as per the ACRS TOR.	
	Provide ACRS	Submit final ACRS report to ISC and the First Nation.	

Since ACRS requires a certified engineer or architect to complete the inspection, many First Nations are forced to contract out that work as they typically do not have those qualifications on reserve. In this way,

<sup>7</sup> Ibid, Section 1 – Introduction

<sup>8</sup> Ibid, pg. 1

<sup>9</sup> Government of Canada, (Extended Asset Condition Reporting System (E-ACRS), Terms of Reference 2018-2019, pg. 7-9

<sup>10</sup> Asset Condition Reporting System Manual, Ontario Version 2.0, 2018, Pg. 2; Section 3 – Terms of Reference, pg. 2



ACRS limits movement towards self-sufficiency by taking asset management practices away from the First Nation and places it in the hands of ISC and consultant groups. To alleviate that challenge, ACRS policy could be modified to allow First Nations to complete the ACRS inspections on their own or utilize an Indigenous organization that has the human capacity to do so (i.e., a tribal council).

## 2.2 Federal policy direction

In the 2018/2019 year, ISC created the Asset Management Program (AMP) to assist First Nations with long-term asset management<sup>11</sup>. The program is an initiative under the CFMP designed to develop First Nation capacity for long-term infrastructure construction and maintenance planning and was created by funding from the Investing in Canada Plan (2018), which pledged \$14.4 billion in Budget 2017 and an additional \$81.2 billion in Budget 2018. Of this amount, the AMP program will receive \$15 million over five years to build asset management capacity and awareness within First Nations communities, through a three phase approach 1) Awareness; 2) Planning and 3) Implementation, including:

- Asset management governance;
- Human resources;
- Costing & valuation processes;
- Data management; and
- Implementation of asset management plans.

Eligible First Nations receive up to \$40,000 for each phase or category; and for recipients that represent more than one First Nation, or a technical organization, Tribal Council, or educational institution, funding can be up to \$120,000 per recipient.<sup>12</sup>

Furthermore, in 2016, Canada committed to the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) as a full supporter “without qualification.”<sup>13</sup> Included in these is Article 21, which supports Indigenous control over their own institutions and development:

*1. Indigenous peoples have the right, without discrimination, to the improvement of their economic and social conditions, including, inter alia, in the areas of education, employment, vocational training and retraining, housing, sanitation, health and social security.*<sup>14</sup>

The recent introduction of the AMP program and Canada’s full endorsement to UNDRIP provides a positive outlook for First Nations becoming more self-determining entities, and more specifically improvements in infrastructure development and capacity building. Due to the lack of details provided on

<sup>11</sup> ISC. Asset Management Program. <https://www.sac-isc.gc.ca/eng/1558029629806/1558029739483>

<sup>12</sup> Ibid.

<sup>13</sup> ISC, 2019, “United Nations Declaration on the Rights of Indigenous Peoples.” Government of Canada. <https://www.aadnc-aandc.gc.ca/eng/1309374407406/1309374458958>

<sup>14</sup> Ibid.



the AMP program and how Canada will implement articles of UNDRIP in relation to O&M, it's unclear to determine what policy direction, if any, will aligning current ACRS inspections to future processes of asset management. Consequently, OFNTSC still believes that until First Nations are authorized to provide their own inspectors, ACRS remains disconnected and relevant to the needs of First Nations.

### 3. Challenges and Opportunities

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A longstanding issue for First Nations is the chronic underfunding that they receive in comparison to non-Indigenous communities.<sup>15</sup> As ACRS reports are used by ISC to determine funding for O&M, the program has in turn create funding barriers for communities.

To continue receiving funding through the CFMP, First Nations are required to conduct ACRS inspections every three years,<sup>16</sup> and inspections must be completed by a certified engineer or architect. Many First Nations do not have these professionals in-house and so most often contract that work to an external organization. This requirement creates a cyclical dependency where the work is consistently sourced out to consultants while the First Nation plays an insignificant role in the process. Instead, training programs could be created to train community members in the ACRS inspection, alleviating the need for a consultant and building capacity within First Nations.

Other opportunities that exist for better use or improving the ACRS program would be creating an Infrastructure Report Card for First Nations similar to the Canadian Infrastructure Report Card (CIRC), which provides an assessment of nation-wide infrastructure as a tool for policymakers to identify challenges and plan for solutions.<sup>17</sup> The report card is made public which creates accountability to the Canadian public and sets baselines that municipalities can work towards improving. A similar report card on First Nation infrastructure will paint a fulsome picture of the state of First Nation infrastructure and provide a baseline that First Nations can work towards improving. Creating this report card can start with the support of current and historic ACRS data.

ACRS could also be improved by implementing the Extended Asset Condition Reporting System (E-ACRS) currently being used by British Columbia First Nations and being piloted with First Nations of the United Chiefs and Councils of Mnidoo Mnising (UCCMM) (2019).<sup>18</sup> E-ACRS differs from ACRS in that the process aligns with asset management full life cycle and long term planning i.e., 25-35 years.

The impacts of climate change poses additional challenges and risks to First Nations infrastructure assets. This is an ideal opportunity to introduce OFNTSC's "award winning" FN PIEVC Infrastructure Resilience Toolkit into First Nations asset management plans.

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<sup>15</sup> <https://aptnnews.ca/2018/02/22/lack-funding-piling-dreams-first-nations-children-blackstock/>

<sup>16</sup> ISC, 2016, Protocol for INAC-funded Infrastructure, pg. 25

<sup>17</sup> <http://canadianinfrastructure.ca/en/index.html>

<sup>18</sup> Personal communications with Sr. Advisor from Ontario First Nations Technical Services Corporation



## 4. Conclusion

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ACRS comprehensiveness in assessing and databasing assets justifies why the system is the primary inspection and auditing tool for ISC to manage government funded assets on reserves. However, the system excludes First Nation participation involvement in the process and for that reason it does not support self-sufficiency and self-determination. It is imperative that the decades of infrastructure information on First Nations assets be released and accessible to First Nations i.e. access to ICMS database, ACRS inspections etc. to begin the process of capacity building within Ontario First Nations communities and facilitate the transition to an asset management plan.

First Nations have an abundance of information on community infrastructure and is the foundation to build effective & efficient asset management plans.

Along with relevant data, local knowledge and industry best practices base, First Nations Asset Management Plans would establish the capital, operations and maintenance needs and include processes that focus on the full life cycle requirements of community infrastructure.

It should be noted that an asset management plan is meant to be a living document that evolves year to year based on community requirements (changing levels of service), capital decisions and long-term financial planning. The industry has recognized that it may take several planning cycles for communities to achieve a sufficient level of detail for a fully developed and sustainable asset management plan.



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ONTARIO FIRST NATIONS  
TECHNICAL SERVICES  
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## **First Nations Emergency Planning in Ontario**

### *The Role of OFNTSC and Recommendations for Improvement*

Prepared by: Ontario First Nations Technical Services Corporation  
Date: October 02, 2019

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## 1. Introduction

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The Ontario First Nations Technical Services Corporation (OFNTSC) provides emergency planning support and training to develop capacity within First Nations to prepare for emergency events. OFNTSC's Emergency Planning unit has been in place since 2009, and delivers: 1. training workshops (regional and in-community) to educate participants on emergency management through phases; 2. advisory services to update/develop of emergency master plans; and 3. advisory services to carry out emergency planning exercises.

Emergency management on-reserve has received significant attention in recent years due to the challenges faced by First Nations with flooding, wildfires, and a host of other naturally occurring and human-caused threats. As climate change continues to affect many First Nations in Ontario, it is expected that extreme weather events are likely to become the new normal. While the federal government plays an important role in the delivery of emergency management services to First Nations on-reserve, several gaps exist in both the policy and emergency management delivery framework, which adversely affects First Nations and can have a costly toll on community infrastructure. First Nations are the fastest growing demographic in Canada so it is imperative that comprehensive emergency plans are put in place, sufficiently resourced, implemented, and updated.

The OFNTSC plays a critical role in emergency planning in Ontario, and as First Nations continue to face emergencies, it is essential that the pillars of emergency management (Preparedness, Response, Recovery, and Mitigation) be culturally sensitive and delivered by and for Indigenous communities and organizations consistent with the *United Nations Declaration on the Rights of Indigenous Peoples*.

The following report will explore emergency planning within the context of Ontario First Nations through an overview and analysis of federal emergency management policies as they relate to on-reserve First Nations. It will then explore challenges faced by First Nations associated with emergency planning and provide a list of best practices in emergency planning, in addition to an overview of emergency management regimes in other Canadian jurisdictions. Lastly, the report will highlight recommendations to both improve the service the OFNTSC offers, and to aid First Nations in the preparation of emergencies.





## 2. OFNTSC’s Approach to Emergency Planning

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In 2009, then-Indigenous and Northern Affairs Canada (INAC) (now Indigenous Services Canada (ISC)) approached the OFNTSC to carry out a “Peacetime Emergency Management Training” pilot project. As a result of the pilot’s success, INAC and the OFNTSC established a partnership for First Nation emergency management preparedness and training. The OFNTSC has since been providing emergency management training and one-to-one assistance for plans and exercises to Ontario First Nations. Prior to 2009, emergency planning and response training was undertaken by the Emergency Measure Ontario (EMO) (now the Office of the Fire Marshal and Emergency Management [OFMEM]). During this time, the Province employed a training model that was neither user friendly nor designed for First Nations. Training was offered online or within municipalities and content was geared towards municipalities rather focusing on the issues of on-reserve First Nations. When the OFNTSC started the program, INAC Ontario Region had identified that they had received Master Emergency Response Plans from 31% of First Nations – 38 communities in total. Since taking on emergency preparedness responsibilities, OFNTSC has worked with First Nations to increase this number, which today stands at 92%. The OFMEM remains primarily responsible for the response pillar of emergency management in Ontario and takes on some preparedness responsibilities in the James Bay area. The OFNTSC plays a role in introducing Ontario First Nations to recovery as it transitions from response.

The OFNTSC offers First Nations emergency management training by First Nation trainers through a phased approach, as follows:

- Phase 1: Hazard and Risk Identification and Introduction to Emergency Management
- Phase 2: Framework of First Nation Emergency Response Plan
- Phase 3: First Nation Exercise Program
- Phase 4: Live Operations-Based Exercise
- Introduction to Recovery
- Evacuation and Reception Centre Overview

The OFNTSC employs a “Train the Trainer” model approach to emergency preparedness, which has been highlighted as a best practice throughout Canada. A further breakdown of OFTNSC training course is available in **Appendix A**.



### 3. Background

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#### 4.1 Overview of Federal Emergency Management Policies, Directives and Guidelines

The federal *Emergency Management Act* recognizes disaster management as within provincial jurisdiction, though this has been delegated to municipalities and communities (such as First Nations) in all provinces and territories. As a result, 90% of emergencies are managed by municipalities and communities, with those remaining overseen by provincial governments.<sup>1</sup> Federal involvement is generally limited to training, public education, and provision of disaster recovery funding.

Canadian policy for Emergency Management embodies a whole-of-society approach, which involves incorporating and using existing knowledge and capabilities within partnerships to strengthen resilience. According to Canada's Emergency Management Strategy (2019), resilience is defined as “the capacity of a system, community or society to adapt to disturbances resulting from hazards by persevering, recuperating or changing to reach and maintain an acceptable level of functioning.”<sup>2</sup>

Canada's *Federal Policy for Emergency Management* (2009) has a stated objective to “promote an integrated and resilient whole-of-government approach to emergency management planning, which includes better prevention/mitigation of, preparedness for, response to, and recovery from emergencies.”<sup>3</sup> These four pillars of emergency management are further outlined in *An Emergency Management Framework for Canada* (2017) and later in the *Emergency Management Strategy for Canada* (2019).<sup>4</sup>

The purpose of the Framework is to acknowledge that emergency management intersects with all sectors of society and that responsibilities are shared across sectors and jurisdictions. Given the complex and overlapping responsibilities related to emergency management in Canada, the Framework aims to improve collaboration between levels of government to ensure comprehensive, complimentary, and coherent actions. The Framework also provides guidance

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<sup>1</sup> Bowerman, Charles. (2017): 184-195.

<sup>2</sup> Public Safety Canada, 2019.

<sup>3</sup> Public Safety Canada, 2018.

<sup>4</sup> Public Safety Canada 2017, Public Safety Canada 2019.



for how governments and partners assess emergency related risks and ways to work together to tackle emergency management.

The Framework is built around four components, or pillars of emergency management: prevention and mitigation, preparedness, response, and recovery. The pillars are independent it is important to recognize that they are not independent of each other and can be developed and implemented together or sequentially. The Framework ensures that these four components are seamlessly integrated, and that there are strong relationships among emergency management partners, including First Nations.

The Strategy builds on the principles set out in the Framework and federal policy in order to clearly articulate federal priorities to strengthen the resilience of Canadian society by 2030.<sup>5</sup> According to the Strategy, building resilience involves being empowered to share responsibilities to prevent hazards from escalating, and increasing capacity (both social and physical – i.e., infrastructure) to cope with and adapt to hazards and respond and recover where necessary.

Both the Framework and Strategy align with key international agreements, including the Sendai Framework for Disasters Risk Reduction 2015-2030, the Paris Agreement, and the United Nations Sustainable Development Goals.

INACs National Emergency Management Plan (2009) describes its responsibilities for emergency management on reserves. These responsibilities include support for emergency management activities on reserves, ensuring that First Nations have access to emergency management services that meet the standards, critical of services for other provincial residents, and to provide support to Nations in the development and maintenance of emergency plans.<sup>6</sup> Health Canada's role on First Nations reserves includes support for health care services related to emergency, for example, disease outbreaks.

#### 4.2 *First Nations Emergency Management in Ontario*

In 2018, ISC entered into a 10-year bilateral agreement with Ontario granting the province responsibility for the provision of emergency management response services to on-reserve First Nations. Through this new arrangement, First Nations communities have been given access to more training opportunities. For example, training that was previously unavailable can now be taken in a classroom setting. Despite the additional access to training, however, classroom

<sup>5</sup> Government of Canada, 2019

<sup>6</sup> Indian and Northern Affairs Canada, 2009.



sessions tend to focus on the municipal context, examples from which are largely in-applicable on First Nations. This change was made unilaterally and without consultation with First Nations, but does include a commitment to work with Ontario First Nations and representative organizations in developing a trilateral agreement. This work remains ongoing and has not yet produced any agreement that works for all parties.

ISC maintains a role in emergency management on-reserve, namely through the provision of financial support through the Emergency Management Assistance Program (EMAP) to help First Nations mitigate, prepare for, respond to and recover from disasters.<sup>7</sup> Emergency management plan preparation is the responsibility of First Nation governments and is additionally supported by ISC.

Emergency management in Ontario is legislated by the *Emergency Management and Civil Protection Act*, and provincially administered by Emergency Management Ontario.<sup>8</sup> In 2014, the then Minister of Community Safety and Correctional Services was asked to conduct a review of Ontario's emergency management systems. Among the 52 recommendations, seven specifically recommended improving emergency management services available to First Nations to ensure a comparable level of service to that offered to municipalities. If implemented, these recommendations would remove any First Nations involvement in preparedness to place it into the hands of the provincial government, cutting off communities from input into their own emergency management planning. The review report recommended that the then Ministry of Indigenous Relations and Reconciliation be granted formal authority and responsibilities at the provincial level (working with INAC at the federal level) for emergency management issues with First Nations. Due to the change in Ontario's provincial government in 2018, it is unlikely that the recommendations of the 2014 review will be implemented.

### 4.3 *Federal Policy Direction*

Since the election of the federal Liberals, emergency management has consistently remained on the agenda as evidenced by federal budget allocations.

Budget 2016 provided \$255 million over two years to the First Nations Infrastructure Fund to support investments in a range of infrastructure and to mitigate the effects of natural disasters and fire protection services.<sup>9</sup> Budget 2017 further proposed to integrate traditional Indigenous

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<sup>7</sup> Ibid.

<sup>8</sup> Henstra, Daniel (Ed.) (2013).

<sup>9</sup> Budget 2016, 143.



knowledge to guide adaptation measures and to enhance Indigenous community resilience through infrastructure planning and emergency management dollars.<sup>10</sup>

Budget 2018 committed to maintain direct support to the emergency management organizations that prepare for and respond to severe weather. Specifically acknowledging that First Nations communities experience disproportionate health and safety risks from emergencies and natural disasters and are 18 times more likely to be evacuated as a result of disasters, Budget 2019 committed further dollars, including:

- \$211.0 million over five years, starting in 2019–20, with \$49.4 million per year ongoing to support increased resiliency and emergency management on-reserve; and
- \$48.0 million over four years, starting in 2020–21, to renew funding for infrastructure projects on-reserve that will protect communities from climaterelated hazards.

In addition to budget commitments, Canada committed to the “full implementation” of the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) in Canadian law and policy “without qualification.”<sup>11</sup> With respect to operations and maintenance, the UN Declaration states:

*Article 18: Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own Indigenous decision making institutions.*

*Article 19: States shall consult and cooperate in good faith with the Indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them.*

*Article 29 (1): Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous peoples for such conservation and protection, without discrimination.*

<sup>10</sup> Budget 2017, 129.

<sup>11</sup> Bennett, Carolyn (2017) “Intervention from the Floor on the 10th Anniversary of the United Nations Declaration on the Rights of Indigenous Peoples.” Speech. United Nations Permanent Forum on Indigenous Issues 16th Session. New York City. April 25, 2017.



The above articles are relevant to the emergency planning discussion insofar as bilateral emergency management agreements between the provinces and the federal government, in spite of budget commitments and rhetoric, remain in place.

#### 4.4 *Emergency management funding mechanisms*

##### 4.4.1 Federal funding mechanisms

As of 2014, ISC assumed responsibility for all costs for on-reserve emergency events. The Emergency Management Assistance Program (EMAP), the Capital Facilities Maintenance Program (CFMP), and the First Nations Infrastructure Fund (FNIF) are the key federal funding agents for the four pillars of emergency management on reserve.

EMAP funds non-structural mitigation, preparedness, response and recovery costs. Preparedness and mitigation funding is available to assist communities with training, developing emergency management plans and risk assessments, while response/recovery funding can be enlisted when response/recovery activities are beyond the capacity of the communities involved in the post-event activities. EMAP funding is distributed annually based on both proposals for emergency preparedness and non-structural mitigation projects and also applications for response and recovery costs.

ISC also provides funding to First Nations communities in support of flood preparation and mitigation activities and in support of wildfire prevention and mitigation.

<b>EMAP Contributions to Ontario</b>		
<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
\$17,129,659	\$32,688,134	\$39,185,753
<i>22.4% of total national contributions</i>	<i>31% of total national contributions</i>	<i>35% of total national contributions</i>

Source: INAC, Audit of the Emergency Management Assistance Program

The CFMP and FNIF provide investments to First Nations in structural mitigation infrastructure projects. Funding for these projects is dispersed in accordance with ISC's annual capital planning process, and is prioritized by ISC in line with a First Nations Infrastructure Investment Plan.



#### 4.4.2 Planned funding for Ontario Region

The bilateral agreement between ISC and Ontario (primarily related to the response pillar of emergency management) outlines the financial contributions for the next 10 years. In fiscal year 2018-19, \$1,404,003 was allocated to the province. Each fiscal year after this will see a 3% increase, as displayed below. Note that the funding through the bilateral agreement does not include cost recovery for emergency response.

Proposed program funding by fiscal year	Total Budget
2018-19	\$1,404,003
2019-20	\$1,446,123
2020-21	\$1,489,507
2021-22	\$1,534,192
2022-23	\$1,580, 218
2023-24	\$1,627,624
2024-25	\$1,676,453
2025-26	\$1,726,747
2026-27	\$1,778,549
2027-28	\$1,831,905

## 4. Best Practices in Emergency Planning

Overall, there is a lack of documentation on best practices for Emergency Management in First Nations communities and governing bodies in Canada. While provincial and federal-level policies and strategies provide objectives, recommendations, and best practice examples in relation to federal, provincial, territorial governments and non-Indigenous organizations, many of these do not specifically address the needs of First Nations.

This section provides an overview of the available recommendations and best practices specific to First Nations in relation to OFNTSC's work in emergency planning and preparedness.



### 5.1 *Understanding emergency management capabilities and outcomes in First Nations organizations*

It is critical for federal, provincial, territorial, and First Nations organizations to understand the existing capacity for emergency management in First Nations organizations. To this end, OFNTSC supports the creation of a central inventory of emergency management capabilities in First Nations organizations as a critical step in understanding capacity and sharing information. It is essential that an inventory of capacity is coupled with sharing information on the outcomes of emergency planning and preparedness activities. Better understanding of outcomes will continue to inform preparedness and planning activities.

In 2017, the federal government and the Assembly of First Nations began work on an inventory of Indigenous capacities towards emergency management. The Indigenous Emergency Management Capabilities Inventory is led by Public Safety Canada and the Assembly of First Nations and will result in a tool that FPT governments and Indigenous communities can use to focus on the emergency management needs of Indigenous communities by identifying what systems are already in place and what is required for the future.

### 5.2 *Implementing effective emergency management frameworks*

As First Nations in Ontario continue to face an increasing amount of emergencies, it is imperative that emergency management frameworks, guidance documents, and concepts reflect the four pillars of emergency management, defined by Public Safety Canada as:

- **Prevention and mitigation:** the actions taken to identify and reduce the impacts and risks of hazards before an emergency occurs
- **Preparedness:** ensuring that the capability and capacity are in place to increase a community's ability to respond quickly and effectively to emergencies and recover from their long-term effects
- **Response:** actions taken during or immediately after an emergency or disaster for the purpose of managing the consequences.
- **Recovery:** actions taken after an emergency or disaster to re-establish or rebuild conditions and services.<sup>12</sup>

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<sup>12</sup> Public Safety Canada, 2010.





While the OFNTSC supports and encourages First Nations in Ontario to develop, implement, and exercise community emergency management plans that are aligned with these four pillars, OFNTSC services are currently only offered in planning and preparedness.

### *5.3 Creating emergency management planning and guidance materials specific to First Nations*

It is critical that emergency management planning and guidance materials specific to First Nations are available and easily accessible. Materials that are tailored to First Nations needs should consider: geography and remoteness of a community, access to existing emergency services, and the human resources in many First Nations governments. In addition to this, it is critical that First Nations communities benefit from training that is culturally-relevant and delivered in-community.

## **5. Challenges and Opportunities**

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As stated earlier, emergency events disproportionately impact First Nations communities due to their relative remoteness and isolation and limited access to emergency services, which leads to poorer health and safety outcomes for First Nations people. While the federal policies outlined in this paper provide a strong foundation for emergency management in general, these policies and programs often fail to take into account the needs of First Nations communities and individuals.

Specifically, the key challenges and issues identified by reports from federal, provincial, and Indigenous organizations on the topic of emergency management in Indigenous communities, as well as the work that OFNTSC does on the ground, include:

- Funding for emergency preparedness - including developing, implementing, and exercising emergency plans - in First Nations communities is largely inadequate, and many Nations find these costs prohibitive;
- Mainstream models of emergency preparedness and response do not leave space to integrate First Nations culture and tradition, on-reserve realities and jurisdictional processes;
- The knowledge and expertise of First Nations people is not taken into account during federal and provincial emergency response and planning;
- Training models designed for the province of Ontario and Ontario municipalities do not integrate First Nations culture and tradition, nor do they consider the population,



geographic, ecological, and infrastructure realities and resulting challenges that many nations face;

- Leadership changes within First Nations combined with stretched human resources in First Nations communities impacts the continuity and sustainability of emergency management plans;
- Leadership changes on the federal and provincial level results in the need for First Nations representatives to advise on sometimes repetitive initiatives;
- The OFNTSC has excelled in providing emergency management training on reserve in Ontario. Despite this, the Government of Ontario continue to advocate for this responsibility, despite the fact that service agreements for on-reserve emergency management agreements are currently created bi-laterally between federal and provincial governments which creates service delivery and knowledge gap for First Nations.
- While the Emergency Management Assistance Program has a consistent allocation in the federal budget, the current funding process is not efficient, requiring ISC to make annual funding requests to fully address the costs associated with emergency management on-reserve and leading to a lack of clarity on the funding process within the emergency management community;
- The OFNTSC is limited in the scope of emergency management training it can offer. (OFNTSC assists with developing Master Emergency Response Plans.)
- While the OFNTSC is able to offer preparedness training, it often cannot offer assistance to First Nations in responding to emergency situations;<sup>13</sup>
- The OFNTSC's funding is renewed annually by ISC and is proposal-based. The absence of a multi-year funding agreement makes it difficult to plan for expanding services; and,
- Qualified trainers are difficult to attract due to OFNTSC's inability to hire them full time. Trainers are hired for on a fee-for-service model which is not cost-effective.

In spite of these challenges, First Nations possess the best knowledge of their community needs and their residents. Moreover, perhaps the greatest opportunity is the large workforce First Nations represent that should be harnessed for the purposes of emergency preparedness and management.

Another opportunity exists for the OFNTSC to be more involved in the response pillar of emergency management. In Alberta, for example, First Nations emergency management is integrated into the Alberta Emergency Management Agency. There, field officers work in all four pillars of emergency management, including acting as a liaison during response. Despite

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<sup>13</sup> The OFNTSC has, in one or two cases, been able to offer this assistance when requested by a First Nation.



the fact that Ontario has 133 First Nations (Alberta has 45), the OFNTSC, and First Nations more generally, have little to no role in response. While the OFNTSC believes First Nations, rather than the provincial government, hold ultimate responsibility for emergency preparedness, there is an opportunity for more First Nations involvement in emergency response here if we take lessons from jurisdictions like Alberta.

## 6. Conclusion & Recommendations

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The key finding of this exercise has been the need to better integrate the OFNTSC with the four pillars of emergency management, not just planning and preparedness. First Nations organizations that work directly with First Nation communities and take into account the unique circumstances they face are better able to adequately respond to First Nations in emergency situations. If programs are solely run by regional non-First Nations service providers the result may be reduced access for First Nations, less culturally-specific operations, and continually disproportionately underserving First Nations communities. As climate change impacts are likely to further exacerbate similar wildfire crises on a yearly basis it will be increasingly important for greater First Nations-led approaches to emergency management in accordance with best practices and community knowledge.

OFNTSC holds the position that jurisdictional disputes between provincial and federal governments regarding their responsibility to deliver emergency services to First Nations are counterproductive to the goal of ensuring First Nations' are prepared if and when and emergencies strike. Additionally, the following recommendations target various decision makers, and are geared towards improving the emergency planning service offered by OFNTSC:

1. Move away from the proposal-based funding relationship towards a multi-year funding agreement with Ontario. This could occur as part of a renegotiated service agreement, or as an interim measure. A multi-year funding agreement for emergency preparedness would enable the OFNTSC to plan service delivery in a consistent and predictable manner, and would allow the OFNTSC to build capacity and retain skilled trainers. This funding model would also provide increased staffing to work more closely in supporting First Nations with emergency planning and exercising. Sustainable and predictable funding would enable OFNTSC to improve tracking of service requests which in turn would allow
2. For OFNTSC to better understand how emergency plans are operationalised, in order to improve training, the OFNTSC should advocate for access to information on how emergency plans were executed during real emergencies.



3. Increase staffing to assist First Nations in all their emergency planning needs and navigating the emergency planning silo's in addition to work already undertaken.

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## Appendix A: OFNTSC Emergency Planning Training Workshops Outline

Emergency Planning Program Training Books used during regional and in-community training are listed below. Initially, each year a new standalone Phase was introduced and each sessional is 2.5 days of in-classroom learning.

As the years went on and the reality of staff turnover and/or the responsibility to update and exercise changed the First Nation's Master Emergency Management Plan, Phases were coupled together for a review Phase 1/2 & Phase 3/4 Review regional session were held 2.5 days.

For the in-community, training is tailored from this materials to topics the First Nation request to be covered. In-Community training and exercises range from .5 to 2 days.

### **Phase 1: Overview**

- To introduce First Nations to the main components of an emergency plan.
- To explain the process for developing a plan and where to obtain help for First Nations.
- To provide First Nations with an opportunity to use a plan by working through an emergency situation that could happen in their First Nation Community.
- To provide First Nations with a sample plan they can take back to their First Nation Community and customize for their own use.
- To provide information on Emergency Management Ontario (EMO) and their roles and responsibilities as it pertains to emergencies in Ontario.
- To explain the process of setting up a Community Control Group (CCG) for First Nations to deal with emergencies within their community.
- To provide First Nations with an introduction to evacuation planning for their community.
- To provide First Nations with an introduction to the Hazard Identification and Risk Assessment (HIRA) tool to establish risks for their community.

### **Phase 2: Overview**

- To further enhance First Nations knowledge of Community Emergency Preparedness planning.
- To explain the process for implementing a Community Emergency response plan and activating an Emergency Operations Centre.





- To provide First Nations with an opportunity to utilize an Emergency response plan by working through and activating an Emergency Operations Centre in an emergency situation.
- To provide First Nations with a knowledge of Evacuation planning and processes.
- Introduces First Nations to the four feathers of emergency management. Feather 1: Mitigation. Feather 2: Preparation, Planning and Education. Feather 3: Emergency Response. Feather 4: Recovery.

### **Phase 3: Overview**

- To introduce participants into how to develop a First Nation Exercise Program.
- To provide an opportunity to test master emergency response plans through simulated tabletop exercises.
- To provide First Nations with resource material and sample documents for completing an emergency response plan.
- To provide information on why to use a building block approach for performing an exercise.
- To provide information on completing a performance check for your community exercise.

### **Phase 4: Overview**

- To provide participants with a review of the first 3 phases of Emergency Preparedness training.
- To provide an introduction to mock exercises and how to prepare a mock exercise for a Master Emergency Response Plan.
- To provide a description of the “important players” that should be involved in a mock exercise.
- To provide First Nations with a guideline for exercise conduction including; Scope, Objective, Purpose, Scenario Narrative, Health and Safety, Termination, Expected Response/Evaluation Criteria.
- To provide First Nations with a guideline for exercise evaluation including; Evaluation Team, Elements for Evaluation, Critiquing Mock Exercises, Mock Exercise Evaluation Report, a Corrective Action Plan.

### **Intro to Recovery: Overview**

- To provide First Nations with an Introduction to the Canada Emergency Alert System including; How alerts are distributed, What type alerts are broadcast, FAQ's, Ontario's Emergency Public Warning System.
- To provide First Nations with information on how to transition from response into the recovery phase.



- To provide information on Health and Safety Guidelines for the injured as well as information on how to prevent injuries after an emergency event.
- To provide guidelines on Community Members returning home offering guidelines before entering a building as well as dealing with animals and wildlife.
- To provide information on coping with emergencies; understanding emergencies, easing emergency related stress and helping children cope with emergency events.
- To provide information on damage assessment including; planning a damage assessment program, training and exercises, local damage assessment, data collection and analysis, damage assessment summary report for assistance sample.
- To provide information on record keeping and an insurance overview.
- To provide an overview on planning for individual and community psychosocial recovery including; psychosocial factors and psychosocial recovery planning
- To provide a critical incident stress management overview including; defusing, critical incident stress debriefing, group intervention/debriefing techniques, post trauma stress, stress, training, family dynamics.
- To provide information on developing a First Nation Business Continuity Plan including; How Business Continuity Management (BCM) fits into emergency planning, provide a BCM outline.

### **HIRA: Overview**

- To provide First Nations with a detailed introduction into the Hazard Identification and Risk Assessment portion of emergency planning.
- To provide information on defining hazards specific to each First Nation community including climate change.
- Defining risks and determining how to assess each potential hazard through a risk assessment process that involves quantifying a risk by the probability, consequences and risk level.
- Identifying the vulnerability of the First Nation through the completion of a HIRA exercise.
- To provide information on how to mitigate any potential risks to the community through the completion of the HIRA exercise.





ONTARIO FIRST NATIONS  
TECHNICAL SERVICES  
CORPORATION

## **OFNTSC Environmental Services**

*Exploring Challenges and Opportunities in Source Water Protection,  
Contaminated Sites, Solid Waste Management and Environmental  
Assessment*

Prepared by: Ontario First Nations Technical Services Corporation  
Date: October 31, 2019

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## 1. Introduction

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Environmental management on First Nation’s reserves, as in other jurisdictions across the country deals with a number of issues related to how lands and waters are managed to ensure the protection of the local environment and healthy living conditions for people and wildlife. The Ontario First Nations Technical Services Corporation (OFNTSC) delivers a number of services to support First Nations to manage reserve lands to comply with federal and provincial regulations and to make improvements in support of a healthy environment and living conditions. OFNTSC’s supports First Nation’s on-reserve communities both in the development and maintenance of environmental infrastructures and in infrastructure required for environmental protection. Specifically, OFNTSC supports First Nation in four (4) main service areas:

- Source water protection
- Contaminated sites assessment and remediation
- Solid Waste Management
- Environmental Assessment

In Canada, there is no one authority over the environment and jurisdiction, roles, and responsibilities are shared between federal, provincial, territorial, and municipal governments.<sup>1</sup> However, under section 91(24) of the *Constitution Act* 1867, the federal government has authority over “Indians and lands reserved for Indians.”<sup>2</sup> This directly involves the federal government with environmental management activities on reserves. Each section of this paper therefore provides an overview of federal legislation, policies, and programs as they relate to each of OFNTSC’s environment service areas. Following the overview, this paper describes funding mechanisms in place in support of environmental services and best practices in each service area. Under each service area, this paper also discussed key challenges and opportunities for OFNTSC’s environmental service.

### *Federal policy direction*

First Nations reserve communities across the country face many similar challenges with respect to environmental management. Lack of suitable public infrastructure and capacity for training, maintenance, and operations have delayed community development and threaten the health and wellbeing of local communities and the environment. Through its full support, without qualification, of *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP),<sup>3</sup> the federal government has committed to supporting First Nations strengthen their capacity to manage and set priorities for land development, use, and conservation of lands and territories.

Articles 25, 29, and 32 of the UNDRIP state, respectively:

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<sup>1</sup> Federal and provincial roles and responsibilities are outlined in sections 91 and 92 of the *Constitution Act* 1867

<sup>2</sup> The *Constitution Act*, 1867 (UK), 30 & 31 Victoria, c 3

<sup>3</sup> Indigenous and Northern Affairs Canada. “United Nations Declarations on the Rights of Indigenous Peoples.” Accessed July 24, 2019. <https://www.aadnc-aandc.gc.ca/eng/1309374407406/1309374458958>



*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 (Article, 25).*

*1. Indigenous people have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous people such as conservation and protection, without discrimination. 2. States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent. 3. States shall also take effective measure to ensure, as needed, that programmes for monitoring, maintaining and restoring the health of indigenous peoples, as developed and implemented by the people affected by such materials, are duly implemented (Article 29).*

*1. Indigenous peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and other resources. 2. States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources. 3. States shall provide effective mechanisms for just and fair redress for any such activities, and 24 appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact (Article 32).<sup>4</sup>*

Over the last few years, federal policy direction with respect to the environment and First Nations living on reserves has been to support Nations through investing in public environmental infrastructure to improve on reserve living conditions and the state of the local environment. Investing in public environmental infrastructure is intended to improve Nations' access to clean drinking water, effectively manage solid waste, improve the state of the local environment through contaminated site remediation among others.<sup>5</sup>

Federal budgets since 2016 have made the following commitments:

- Budget 2016: \$4 billion to improve First Nations community infrastructure, including:
  - \$1.8 billion over five years on water and wastewater infrastructure
  - \$409 million over five years to solid waste management

<sup>4</sup> United Nations. UN General Assembly. "United Nations Declaration of the Rights of Indigenous Peoples." General Assembly Resolution 61/295. (2008)

<sup>5</sup> Government of Canada. "Investing in First Nations community infrastructure" Accessed October 22, 2019. <https://www.sac-isc.gc.ca/eng/1526995988708/1526996020578>



- \$255 million over two years to the First Nations Infrastructure Fund
- Budget 2017: additional \$4 billion over 10 years to improve water treatment systems and other community infrastructure.<sup>6</sup>
- Budget 2018: additional \$172.6 million over three years to improve access to clean drinking water.<sup>7</sup>
- Budget 2019: proposed an additional \$739 million over five years, beginning in 2019-2020, with \$184.9 million per year ongoing.<sup>8</sup>

Broadly, funds for public environmental infrastructure are administered through Indigenous Services Canada (ISC, formerly Indigenous and Northern Affairs Canada) through the Capital Facilities and Maintenance Program (CFMP). CFMP is one of the federal government's main pillar for supporting First Nation's on reserve infrastructure.<sup>9</sup> The program is designed to maintain physical assets and through operations and maintenance funding or funding for minor and major capital and is managed through regional five year plans where specific needs have been identified.<sup>10</sup>

As a compliment to CFMP, the federal government has created the First Nations Infrastructure Fund (FNIF) which is intended to improve and increase public infrastructure to improve the quality of life on reserves.<sup>11</sup> FNIF supports: planning and skills development, solid waster management, energy systems, and connectivity. In order to access FNIF funding, Nations are required to have plan under the First Nations Infrastructure Investment Plan (FNIIP) which acts as ranking tool for prioritizing projects.<sup>12</sup>

## 2. OFNTSC's Environment Services

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OFNTSC's Environmental Services take a two-pronged approach to support First Nations on reserve communities and Tribal Councils: Firstly, OFNTSC provides technical support for on reserve environmental infrastructure, such as landfills and the decommissioning of contaminated sites. OFNTSC supports Nations through the capital process, including facilities construction, operation and maintenance, training, renovations and improvements, and decommissioning. Secondly, OFNTSC provides support for infrastructures and processes to ensure the protection of the local environment. Here, OFNTSC services include supporting Nations through environmental assessments, training and advice on best practices for

<sup>6</sup> Indigenous Services Canada. "First Nation community infrastructure" Accessed October 22, 2019. <https://www.sac-isc.gc.ca/eng/1100100010567/1521125219538>

<sup>7</sup> Indigenous Services Canada. "Water in First Nation communities" Accessed October 22, 2019. <https://www.sac-isc.gc.ca/eng/1100100034879/1521124927588>

<sup>8</sup> Canada. Ministry of Finance. "Budget 2019: Growing the Middle Class." William Francis Morneau. (2019): 139-47.

<sup>9</sup> Indigenous Services Canada. "Capital Facilities and Maintenance Program" <https://www.sac-isc.gc.ca/eng/1100100016395/1533641696528>

<sup>10</sup> Ibid

<sup>11</sup> Indigenous Services Canada. "First Nation Infrastructure Fund" Accessed October 22, 2019. <https://www.sac-isc.gc.ca/eng/1100100010656/1533645154710>

<sup>12</sup> Indigenous Services Canada. "First Nations Infrastructure Investment Plans and Reports" Accessed October 22, 2019. <https://www.sac-isc.gc.ca/eng/1440084290678/1533645718223>



program design, maintenance and operation, and support to understand and comply with federal legislation and regulations.

Many of OFNTSC's environmental services overlap with the Engineering Service in that there is a focus on infrastructure planning, development, operations, and maintenance. Environmental Services, however, focuses specifically on service areas related to environmental management, including solid waste management; source water protection; environmental site assessment and contaminated site remediation. OFNTSC advises First Nations communities and Tribal Councils on legislation and regulation as it related to capital infrastructure projects and in defining the scope of projects. OFNTSC also supports clients with accessing federal funds for environmental and infrastructure projects but does not directly support economic development.

Environmental Services is comprised of experienced environmental scientists who have experience working with First Nations communities and expert knowledge of provincial and federal legislation and best practices in applying Canadian legislation for First Nations' lands. Through their work, OFNTSC is helping to create and support a network of First Nations environmental professionals.

Some of OFNTSC's key work and projects in Environmental Services include:

- Delivering training on the Ontario First Nations Source Water Protection Plan, which, ensures First Nations' plans are developed with community participation and strong technical assessment;
- Establishing the Ontario Regional Tribal Council Solid Waste Working Group;
- Securing funding to deliver solid waste management training; and
- Supporting First Nations with Solid Waste Management Plan studies, Landfill Assessments, and Waster Municipal Transfer Services Agreements,

## 2.1 **Source Water Protection**

Source water is untreated water from surface and groundwater, such as creeks, lakes, and aquifers that supply human drinking water.<sup>13</sup> Environmental contaminants entering source water can easily make there way into human drinking water so source water protection is a crucial and necessary component to ensuring drinking water safety and preventing human illness.<sup>14</sup> Protecting drinking water involves many approaches beyond source water protection and includes, for example, chlorination and filtration and testing and monitoring water quality. Each approach offers a barrier to prevent water contamination, but source water protection is the first among these barriers and one of the most important as it involves stopping contaminants from entering at the source.<sup>15</sup> Moreover, protecting contaminants from entering source water is often cheaper then remediation afterwards.<sup>16</sup>

<sup>13</sup> Environment Canada. *A pocket guide to source water protection for First Nations*. (n.d)

<sup>14</sup> Ibid

<sup>15</sup> Aboriginal Affairs and Northern Development Canada. *First Nations on-reserve source water protection plan, guide and template*. (2014). Ministry of Aboriginal Affairs and Northern Development. Accessed October 22, 2019. [https://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ-ENR/STAGING/texte-text/source\\_1398366907537\\_eng.pdf](https://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ-ENR/STAGING/texte-text/source_1398366907537_eng.pdf)

<sup>16</sup> Ibid





### 2.1.1 Overview of Federal legislation, policies, programs

In Canada, provinces have constitutional authority over freshwater resources within their boundaries and responsibilities for water management. The federal government maintains authority and responsibilities for managing water on federal lands which includes First Nations reserves as per section 91(24) of the *Constitution Act* which grants federal jurisdiction over “Indians and lands reserved for Indians.”<sup>17</sup> There are more than 20 departments and agencies with responsibilities over freshwater resources, and one of the central challenges for the country is ensuring that water management policies and strategies are developed and implemented collaboratively.<sup>18</sup>

Federally, Indigenous Services Canada (ISC), Health Canada, and Environment and Climate Change Canada (ECCC, formerly Environment Canada) are the primary departments responsible for water governance. ISC offers broad funding for various aspects of water system development, construction, and maintenance, as well as, health advice where there are water related concerns, assistance with addressing unacceptable water quality test results, and support for community-based monitoring programs<sup>19</sup>. As a federal leader for Canadian health, Health Canada works with the provinces and territories to develop drinking water guidelines.<sup>20</sup> ECCC is responsible for source water protection as a result of its power to regulate how or if wastewater is discharged into federal waters.

The federal government also shares responsibilities for water governance with First Nations on reserves. Band Councils manage day-to-day water operations, including: water sampling and testing; issuing drinking water advisories within community; and infrastructure planning and development.<sup>21</sup>

There are no specific pieces of federal legislation with respect to source water protection, rather there are a number of laws that govern water-related activities, including:

- The *Canada Water Act* which outlines federal agreements with provinces
- The *International River Improvements Act* which outlines licensing activities that impact rivers flowing to the United States
- The *Department of Environment Act* which names the Ministry of Environment as the national leader for water management

There are also a number of federal laws, such as the *Fisheries Act*, which make provisions for regulating pollutants entering water.<sup>22</sup>

<sup>17</sup> *Constitution Act* 1867

<sup>18</sup> Environment and Climate Change Canada. “Water governance: federal policy and legislation” Accessed October 22, 2019. <https://www.canada.ca/en/environment-climate-change/services/water-overview/governance-legislation/federal-policy.html#federalWP>

<sup>19</sup> Indigenous and Northern Affairs Canada. “Roles and responsibilities” Accessed October 22, 2019. <https://www.aadnc-aandc.gc.ca/eng/1314034319353/1314034564208>

<sup>20</sup> Ibid

<sup>21</sup> Ibid

<sup>22</sup> Water governance: federal policy and legislation”



With respect to First Nations, the main legislative tool for source water protection is the *Safe Water for First Nations Act* (SWFNA). The SWFNA was created in 2013 and has been criticized for ignoring the recommendations of First Nations, creating a regulatory framework without appropriate investments in resources, and passing the liability of failing infrastructure onto First Nations communities.<sup>23</sup> The Assembly of First Nations (AFN), in particular, has been critical of the Act and in 2015 passed Resolution 76/2015 “Safe Drinking Water for First Nations” to repeal it, stating – among other things – that it was “developed without meaningful consultation with First Nations, is contrary to inherent authority of First Nation governments and does not reflect the principles of Customary Laws regarding water.”<sup>24</sup> Following that resolution, the AFN passed Resolution 01/2018 “First Nations Led Process to Develop New Federal Safe Drinking Water Legislation,” which mandated work with the federal government to create a co-developed process.<sup>25</sup> ISC has agreed to work with the AFN on this process, and the two are working together to create safe-drinking water legislation and a long-term water and wastewater strategy.<sup>26</sup>

There are no programs dedicated specifically to source water protection, rather there a number of programs for supporting clean drinking water and infrastructure on reserves, in which source water protection is, or can be, a component. Source water protection is one of several barriers in a multi-barrier approach to ensuring safe drinking water and so programs tend to be designed with the goal of safe drinking water in mind. ISC, for example, administers the Capital Facilities and Maintenance Program (CFMP) and the First Nations Infrastructure Fund (FNIF). CFMP allocates funds for community infrastructure construction and maintenance and FNIF assists First Nations improve public infrastructure on reserves.<sup>27</sup> This funding mix, however, leads to its own set of challenges that OFNTSC has identified in the past: funding has not increased to meet increasing rising costs, the funding formula is based on dated information, federal contributions are based on project costs rather than life-cycle costs and First Nations are obligated to meet a net funding requirement.<sup>28</sup> If communities are unable to meet this last requirement, operations and maintenance needs are unmet. Taken all together, these issues lead to “higher costs and prevents First Nations infrastructure and community assets from achieving their full life cycles.”<sup>29</sup>

<sup>23</sup> Assembly of First Nations. “First Nations Led Process for New Safe Drinking Water and Wastewater Legislation.” Technical Bulletin. July 2018. Retrieved from: <https://www.afn.ca/wp-content/uploads/2018/08/18-07-09-Housing-Sector-Technical-Update-re-Water-July-2018-V4.pdf>

<sup>24</sup> Assembly of First Nations. Special Chiefs Assembly. “First Nations Led Process to Develop New Federal Safe Drinking Water Legislation.” Resolution no. 01/2018. May 2, 2018.

<sup>25</sup> Ibid

<sup>26</sup> Indigenous Service Canada. “Indigenous Services Canada: Departmental Plan 2019-20”. <https://www.sac-isc.gc.ca/eng/1553090854386/1553090905214?wbdisable=true>. Accessed July 24, 2019.

<sup>27</sup> “Capital Facilities and Maintenance Program”; “First Nation Infrastructure Fund”

<sup>28</sup> Ontario First Nations Technical Services Corporation. “On Reserve Operations and Maintenance Policy: The Case for Reform”. November 23, 2018: 4

<sup>29</sup> Ibid, 4



### 2.1.2 Federal Funding Mechanisms

Since source water protection involves preventing contaminants from entering the at a its source, investments in infrastructure and facilities maintenance are relevant and funding can be accessed through several broad programs including:

- Capital Facilities and Maintenance Program: \$1 billion annually in housing, education, water and wastewater, and other infrastructure funding.<sup>30</sup>
- First Nations Infrastructure Investment Fund: provides funding for infrastructure projects including planning and skills development as identified in First Nations Infrastructure Investment Plans.
  - FNIIF does not fund continued operations and maintenance, or salaries for positions responsible for ongoing maintenance.<sup>31</sup>

### 2.1.3 Best Practices in Source Water Protection

Source water protection is a management tool, or component, to ensuring safe drinking water. Best practices for safe drinking water in First Nations communities include a multi-barrier approach in which source water protection is the first of several barriers.

ISC's *Protocols for Safe Drinking Water in First Nations Communities* (the "Protocol") adopts this multi-barrier approach as a way to prevent water-borne contaminants from entering drinking water supplies. This approach ensures that adequate barriers are in place at each stage of a drinking water system, including protecting source water, treatment of drinking water, maintenance of the distribution system, and water quality testing.<sup>32</sup> The *Protocol* outlines standards for all aspects of First Nations drinking water systems from design to operation to monitoring. All drinking water systems in First Nations communities that are funded through ISC and that serve at least five households, or a public facility must adhere to the guidelines in the *Protocol*.

According to ECCC's *Source Water Protection Handbook for First Nations* and *A pocket guide to source water protection for First Nations*, there are two phases with 8 steps for effective source water protection:

#### Phase 1: Assessment Phase

- Delineating the source-water area
- Identify potential contaminants/assess threats
- Assess source vulnerability

<sup>30</sup> "Capital Facilities and Maintenance Program."

<sup>31</sup> "First Nation Infrastructure Investment Fund." 2

<sup>32</sup> Indian and Northern Affairs Canada. *Protocols for Safe Drinking Water in First Nations Communities*. (2016). Ministry of Indian and Northern Affairs Canada. Retrieved from: [https://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/texte-text/sdw\\_1100100015850\\_eng.pdf](https://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/texte-text/sdw_1100100015850_eng.pdf)



- Public education and participation

## Phase 2: Protection Phase

- Establish source water protection committee
- Develop a source water protection plan
- Implement source water protection plan
- Monitor and update the source water protection plan.<sup>33</sup>

### 2.1.4 Challenges and opportunities

One of the key challenges for delivering services related to source water protection is that it does not fall under one specific role or responsibility. Within a community, anyone from lands managers to health directors are involved with source water protection. While OFNTSC can give advice on how to create a plan, plan implementation, and thereby success, is the responsibility of many people and departments. Moreover, there is little in the way of funding for plan implementation and for the human resources needed to monitor and evaluate implementation – this is despite the fact that source water protection is identified as a barrier in the multi-barrier approach to protecting drinking water and an important step for eliminating drinking water advisories on reserve.

## 2.2 Contaminated Sites Assessment and Remediation

According to the definition adopted by the Government of Canada, a contaminated site is "one at which substances occur at concentrations (1) above background (normally occurring) levels and pose or are likely to pose an immediate or long-term hazard to human health or the environment, or (2) exceeding levels specified in policies and regulations."<sup>34</sup> Contaminated sites on First Nation lands are a pervasive issue in Ontario and indeed across Canada. For Ontario First Nations, remediation of contaminated sites is complicated by issues such as inadequate, conflicting or absent legislation, lack of funding and, most significantly, competing jurisdictions. Altogether, these complications make monitoring, enforcement and clean-up on First Nations lands complex and very costly.

### 2.2.1 Overview of Federal legislation, policies, programs

The legal regime for contaminated sites on-reserve varies substantially from that found on provincial lands. As reserves are federal lands, provincial laws and regulations that affect on-reserve lands do not apply on reserve. Canada manages contaminated sites on federal land by way of policy rather than legislation. Most Ontario First Nations are subject to the *Indian Act* reserve land management regime and

<sup>33</sup> *A pocket guide to source water protection for First Nations*

<sup>34</sup> Treasury Board of Canada Secretariat. (n.d.) "Federal Contaminated Sites Inventory." <https://www.tbs-sct.gc.ca/fcsi-rscf/home-accueil-eng.aspx>



are thus faced with inadequate federal environmental management tools, under which contaminated sites are largely addressed by unenforceable policy.<sup>35</sup>

In 2005, Environment Canada introduced the Federal Contaminated Sites Action Plan (FCSAP) to provide funding and support federal departments, including ISC, in managing contaminated sites. In July 2019, the Government of Canada renewed the Federal Contaminated Sites Action Plan for 15 years (2020–2034) and invested \$1.16 billion from 2020–2024. As part of this investment, the remediation of contaminated sites on-reserve was highlighted as a priority.

The federal effort to identify and document environmental problems on reserves began in 1992.<sup>36</sup> In 2003, the Contaminated Sites Management Program (CSMP) was initiated to continue the assessment and remediation of contaminated sites on reserve lands. Currently, the Contaminated Sites On-Reserve (CSOR) Program provides assistance to First Nations by supporting the assessment and remediation of contaminated sites on-reserve lands. The CSOR is an environmental management program delivered by ISC that funds First Nations to undertake environmental site assessment and remediation or to risk manage contaminated sites on-reserve. Implementation of CSOR is supported by Environment Canada’s FCSAP.

Canada's contaminated sites management policy is overseen by a Treasury Board which has overall responsibility for the management of federal real property including reserve lands.<sup>37</sup> The Environmental Stewardship Strategy Information Management System (ESSIMS), a contaminated sites module, keeps an up to date list of identified contaminated sites on reserves. ISC Ontario region is responsible for the site by site management of contaminated sites and the accuracy of the associated data in ESSIMS.

ISC has enacted a relatively brief Contaminated Sites Management Policy, which repeats many of the policies found in the Treasury Board Management of Real Property Policy. However, the principles of the ISC policy emphasize the following:

- The approach to managing contaminated sites is risk-based.
- Priorities for managing contaminated sites are:
  - human health and safety;
  - legal and claims obligations;
  - significant impacts on the environment; and
  - work collaboratively with First Nations to manage contaminated sites.
- Manage future policies and programs to prevent future contaminated sites liabilities to the Crown;
- Follow the federal “polluter pays” principle.<sup>38</sup>

<sup>35</sup> Hykin, 17.

<sup>36</sup> In 1992, the “Environmental Issues Inventory and Remediation Plan” was developed to identify and track on-reserve contaminated sites.

<sup>37</sup> John W. Gailus. “Management of Contaminated Sites on Indian Reserve Lands.” Devlin Gailus Barristers and Solicitors. (2013): 9.

<sup>38</sup> ISC. “Contaminated Sites Management Policy.” <https://www.aadnc-aandc.gc.ca/eng/1100100034643/1100100034644>



A key principle to Canada's approach is the "polluter pays" principle which posits that polluters be the immediate party responsible for the costs and damages relating to the contamination they cause. Enforcement of the "polluter pays" principle on-reserve is complicated though, as it is accompanied by provincial compliance promotion elements (e.g., standards, certification, licensing, inspection), which are lacking on-reserve.<sup>39</sup> Minimal requirements for monitoring and at the end of permit and lease terms have resulted in the polluter abandoning the site which leaves Canada deal with the liabilities associated with the contaminated site, and the First Nation with the health and environmental risk.<sup>40</sup>

### 2.2.2 Federal Funding Mechanisms

As stated above, the Federal Contaminated Sites Action Plan (FCSAP) provides funding and support to First Nations in managing contaminated sites. The FCSAP is a key source of funding for the CSOR; however, funding is provided on a cost-share basis. While the FCSAP provides a bulk of the funding for contaminated sites on reserve, ISC Ontario Region (through the Capital Facilities and Maintenance Program) provides the balance of funding.<sup>41</sup>

### 2.2.3 Best Practices in Contaminated Site Reclamation

When determining if a site is contaminated, a detailed assessment of scope and nature of contamination, a risk assessment, remediation planning, implementation of a remediation plan, and environmental monitoring are critical steps and best practices to reclaim the site and mitigate risks to human health and the environment. The following steps are drawn from legislation from across Canada.<sup>42</sup>

#### Step 1 – Identify and assess site for potential contamination

Assess the significance of the reported contamination through a site visit. Ensure a qualified person conducts the site assessment and collects the necessary technical information including effects on soil and groundwater and potential effects on the surrounding population. It is critical that the extent of the contamination is clearly defined and delineated. A comprehensive environmental assessment which identifies the nature and extent of contaminants will allow the First Nation to characterize the site and/or the risk to human health and the environment and make informed decisions and a remedial action plan.

Phase 1 - The initial actions undertaken to determine whether a property is, or is not, contaminated. A Phase I site information assessment involves reviewing all available reports, studies and other relevant documents on a site, but does not involve sampling, analysis and measurement of soil and water.

<sup>39</sup> [https://www.aadnc-aandc.gc.ca/DAM/DAM-CIRNAC-RCAANC/DAM-AEV/STAGING/texte-text/ev\\_css60\\_1511896979296\\_eng.pdf](https://www.aadnc-aandc.gc.ca/DAM/DAM-CIRNAC-RCAANC/DAM-AEV/STAGING/texte-text/ev_css60_1511896979296_eng.pdf), 7.

<sup>40</sup> Gailus, 6.

<sup>41</sup> [https://www.aadnc-aandc.gc.ca/DAM/DAM-CIRNAC-RCAANC/DAM-AEV/STAGING/texte-text/ev\\_css60\\_1511896979296\\_eng.pdf](https://www.aadnc-aandc.gc.ca/DAM/DAM-CIRNAC-RCAANC/DAM-AEV/STAGING/texte-text/ev_css60_1511896979296_eng.pdf) 12.

<sup>42</sup> Nunavut, NWT



Phase II - Builds upon results of the Phase 1 assessment by sampling soil and water, and sometimes air, on a site to characterize and delineate the concentration of contaminants and compare those levels to approved remediation criteria. A Remedial Action Plan may be developed following the Phase II reconnaissance testing program if all necessary information about the site has been obtained.

Phase III - The most detailed level of assessment that is intended to address any outstanding issues and information gaps following a Phase II assessment.

## Step 2 - Preparation of a Remedial Action Plan (RAP) and Implementation

A RAP will be critical in outlining the methodology and plan for remedial action.

- Summarize all data on contaminants identified during the site investigation(s);
- Identify contaminants of concern and the media affected;
- Identify the proposed clean up criteria and method(s) by which they have been derived;
- Identify, quantify and characterize the materials to be treated/removed;
- Summarize remedial options evaluated and the method used to select the preferred remedial strategy;
- Describe the selected clean up method and its technical feasibility;
- Detail an implementation plan, including a schedule;
- Discuss control measures to minimize fugitive air emissions, surface water control, worker health and safety;
- Identify the fate of residual contaminants; and
- Identify remedial verification and long-term monitoring plans.

## Step 3 – Site Closure

When the responsible party and qualified person are satisfied that all the requirements of the RAP have been met, a closure report will be forwarded to ISC-Ontario region.

### 2.2.4 *Challenges and opportunities*

While recent Treasury Board commitments and ISC efforts to deliver on program objectives have benefited the management of contaminated sites on reserves, there remain challenges for ensuring effective contaminated sites remediation in remote communities. Diesel is a primary energy source for remote communities and lack of human and financial resources to deal with proper remediation often leaves these sites unmanaged. There are linkages and potential opportunities for OFNTSC to support communities' transition to green technology as a way to resolve issues around contaminated sites and reliance on diesel.



## 2.3 Solid Waste Management

Solid waste management protects human health and the surrounding environment. ‘Solid waste’ refers to reusable, recyclable, compostable, and/or residual waste. Solid waste management systems include collection, diversion, and disposal systems. Diversion systems refer to recycling and composting and disposal systems refer to landfills, incineration, or open burning.<sup>43</sup>

Many rural and remote communities, which can include First Nations reserves have inadequate solid waste management systems due to lack of adequate infrastructure – a problem that is confounded and perpetuated by lack of financial resources and competing infrastructure needs.<sup>44</sup>

### 2.3.1 *Overview of Federal legislation, policies, programs*

Solid waste management is shared among federal, provincial, and municipal governments. Municipalities are responsible for managing collection, recycling, composting, and household waste disposal. Provinces provide direction through establishing waste reduction policies and programs, as well as approving and monitoring waste management facilities.<sup>45</sup> The federal government is connected to waste management on First Nations reserves through its authority granted by the *Indian Act*. The Indian Reserve Waste Disposal Regulations under the *Indian Act* has provisions for issuing permits for waste disposal, storage, and burning on reserve lands.<sup>46</sup> While First Nations can pass by-laws on reserves under section 81 of the *Indian Act*, the federal government has ultimate authority and responsibility for environmental protection on reserves.<sup>47</sup>

ISC administers the First Nations Waste Management Initiative to support Nations in the development of infrastructure and training programs for sustainable waste management systems. The goal of the initiative is to ensure First Nations communities have sustainable solid waste management systems. Currently, many communities are struggling with the negative environmental and human health affects from unmaintained landfills, open burning, and lack of programs for recycling, composting, and disposal of hazardous waste. Through a combination of infrastructure funding, capacity building, and education, the program aims to support overall waste reduction and diversion on reserves that are adapted to individual

<sup>43</sup> Environment and Climate Change Canada. “Municipal solid waste and the environment.” Accessed on October 22, 2019.

<https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/municipal-solid/environment.html>

<sup>44</sup> Environment and Climate Change Canada. *Solid waste management for rural and remote communities, planning and technical guidance document*. (2017). Ministry of Environment and Climate Change Canada. Retrieved from:

<http://publications.gc.ca/site/eng/9.826705/publication.html>

<sup>45</sup> Environment and Climate Change Canada. “Municipal solid waste: a shared responsibility” Accessed October 22, 2019.

<https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/municipal-solid/shared-responsibility.html>

<sup>46</sup> Indian Reserve Waste Disposal Regulations, CRC, c 960

<sup>47</sup> John W. Gailus. *Management of Contaminated Sites on Indian Reserve Lands*. (2013). Devlin Gailus, Barristers and Solicitors. Retrieved from: [http://www.dgwlaw.ca/wp-content/uploads/2014/12/Site\\_Remediation\\_Conference\\_Paper.pdf](http://www.dgwlaw.ca/wp-content/uploads/2014/12/Site_Remediation_Conference_Paper.pdf)





needs of communities. If successful, the initiative will result in an increased number of Nations with improved waste infrastructure, programing and waste management systems.<sup>48</sup>

Funding under this initiative is available to First Nations communities, tribal councils, related non-profit organizations, eligible collaborative organizations operating on behalf of the Nation, and First Nations technical services organizations. The initiative was announced as part of the 2016 budget and offers funding for a range of activities including:

- “Community waste management agreements with municipalities and service providers (municipal-type agreements)
- Transfer stations to support off-reserve waste diversion
- Engineered landfills in remote and isolated communities
- Waste reduction and diversion initiatives such as recycling, composting and hazardous waste programs
- Waste operator training
- Coordinating waste diversion
- Waste awareness and education programming
- Landfill management and closing of refuse sites
- Management plans and feasibility studies.”<sup>49</sup>

### 2.3.2 Federal Funding Mechanisms

Funding for solid waste management is available through the First Nations Waste Management Initiative, which is available to First Nations communities, tribal councils, related non-profit organizations, eligible collaborative organizations operating on behalf of the Nation, and First Nations technical services organizations. First Nations communities applying for funding through this initiative need to ensure that their waste infrastructure needs are described in the First Nations Infrastructure Investment Plan (FNIIP). FNIIP helps communities assess and strategically plan infrastructure investments by prioritizing them according to the National Priority Ranking Framework. The ranking tool is intended to ensure projects with the highest priority are the first to receive funding.<sup>50</sup>

Funding is also available through the Capital Facilities Maintenance Program (CFMP) and First Nations Infrastructure Investment Fund (FNIIF) as previous described in this paper. While these two funding sources have not ear marked fund specifically for solid waste management, they are intended to support community public infrastructure on reserves.<sup>51</sup>

<sup>48</sup> Indigenous and Northern Affairs Canada. *First Nation Waste Management Initiative*. Norther Ontario First Nations Environment Conference. (October 6, 2016). Ministry of Indigenous and Northern Affairs Canada.

<sup>49</sup> Indigenous Services Canada. “First Nations Waste Management Initiative” Accessed on October 22, 2019. [https://www.sac-isc.gc.ca/eng/1491490781609/1533647730166#Related\\_links](https://www.sac-isc.gc.ca/eng/1491490781609/1533647730166#Related_links)

<sup>50</sup> “First Nations Infrastructure Investment Plans and Reports”

<sup>51</sup> “Capital Facilities and Maintenance Program;” “First Nation Infrastructure Fund”



Although solid waste management on reserve falls under federal jurisdiction, there are no robust federal guidelines, likely as a result of the role of provinces and municipalities in solid waste management. As a result, on reserve communities in Ontario use provincial guidelines as a default.

### 2.3.3 *Best Practices in Solid Waste Management*

The Made-in-Ontario Environment Plan focuses waste management responsibilities towards producers and on around effective waste diversion.

Best practices for solid waste management in Ontario should follow policy and legislation intended to the province's vision for waste reduction including:

- *Resource Recovery and Circular Economy Act, 2016*
- *Waste Diversion Transition Act, 2016*
- *Environmental Protection Act*
- *Environmental Assessment Act*
- *Nutrient Management Act*
- Food and Organic Waste Policy Statement

Ontario has several waste diversions programs that provide guidance on the proper waste disposal, reuse, and recycling. The programs include programs for: tire collection, waste and electrical and electronic equipment, municipal hazardous or special waste, blue box, and bottle return.

Waste disposal and removal in the province must comply with the provincial *Environmental Protection Act* and the following regulations:

- Landfill design standards under Reg. 232
- Standards for disposal sites, the management, tracking and disposal of hazardous and liquid industrial waste under Reg. 347
- Requirements for landfill gas collection under Reg. 217
- Requirements for municipal Blue Box programs under O. Reg. 101/94
- Requirements for IC&I sector to reduce waste and recover resource under '3Rs' regulations: O. Reg. 102/94, O. Reg. 103/94 and O. Reg. 104/94
- Requirements for producers of pharmaceuticals and sharps to establish free collection locations across Ontario for pharmaceuticals and sharps they no longer need under Reg. 298/12
- Ontario Compost Quality Standards under Reg. 347 and Guidelines for the Production of Compost



### 2.3.4 Challenges and opportunities

One of the main challenges with respect to solid waste management on reserves is the lack of robust federal structure and guidelines which forces communities to look to provincial legislation and guidelines to develop effective management systems. Yet funding for solid waste programs remains a federal responsibility. Additionally, many small remote communities do not have the size of capacity to support a landfill and therefore rely on off-reserve services. By way of opportunities, there is funding available from industry to support communities.

## 2.4 Environmental Assessment

Environmental Assessments (EAs) are a federal and provincial regulatory tool used across Canada to assess the potential impacts and benefits of natural resource, energy, housing, infrastructure, and other development projects.

Up until recently, the federal government regulated federal level Environmental Assessment (EAs) under the Canadian *Environmental Assessment Act, 2012*, (CEAA 2012). As of August 2019, CEAA 2012 has been repealed and replaced with the *Canadian Impact Assessment Act*.<sup>52</sup> In its review, the federal government has also made significant changes to the EA program and process. The Impact Assessment Agency of Canada now oversees Impact Assessments (IA) which have replaced EAs. Previously and under CEAA 2012, the type and complexity of the EA process for reserve projects depended on the type and complexity of the project.<sup>53</sup> The federal government would determine the level of risk associated with a proposed development project using the regulations set out under paragraph 84(a) of CEAA 2012. Projects on reserve and determined to be of high risk or complexity (for example: mines, large quarries, hydroelectric facilities) were subject to full EA processes while projects determined to be of low or medium risk (for example: road upgrades or construction, gas stations, residential subdivisions, small quarries) were subject to the Environmental Review Process (ERP).<sup>54</sup> The ERP process was designed to minimize the regulatory hurdle involved in completing projects on reserve and has since been repealed along with CEAA 2012.

The Impact Assessment Agency of Canada is currently working on a new regulatory framework and it is yet not clear how First Nations on reserve will be affected by the new process. A key challenge for OFNTSC in the near future will be to navigate changes in regulation and to support communities to adapt to the new process.

<sup>52</sup> “Impact Agency of Canada” Accessed October 22, 2019 <https://www.canada.ca/en/impact-assessment-agency.html>

<sup>53</sup> National Aboriginal Land Managers Association. “Environmental Review Process Engagement Session Discussion Paper” (2017). Retrieved from: [http://nalma.ca/wp-content/uploads/2017/03/ERP\\_ENGAGEMENT\\_SESSION\\_DISCUSSION\\_PAPER\\_FINAL.pdf](http://nalma.ca/wp-content/uploads/2017/03/ERP_ENGAGEMENT_SESSION_DISCUSSION_PAPER_FINAL.pdf)

<sup>54</sup> Indigenous and Northern Affairs Canada. *Proponents’ Guide to Aboriginal Affairs and Northern Development Canada’s Environmental Review Process*. (2014). Ministry of Indigenous and Northern Affairs Canada. Retrieved from: <https://www.aadnc-aandc.gc.ca/eng/1403215245662/1403215349135#chp3>



### 3. Conclusion

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OFNTSC's Environmental Service supports First Nations on reserve communities reach their goals and objectives related to the development and maintenance of public environmental infrastructure which contributes both to the well-being of communities and their local environment. Funding for environmental infrastructure projects comes through ISC programs such as the CFMP and recent federal budgets have committed the government to supporting communities in their pursuit of needed infrastructure. However, ISC and federal government priorities are not always aligned with community needs and as a result, OFNTSC provides support to help Nations access the funding and training they require to support infrastructure and environmental needs. As community needs evolve, so too does the types of services OFNTSC provides. For example, as communities face environmental challenges as a result of climate change, there are opportunities for OFNTSC's environmental service to provide relevant technical support and advice.



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ONTARIO FIRST NATIONS  
TECHNICAL SERVICES  
CORPORATION

## **First Nations Fire Safety in Ontario**

### *The Role of OFNTSC and Recommendations for Improvement*

Prepared by: Ontario First Nations Technical Services Corporation  
Date: October 02, 2019



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## 1. Introduction

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The Ontario First Nations Technical Services Corporation (OFNTSC) Fire Safety service has been in place since 1995 and was created to address fire safety deficiencies that many First Nations homes and buildings experience. OFNTSC is committed to helping First Nations with assessing their fire protection plans and providing fire training and capacity building to mitigate against the loss of life and personal and community infrastructure. OFNTSC acknowledges that fire prevention and protection are essential community services that make the difference between life and death.

Fire safety for on-reserve First Nations has received significant and deserving attention over the past decade due to the increasing instances of fire-related fatalities and the loss of homes and community infrastructure. Ontario leads the country in First Nation reserve fire-related deaths,<sup>1</sup> and the number of on-reserve fire incidents and fire injuries per capita is nearly two and a half times greater than the rest of Canada.<sup>2</sup> First Nations also experience fire-fatalities at a rate ten times higher than what is seen in the rest of country.<sup>3</sup> Fire-related fatalities on-reserve are often preventable and can be linked to a lack of functioning smoke alarms, poor fire prevention and education, a lack of capacity, and inconsistent training of fire crews, among other things. Further complicating these challenges is that on-reserve policy regarding fire protection has often been shaped without the inclusion of First Nations peoples.

Fire safety experts advocate that fire prevention (which includes public education, inspection, and code enforcement) is foundational for fire safety.<sup>4</sup> OFNTSC plays a critical role in fire safety and particularly fire prevention in Ontario, and as First Nations continue to experience fire safety issues, it is essential that fire safety is prioritized, culturally sensitive, and delivered by and for First Nations consistent with the *United Nations Declaration on the Rights of Indigenous Peoples*.

The following paper will explore OFNTSC's fire safety program, and the issue of fire safety more broadly, within the context of Ontario. This will include an overview and analysis of federal fire safety policies as they relate to on-reserve First Nations, challenges faced by First Nations and opportunities to improve fire safety on-reserve. It will explore best practices in fire safety and will make recommendations geared towards improved fire safety on reserve.

## 2. OFNTSC's Approach to Fire Safety

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While individual First Nations hold primary responsibility for on-reserve fire safety, OFNTSC supports Ontario First Nations through public fire protection and prevention in accordance with the National

<sup>1</sup> Siekierska, Alicja and Winter, Jesse (2017). "Fire and Death in Canada's First Nations." *Toronto Star*. February 24, 2017.

<http://projects.thestar.com/first-nations/fire-and-death-in-canadas-first-nations/>

<sup>2</sup> Canada Mortgage and Housing Corporation. (2007). "Fire Prevention in Aboriginal Communities."

<sup>3</sup> Ibid.

<sup>4</sup> Government of Canada. [n.d.] "Level of Service Standards – Fire Protection Services – Capital Facilities and Maintenance Program."

<https://www.sac-isc.gc.ca/eng/1100100010632/1534353148780>



Building Code, building code interpretation for fire related issues, emergency vehicle specification review, community fire prevention issues, volunteer fire department administration, and fire equipment purchase review. OFNTSC works with volunteer fire departments and fire prevention officers from Tribal Councils to ensure First Nations have current information as it relates to fire safety initiatives. Services offered by the OFNTSC are free of charge to First Nations and Tribal Councils in Ontario.

OFNTSC's fire safety service has the following strategic priorities:

1. To promote development of an effective and efficient public fire education program providing fire protection and fire safety in First Nation communities in the Ontario region.
2. To assist in ensuring that this program meets the overall goals and priorities of a First Nation Fire Department.
3. To assist in ensuring the program has viability and self-sufficiency within a 10-year period.
4. To promote a safe working environment within First Nation fire departments.
5. To assist in providing training and education to the First Nation fire department based on IFSTA (International Fire Service Training Association).
6. To assist in providing delivery systems that reflects the principles and strategic directions of ISC.
7. To assist in ensuring all local issues of the First Nation communities are addressed with respect to fire safety matters and plans.
8. To continue to assist and support the First Nation fire departments in all matters of fire prevention and public education until such time as the departments are self-sufficient.
9. To aid in training, education and management in all types of emergencies and disasters.

The benefits to using OFNTSC's fire safety services include community awareness, education, and capacity building around fire prevention; community preparedness in the event of a fire; improved efficiency in fire department administration; and, additional purchasing power when procuring firefighting equipment.

### 3. Background

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#### *3.1 Overview of Federal Fire Safety Policies and Programs*

Unlike municipalities and non-Indigenous communities, there are no national regulations or legislation governing fire protection for First Nations. The lack of a standardized process and guiding principles to make sure on-reserve buildings meet safety requirements has resulted in some First Nations having well-established rules around fire prevention and others having none. First Nations may establish their own fire departments or may contract fire protection services from neighbouring municipalities. Remote and northern communities are often at a disadvantage as they cannot easily partner with municipalities given their geography.



At a national level, the National Building Code of Canada sets out technical provisions for the design and construction of new buildings which also applies to the alteration, change of use and demolition of existing buildings. The National Building Code acts as a model building code meant to create the foundation of building codes at the provincial level; however, it has no legal status unless expressly adopted by the provinces. Provincial building codes, such as the Ontario Building Code, a regulation created under the *Ontario Building Code Act, 1992*, are enforceable across the province but generally do not apply to on-reserve construction projects. This creates uncertainty when determining which building standards to adhere to when developing infrastructure projects on First Nation lands. While First Nations operating under the *Indian Act* have the authority to pass land use bylaws that adopt a building code or create their own building code, the federal government's policy is that building codes passed by First Nations must conform to the National Building Code.

The Protocol for INAC-Funded Infrastructure makes it clear that a Council of a First Nation must adhere to the National Building Code along with other national codes (such as the Canadian Electrical Code and the National Plumbing Code of Canada), as a condition of receiving funding from the Canadian government. First Nations are required to manage their own fire protection services using funding received from Indigenous Services Canada (ISC) through the Capital Facilities and Maintenance Program (CFMP).

The 2010, the federal government released the *First Nations Fire Protection Strategy 2010-2015*, which was developed to focus on fire protection for on-reserve communities. In 2015, the *Joint First Nations Fire Protection Strategy 2016-2021* was released, which builds upon the 2010 strategy and places greater emphasis on partnerships, fire prevention education and the development of standards. The goal of the latter strategy is to support on-reserve communities in reducing the risk of fire-related deaths, injuries and losses to critical infrastructure.<sup>5</sup> These strategies have been criticized for being developed without First Nations input or that of First Nation organizations.<sup>6</sup>

### 3.2 Fire Safety in Ontario

In Ontario, fire prevention is a provincial responsibility administered through the Office of the Fire Marshal (a branch of the Ministry of the Solicitor General). The *Fire Protection and Prevention Act, 1997*, defines the powers and duties of the Fire Marshal on a provincial scale as well as the responsibilities of municipal councils for fire-related services at the local level. The Act bears no mention of First Nations, as discussed above, since First Nations fall under federal jurisdiction and therefore outside the authority of the Ontario Fire Marshal.

<sup>5</sup> Indigenous Services Canada. (2018). "Statement from Minister Philpott on Fire Prevention Week." <https://www.canada.ca/en/indigenous-services-canada/news/2018/10/statement-from-minister-philpott-on-fire-prevention-week.html>

<sup>6</sup> Nishnawbe Aski Nation (2017) "Submission to the Standing Committee on Indigenous and Northern Affairs, Fire Safety and Emergency Management in Indigenous Communities."



### 3.2 Federal policy direction

Since coming to power in 2015, the Liberal government has prioritized the need to provide better fire protection for First Nation communities, reduce fire losses, and extend the life cycle of community infrastructure assets. Budget 2019 proposed to help First Nations communities prepare for emergencies and better adapt to the threats of climate change, with the following investments:

- \$211.0 million over five years, starting in 2019–20, with \$49.4 million per year ongoing to support increased resiliency and emergency management on-reserve.
- \$48.0 million over four years, starting in 2020–21, to renew funding for infrastructure projects on-reserve that will protect communities from climate related hazards.<sup>7</sup>

Budget 2019 also states that the above listed investments will support the creation of an Indigenous Fire Marshall’s Office (IFMO)—a First Nations-led institution that would promote fire safety and prevention, undertake public education, enforce local fire safety and building codes, and conduct regular building inspections in First Nations communities. Another stated goal of the IFMO is to fix glaring gaps in fire prevention programs across Canada and oversee data collection on First Nations on-reserve fires, which had stopped being tracked under the former Harper government. The creation of the IFMO is supported by Assembly of First Nations Resolution 89/2017: “Support for Creation of the Indigenous Fire Marshal Office”; however, the Chiefs of Ontario have cited concerns with the IFMO, notably with the process surrounding its creation.

In May 2016, the Minister of Indigenous and Northern Affairs announced Canada is a full supporter, without qualification, of the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP).<sup>8</sup> Article 23 of the UNDRIP states:

*Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, Indigenous peoples have the right to be actively involved in developing and determining health, housing and other economic and social programs affecting them and, as far as possible, to administer such programs through their own institutions.*

Article 23 encapsulates the need for active First Nations involvement in developing and administering fire safety programs which to date have not been developed with adequate First Nations involvement.

<sup>7</sup> Ministry of Finance. “Budget 2019: Investing in the Middle Class.” Government of Canada. <https://www.budget.gc.ca/2019/docs/plan/budget-2019-en.pdf>

<sup>8</sup> Indigenous Services Canada (2019). “United Nations Declaration on the Rights of Indigenous Peoples.” Government of Canada. <https://www.aadnc-aandc.gc.ca/eng/1309374407406/1309374458958>



### 3.4 Federal funding mechanisms

ISC provides funding as part of an annual core capital funding contribution which covers residential housing units and ISC funded public-access buildings or assets.<sup>9</sup> As per CFMP guidelines, it is the First Nations responsibility to financially contribute to the operation and maintenance costs of their fire facilities, vehicles, equipment and systems. Funding is distributed based on ISC’s “Continuum of Service Model” (see **Appendix A**) which supports a range of funding options for providing fire protection services in First Nation communities. The continuum has three tiers:

- The first tier is investment in fire prevention and fire education programming;
- The second tier is investment in capacity development, training and effective operation and maintenance of fire protection equipment; and
- The third tier is investment in capital investment towards fire protection infrastructure or equipment.

First Nations must meet the requirements at each tier to move to the next tier of funding. ISC claims that the tiered funding approach “increases support to a community based on its ability to deliver services at each tier;”<sup>10</sup> however, in practice, moving along the tiered funding continuum to achieve the maximum funding can be a challenge for many communities. The ISC approach inhibits First Nations from obtaining the maximum amount of funding which results in unnecessary damage and fire-related fatalities,<sup>11</sup> and has been further criticized as insufficient for remote, northern, and less populated communities.<sup>12</sup> OFNTSC recognizes that the “one-size-fits-all” funding approach to the critical issue of fire safety on-reserve is inadequate and not conducive to enabling First Nations to mitigate fire-related issues in a meaningful and proactive way.

From 2008-09 to 2014-15, ISC has provided more than \$27 million annually for capital investments, operating and maintenance costs, and firefighting training in First Nation communities.<sup>13</sup> When split across 634 First Nation communities across Canada, each community received \$42,655 annually to maintain all aspects of fire prevention services.<sup>14</sup>

## 4. Best Practices in On-Reserve Fire Safety

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In 2013, OFNTSC released the “Strategy to Enhance Fire Emergency Services” which details the need for a best practices approach to First Nations fire safety and prevention. The strategy identifies seven (7) best

<sup>9</sup> Government of Canada. (2016). “Level of Service Standards – Fire Protection Services – Capital Facilities and Maintenance Program.” <https://www.sac-isc.gc.ca/eng/1100100010632/1534353148780>

<sup>10</sup> Ibid.

<sup>11</sup> Nishnawbe Aski Nation (2017) “Submission to the Standing Committee on Indigenous and Northern Affairs, Fire Safety and Emergency Management in Indigenous Communities.”

<sup>12</sup> Ibid.

<sup>13</sup> Ibid, 31-32.

<sup>14</sup> Nishnawbe Aski Nation (2017): 12.



practices that First Nations fire departments should adopt to provide a high level of emergency services and fire protection that is appropriate to their community. While many of these practices are applied by several First Nations fire departments in Ontario, many are not. The seven identified best practices are as follows:

**1. *Assess the risk and develop long range plans***

First Nations should undertake risk assessment and develop long range plans for their fire departments and communities at large. These plans should: describe how they intend to meet the firefighting and other community emergency needs; be developed in collaboration with any broader community planning underway; and, should clearly consider human resource and financial limitations. Fire departments should develop contingency plans to cover fire department operations in the event of community emergencies or equipment malfunctions. Plans may also include emergency medical responses and specialized rescues and should consider developing community emergency response plans and corresponding implementation plans.

Long range planning also involves preparing to replace fire equipment and infrastructure. As a component of community operations and maintenance or asset management plans, First Nations communities should develop infrastructure replacement plans and be financially prepared for costs associated with upgrades and replacement of obsolete or worn vehicles and equipment.

**2. *Evaluate fire department performance and use resources cost-effectively in all emergencies***

The performance of First Nations fire departments should be periodically reassessed to identify strengths and weaknesses in their training, equipment, and personnel capacities. Their performance should be evaluated and analyzed following responses to emergencies (through after-action review processes) to determine what worked well and what needs improvement.

**3. *Promote community awareness and prevention strategies for all fire-related emergencies***

Fire safety education programs are integral to improving public awareness of fire risks and fire prevention tactics. It is critical that basic fire awareness information is readily available and communicated clearly to all community members, especially those most vulnerable such as children, seniors, and people with disabilities. Key information must be disseminated in a manner that addresses the unique needs of all communities. Comprehensive education programs include initiatives for homes, schools, and workplaces as well as steps to reduce the local fire departments exposure to liability. Community education programs should be evaluated and modified, as needed, to ensure that they are effective.

**4. *Ensure fire code enforcement wherever and whenever possible through by-laws***

Code enforcement is a key component of community fire protection regimes. As a best practice, inspection programs should be scheduled in advance and target buildings that pose hazards and potential threats to life, safety, and community infrastructure (including homes). Because of the complexities of the



National Fire Code and the National Building Code, fire department personnel need appropriate and ongoing training in this field.

### ***5. Develop effective internal and external communication systems***

Effective communications are essential for a well-functioning fire department. Once fire departments are contacted about an emergency, they need to immediately alert their members. On the scene, incident commanders need to communicate throughout the incident with each fire company as well as maintain contact with dispatchers. When involved in mutual aid responses, all firefighters must understand communications protocols and use common terminology.

Where applicable, fire departments should maintain strong communications with outside groups, including local boards and agencies, as partnerships can be very valuable when faced with emergency situations.

For reliable communication linkages, fire departments need hardware such as radios, pagers, sirens, and other equipment. They also need to prepare communication protocols and train members on their use. Total support is necessary and essential to First Nations fire departments in the development and implementation of effective communications systems.

### ***6. Enlist a competent, trained workforce and support safe operations***

For safe and effective emergency operations, fire departments require adequate staffing levels and succession plans; comprehensive training for all duties associated with fire prevention and response, including operations and maintenance; standard operating guidelines; personal protective equipment for all personnel; and, health and safety procedures. To ensure adequate fire department staff are in place, it is recommended that First Nations fire departments establish a recruitment program based on existing personnel needs and needs identified in long-range plans. Liability, Public Services Health and Safety Association, and other insurance is essential for supporting safe operations. While OFNTSC does not offer firefighter training, supports to communities seeking training are available through OFNTSC. Nevertheless, ensuring a competent, trained workforce is available to support safe fire safety operations is a best practice for on-reserve communities.

### ***7. Plan for on-scene responses***

Before fire departments respond to emergencies, they should undertake intensive advance planning. With the assistance of OFNTSC, First Nations fire departments should analyze the fire risks and other hazards in their response area and gather enough information to prepare pre-incident plans. All firefighters should receive training to become familiar with pre-incident plan information in addition to community risk assessment training. Again, OFNTSC does not provide direct training but can support communities with technical advice and support for on-scene response planning.





Fire departments should utilize an incident management system that defines roles and responsibilities for emergency responses. The incident management system outlines the management structures used during emergency responses and provides standard operating guidelines for each function to be performed.

In addition to the best practices identified above, OFNTSC notes the following additional best practices:

- **Ensure a community-focused approach to fire safety:** Every First Nations community is different, and while it is easy to find relative comparisons, it is imperative that they be treated as such. This is particularly the case for northern and remote First Nations in Ontario.
- **Investigate fires:** Develop a process for investigating fires and specific guidelines on when to contact the Ontario Fire Marshall (OFM) and police for assistance with investigations. Firefighters should be trained on the steps needed to help preserve fire scenes.
- **Maintaining fire infrastructure and equipment:** Develop a routine maintenance program for all infrastructure and equipment to ensure it is always operational. This should include routine maintenance of vehicles and regular testing of ladders, hoses, and other fire equipment.

## 5. Challenges and Opportunities

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First Nations experience challenges related to fire events in a manner that is disproportionate to non-Indigenous Canadians. As stated earlier, Ontario leads the country in First Nation reserve fire-related deaths, and the number of on-reserve fire incidents and fire injuries per capita is nearly two and a half times greater than the rest of Canada.<sup>15</sup> First Nations also experience fire-fatalities at a rate ten times higher than what is seen in the rest of country.<sup>16</sup> According to a 2018 Report of the Standing Committee on Indigenous and Northern Affairs, First Nations communities are simply not equipped to prevent life-threatening and devastating fires and often do not have proper fire protection services. In addition, ISC policy does not serve the needs of Ontario First Nation communities as it does not adequately consider the varying needs of disparate communities. OFNTSC notes the following additional challenges faced by First Nations in Ontario related to fire safety, broken down by policy, infrastructure, and education, training and awareness:

### *Policy and Funding Challenges*

- Building inspection regimes are inconsistent or simply non-existent, and enforcement and compliance mechanisms are lacking.<sup>17</sup>
- The lack of legislation and standards regulating fire protection services for First Nation communities has resulted in a fragmented approach to fire prevention where, as in the case of inspections, enforcement and compliance mechanisms are lacking.

<sup>15</sup> Canada Mortgage and Housing Corporation. (2007). "Fire Prevention in Aboriginal Communities."

<sup>16</sup> Ibid.

<sup>17</sup> Standing Committee on Indigenous and Northern Affairs. "From the Ashes: Reimagining Fire Safety and Emergency Management in Indigenous Communities." (2017): 29.



- Indigenous Services Canada’s funding formula treats every First Nation the same way and does not consider crucial differences such as geographic location and size. Remote and northern communities often suffer as a result of this policy inadequacy. The formula also overlooks the need for investments in human capital and capacity within communities which may result in equipment without trained personnel to operate it.
- Without adequate fire protection funding First Nations often struggle to procure new equipment and hire trained personnel.<sup>18</sup>

### *Infrastructure Challenges*

- Many communities lack functioning smoke detectors, extinguishers and response equipment which contributes to the spread of fires.<sup>19</sup>
- Issues related to housing, such as overcrowding, unregulated construction, and overall poor infrastructure can increase the risks of fires and fire fatalities.

### *Education, Training, and Awareness Challenges*

- Many communities experience a lack of firefighter training, not only for all duties associated with fire prevention and response, but also operations and maintenance.
- In many cases, there are inadequate community fire safety awareness programs, and not all communities carry out prevention activities for the community and for critical infrastructure such as schools.

Despite these challenges listed above, there exists an opportunity to change the status quo, as fire-related fatalities and damages on-reserve are often preventable. For example, the lack of functioning smoke alarms, poor fire prevention and education, a lack of capacity, and inconsistent training of fire crews can all be ameliorated with increased funding aimed at implementing the recommended best practices outlines in earlier sections.

## **6. Conclusion & Recommendations**

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It is the position of OFNTSC that every First Nation citizen deserves to live in a fire safe home and in a safe community with strong protections to mitigate against the potential for fire-related disasters and fatalities. In addition to the strategic priorities listed earlier in this paper, OFNTSC is committed to assisting First Nations with assessing their fire protection plans and providing fire training and capacity building to mitigate against the loss of life and the loss of personal and community infrastructure. OFNTSC recognizes that fire prevention and fire protection are essential community needs that make the difference between life and death. First Nations communities require predictable and sustained funding to

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<sup>18</sup> Ibid, 31.

<sup>19</sup> Ibid, 29.



ensure that the capacity to provide better fire protection, reduce fire losses, and extend the life cycle of community infrastructure assets is always present. OFNTSC will continue to assist First Nations communities in Ontario in fire safety and recommends that all communities heed the best practices discussed throughout this paper.

While OFNTSC is not mandated to lobby or advocate for First Nations on technical services issues, the message from the communities we serve is clear: the status quo is not working, and lives are being lost due to the fire safety-related funding and policy inadequacies that flow from ISC. Nevertheless, OFNTSC acknowledges that fire safety must be viewed holistically starting at the home and the individual level.

Based on the best-practices discussed in this paper, OFNTSC recommends communities undertake the following to ensure fire safety on-reserve:

1. **Identify risks and plan accordingly:** Assess the fire-risk to homes and community infrastructure and develop long range plans. Plans should describe how firefighting and other community emergency needs will be met and should clearly consider human resource and financial limitations. In addition to this, always factor in costs associated with operations and maintenance.
2. **Evaluate fire department performance:** Ensure assessments are scheduled and undertaken periodically to identify strengths and weaknesses in fire training, equipment, and personnel capacities.
3. **Promote community awareness and prevention strategies for all fire-related emergencies:** Ensure that basic fire awareness information is readily available and communicated clearly to all community members, especially those most vulnerable such as children, seniors, and people with disabilities.
4. **Ensure fire code enforcement:** enforcement should take the form of regular inspection programs that target buildings which pose hazards and potential threats to life, safety, and community infrastructure (including homes). In addition to this, wherever and whenever possible include enforcement mechanisms in band by-laws.
5. **Develop effective internal and external communication systems:** Ensure that communications protocols and equipment are in place to notify both community members and (where appropriate) outside agencies. Also, ensure comprehensive training modules for all duties associated with fire prevention and response, including operations and maintenance, are in place.
6. **Enlist a competent, trained workforce and support safe operations:** To ensure adequate fire department staff are in place, it is recommended that First Nations fire departments establish a recruitment program based on existing personnel needs and needs identified in long-range plans.
7. **Plan for on-scene responses:** Ensure pre-incident plans are in place, exercised, and known to the community to encourage fire-readiness.
8. **Ensure a community-focused approach to fire safety:** Every First Nation community is different, and while it is easy to find relative comparisons, it is imperative that they be treated as such. This is particularly the case for northern and remote First Nations in Ontario.



9. **Investigate fires:** Develop a process for investigating fires and specific guidelines on when to contact the Ontario Fire Marshall (OFM) and police for assistance with investigations. Firefighters should be trained on the steps needed to help preserve fire scenes.
10. **Maintain and inspect fire infrastructure and equipment:** Develop a routine maintenance program for all infrastructure and equipment to ensure it is always operational. This should include routine maintenance of vehicles and regular testing of ladders, hoses, and other fire equipment.



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## Appendix A – ISC Continuum of Service Model

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### *Tier 1 – Fire Prevention and educational programming*

The approach begins with fire prevention and awareness – Communities are encouraged to have:

- Band Council Resolutions for fire service and/or fire prevention programs
- Education and home fire safety programs
- Working smoke alarms in all homes
- Community-sponsored fire programming and services
- Third-party fire safety officers doing inspections

### *Tier 2 – Capacity development and training*

Improving community fire safety – Once communities have established an awareness program for fire prevention, they may consider enhancing fire protection services and are encouraged to have:

- Firefighter recruitment and retention plans
- Firefighter training
- Fire service assessments
- Community risk assessment/reduction plans
- Capital investment plans
- Maintenance management plans for fire assets

### *Tier 3 – Capital investments*

Improving fire departments – Once Tier 1 and 2 requirements are met, INAC capital projects can be considered, such as:

- Firefighting vehicles:
  - fire pumper truck
  - fully equipped brush truck
  - trailer with water tank
- Buildings:
  - single bay fire hall or additions to an emergency response centre
- Firefighting equipment:
  - turnout gear
  - pumps and hoses
  - respirators
  - water dugout and trash pump
  - fire resistant coveralls
  - head protection and hand tools





ONTARIO FIRST NATIONS  
TECHNICAL SERVICES  
CORPORATION

## **First Nations Fuel Systems Management in Ontario**

### *The Role of OFNTSC and Recommendations for Improvement*

Prepared by: Ontario First Nations Technical Services Corporation  
Date: October 02, 2019



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## 1. Introduction

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The Ontario First Nations Technical Services Corporation (OFNTSC) provides training and equipment to on-reserve Ontario First Nations to assist in the management of their fuel systems. OFNTSC accomplishes this by certifying fuel handlers through fuel handler training which includes oversight on federally regulated safe fuel handling practices, equipment maintenance, and record-keeping. Currently, OFNTSC is the only service provider that provides bulk fuel system training and oversight for First Nations in Ontario regarding fuel systems management.

On-reserve fuel systems are regulated and managed pursuant to federal legislation that regulates fuel systems management. Under federal legislation, *The Canadian Environmental Act (CEPA)* (1999) sets out the regulatory framework for fuel storage tank systems. This act provides a number of tools for the control and regulation of toxic substances and other pollutants.

OFNTSC has developed a range of training videos and modules for First Nations and is committed to ensuring its approach to fuel systems management aligns with industry best practices. The following report discusses OFNTSC's approach to fuel systems management, outlines best practices, identifies challenges and opportunities, and concludes with recommendations.

## 2. OFNTSC's Approach to Fuel Systems Management

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Established in 1998, the OFNTSC Fuel Systems Management Program exists to train fuel handlers in First Nations across Ontario and assists First Nations in the development of safe fuel handling practices. Initially, the training focused on remote First Nations across northern Ontario where there is a large volume of fuel storage infrastructure equipment vital to their community needs. The fuel program has since expanded into a technical and training service provider for Unaffiliated First Nations, Tribal Councils, and Large First Nations and continues to provide guidance regarding onsite fuel systems and legislative & regulatory responsibilities. The OFNTSC is the only service provider who provides bulk fuel system training and oversight for First Nations in Ontario.

The OFNTSC Fuel Management Program provides certified Fuel Handler Training across Ontario First Nation communities where fuel is an important factor in operating and maintaining critically important community infrastructure. The training that the OFNTSC provides includes oversight on federally regulated safe fuel handling practices, equipment maintenance, and record-keeping. By establishing a strong fuel operations & maintenance workplace with community employees who handle fuel products, OFNTSC assists in ensuring and maintaining healthy environments for Ontario First Nations.

In conjunction with the Fuel Handler course, OFNTSC also offers certified Transportation of Dangerous Goods and WHMIS training and conducts assessments of First Nations-owned fuel-related infrastructure.

The Fuel Systems Management Program operates in accordance with the following strategic priorities:



1. **Compliance** - The Fuel Systems Management Service assists First Nations in ensuring that First Nation based fuel handlers comply with federal legislation including home and commercial fuel tank inspections.
2. **Liaison** - The Fuel Systems Management Service assists First Nations in liaising with private and government agencies in relation to the fuel sector.
3. **Emergency Fuel Spill** - The Fuel Systems Management Service assists First Nations in Response in developing emergency fuel spill response plans.
4. **Equipment Support** - The Fuel Systems Management Service assists First Nations in determining fuel handling system requirements.
5. **Training** - The Fuel Systems Management Service provides First Nations with training in proper fuel management and fuel handling techniques regarding fuel tank storage, emergency fuel spill response, proper fuel management.

OFNTSC's Fuel Systems Management Program is a core service, funding through Indigenous Services Canada Ontario region, however, additional support is sought through the Lands and Economic Development Service Program (LEDSP) to make purchases of fuel safety equipment for First Nations and to provide additional training in the areas of Workplace Hazardous Materials Information System (WHIMIS) and Transportation of Dangerous Goods (TDG).

### 3. Background

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#### 4.1 Federal legislative and regulatory framework

The *Canadian Environmental Protection Act, 1999* (CEPA) is the main federal statute for pollution protection and environmental protection. It provides a number of tools for the control and regulation of toxic substances and other pollutants.<sup>1</sup>

Under CEPA, the *Storage Tank System for Petroleum Products and Allied Petroleum Products Regulations* set out the regulatory framework for fuel storage tank systems. The regulations apply to federal and First Nations on-reserve lands.<sup>2</sup> The regulations apply to both above and underground storage systems for petroleum products (e.g. fuel) and/or allied petroleum products (e.g. ethylene glycol). Whether or not a storage tank system on reserve lands must comply with the regulations depends largely on size and containment and applies to outdoor (above or below ground) storage systems greater than 230

<sup>1</sup> Canadian Environmental Protection Act, 1999, <https://laws-lois.justice.gc.ca/eng/acts/c-15.31/>

<sup>2</sup> Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, 2009, 2.1 (c) <https://laws-lois.justice.gc.ca/PDF/SOR-2008-197.pdf>



litres.<sup>3</sup> As of June 13, 2010, and pursuant to the regulations, storage systems greater than 2,500 litres on federal or Aboriginal lands must register with and display an Environment Canada identification number.<sup>4</sup>

## 4.2 Provincial legislative and regulatory framework

The Technical Standards and Safety Authority (TSSA) in Ontario promotes and enforces public safety in the province under the *Technical Standards and Safety (TSS) Act*. The TSS Act and regulations under the Act apply to public infrastructures including fuel systems.<sup>5</sup> As a provincial entity, TSSA does not have enforcement authority on First Nations reserve lands.

Under the TSS Act, anyone engaged in activities related to a regulated material or substance must hold the necessary certificate.<sup>6</sup> Activities include but are not limited to design, construction, maintenance, or disposal of equipment.<sup>7</sup> This means that maintenance workers for fuel systems on reserves must hold the appropriate TSSA certificate.

## 4.3 Federal policy direction

In 2016, Canada announced \$4 billion in the federal budget for improving First Nations community infrastructure, of which \$3.4 billion was directed from long-term infrastructure funding the majority of which is designated through the Investing in Canada plan.<sup>8</sup> The 2017 budget also announced an additional \$4 billion over 10 years through the Investing in Canada Plan to “build and improve housing, water treatment systems, health facilities and other community infrastructure in partnership with Indigenous peoples.”<sup>9</sup> These are broad investments in First Nations communities and accessed through various funding streams, including the Capital Facilities and Maintenance Program.

The federal government also endorsed the *United Nations Declaration on the Rights of Indigenous Peoples*, in which the following articles pertain to fuel systems management:

Article 29 (1): Indigenous peoples have the right to the conservation and protection of their environment and the productive capacity of their lands or territories and

<sup>3</sup> <https://www.sac-isc.gc.ca/eng/1100100010579/1533644504503>; the footnote could fully explain the regs. See link with the answers to the FAQs.

<sup>4</sup> Fuel Storage Tank System Priority Ranking Framework (For Proposals Ranked as D1 Under the National Priority Ranking Framework) <https://www.sac-isc.gc.ca/eng/1100100010582/1533644408302#5>

<sup>5</sup> Technical Standards and Safety Act, 2000, S.O. 2000, c. 16, <https://www.tssa.org/en/about-tssa/legislation-and-regulations.aspx>

<sup>6</sup> There are a number of Ontario regulations (see link) which require operators to hold a certificate. We can elaborate the information in the footnote if required: <https://www.ontario.ca/laws/regulation/010215#BK2>

<sup>7</sup> Ibid (TSSA Act). <https://www.ontario.ca/laws/regulation/010215#BK2>

<sup>8</sup> Budget 2016

<sup>9</sup> Investing in the Middle Class (2016), <https://www.budget.gc.ca/2016/docs/plan/budget2016-en.pdf>



resources. States shall establish and implement assistance programmes for Indigenous peoples for such conservation and protection, without discrimination.

Article 29 (2): States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of Indigenous peoples without their free, prior and informed consent.

#### 4.4 *Federal funding mechanisms*

There are two main funding mechanisms related to on-reserve infrastructure: The Capital Facilities Management Programs (CFMP) and the First Nations Infrastructure Fund (FNIF) – both of which are proposal-based programs and administered through ISC.

##### Capital Facilities Management Program (CFMP)

The CFMP is one of the federal government’s main pillars for supporting First Nations community infrastructure. The CFMP invest approximately \$1 billion per year in various infrastructure and community facilities. The main objectives of the program are to: increase the life cycle of First Nations physical community assets, reduce health and safety risks, ensure codes and standards are upheld, and that assets are managed efficiently. First Nations can apply for funding through 3 streams: 1) operations and maintenance, 2) minor capital, and 3) major capital. Major capital investments must meet ISC’s priority ranking framework which includes the protection or improvement of health and safety assets, major maintenance, and community growth.<sup>10</sup>

CFMP, for example, provides funding for fuel storage system upgrades and replacement of non-compliant systems. The decision to invest in replacement or upgrades is determined through the Fuel Storage Tank System Priority Ranking Framework. ISC uses this framework to ensure funding is allocated to communities highly dependent on fuel in the operations of community infrastructure.<sup>11</sup>

##### First Nations Infrastructure Fund (FNIF)

The FNIF supports general community infrastructure, including energy systems and fuel storage systems. FNIF differs from CFMP in that its overall objective is to improve the quality of life of First Nations communities. FNIF invests in on-reserve projects, projects on Crown Lands, or lands that have been set aside for the benefit of First Nations. Eligible beneficiaries include Indigenous Nations, organizations, and private and public groups. In order to access funding through FNIF, Nations communities are required to list five-year community infrastructure plans and must meet the following requirements:

<sup>10</sup> Capital Facilities Maintenance Program, <https://www.sac-isc.gc.ca/eng/1100100016395/1533641696528>

<sup>11</sup> Fuel Storage Tank System Priority Ranking Framework (For Proposals Ranked as D1 Under the National Priority Ranking Framework, 2010, <https://www.sac-isc.gc.ca/eng/1100100010582/1533644408302#5>



- Be equal or below the maximum amount payable (\$10 million per recipient per year for capital projects involving the retrofitting, construction, replacement, expansion, or purchase and installation of fixed assets or infrastructure);
- Be supported by a Band Council Resolution, Tribal Council Resolution or other documentation indicating support from the governing body of a self-governing First Nation;
- Be consistent with a community plan and/or strategy applicable for the respective infrastructure category;
- Demonstrate how they contribute to the improvement of community health and safety, and to a cleaner and healthier environment;
- Demonstrate principles of sound budgeting (such as is based on well-documented needs, is cost-effective, consulting fees and salaries are reasonable and justifiable, etc.); and
- Be consistent with all applicable federal and provincial regulatory obligations and standards.<sup>12</sup>

#### 4. Best Practices in Fuel Systems Management

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One tool that First Nations can implement that can assist in better fuel management would be an Environmental Management Plan (EMP). While there is no legal requirement for First Nations to prepare an EMP, many First Nations recognize the value of planning as an important initial step in environmental governance.<sup>13</sup> Indeed, the experience of many First Nations indicates that plans are valuable tools to setting directions and guiding efforts to achieve environmental management,<sup>14</sup> including the management of fuel systems. An EMP defines a First Nation’s approach to important environmental issues and organizes actions to achieve specific environmental goals.<sup>15</sup> There is no template that dictates how best to develop an EMP as each First Nation’s situation is unique and influenced by different priorities; however, EMPs should reflect this distinctiveness, both in the content of the plans and in the ways that they are prepared.

An EMP can be developed with a specific chapter for “Hazardous Waste & Fuel Management” which identifies goals and objectives and in addition to best management practices in fuel handling and storage, fuel transport, and leak and spill prevention methods. This could include the following best management practices for fuel handling and storage:

- Containers must be appropriate for the type of fuel, meet standards of Underwriters Lab of Canada or Canadian Standards Association, be filled to a safe level, and capped;
- All small containers (less than 230 liters or 50 gallons including jerry cans, pails, and drums) stored at or near homes must be kept a minimum of 25 m from roadways and pedestrians and out

<sup>12</sup> <https://www.sac-isc.gc.ca/eng/1497275878022/1533645265362>

<sup>13</sup> David Harper, (2016). “A Guide to Preparing Environmental Management Plans for Operations First Nations.” 6.

<sup>14</sup> Ibid, 9.

<sup>15</sup> Ibid, 6.



of direct sunlight. They are to be protected from potential impact and in a ventilated shed under lock and key;

- Do not fill containers beyond their safe filling level (~90% full);
- Containers must be well maintained and free of rust, severe dents, and leaks;
- Containers must be located a minimum of 30.5 m (100 feet) away from groundwater wells or surface water;
- Containers must be stored at least three metres away from any building or in a building designed for storage;
- Drums and larger containers must be stored upright and dispensed upright using an approved pump;
- Caution and due diligence shall be used to prevent spills, check weekly for spills and leaks;
- Containers must be clearly labeled with contents and hazards, including ‘flammable;’
- Material safety data sheets for all products must be available to all involved in storage, handling, and dispensing of fuels;
- Storage locations must be vented and have appropriate fire extinguishers that are annually inspected with proper tags;
- Dispensing sites must be posted as no smoking and have one extinguisher available for use;
- Operators must conduct regular inspections of fuel tanks to ensure proper requirements are met;
- No fuel must escape during normal transport and handling; and
- A spill kit, appropriate to the type of fuel and volume contained, must be kept easily accessible.<sup>16</sup>

The following are notable best management practices for the transportation of fuel:

- All vehicles transporting fuel must have an appropriate spill kit and the driver must be trained and knowledgeable in its use;
- If a combined fuel load is greater than 2,000 L (440 gallons) a shipping document must be filled out for the cargo, the driver must have proof of “Transport of Dangerous Goods (TDG)” certified training and the load must a TDG placard appropriate for the fuels being transported; and
- All loads must be secured to prevent tipping or fuel loss. Fuel drums being transported by truck must be stacked end on end and transported by vehicles with sides or side boards.<sup>17</sup>

In addition, there are several best practices as drawn from *Best Practices in Fuel Handling and Storage* (2018) and *Fuel Handling Practices, Spill Responses, and Responsibilities for Contractors* (2014). These techniques include:

Technique:	How to implement:
Ensuring that the fuel is sourced from a quality supplier <sup>18</sup>	<ul style="list-style-type: none"> <li>• Do background checks and inspect delivery equipment to ensure the supplier has proper quality checks in place with well-maintained equipment.</li> </ul>

<sup>16</sup> Leq’á:mel First Nation. “Environmental Management Plan.” (2017): 64.

<sup>17</sup> Ibid, 65.

<sup>18</sup> Stephan Nel and Wessel Oosthuizen, (2018). “Best Practices in Fuel Handling and Storage” <https://www.grainsa.co.za/best-practices-in-fuel-handling-and-storage>



	<ul style="list-style-type: none"> <li>Request certification documents from fuel supplier to ensure it meets the minimum standards.</li> </ul>
Use proven fuel management technologies <sup>19</sup>	<ul style="list-style-type: none"> <li>Install breather filters with air driers on bulk tanks and fuel carts.</li> <li>Install particle contamination filters combined with water separators on bulk tanks and mobile fuel carts</li> </ul>
Using good housekeeping procedures with fuel management and maintenance of fuel storage equipment <sup>20</sup>	<ul style="list-style-type: none"> <li>Install bulk fuel tank at a slight angle with the drain plug at the lower point and the layout to the pump at a higher point to keep debris and sludge at the bottom of the fuel tank.</li> <li>Clean bulk tanks and mobile fuel carts and drain sludge and water regularly.</li> <li>Regularly inspect tanks and check sludge levels and rust in bulk tank and mobile fuel carts and maintain accordingly.</li> </ul>
Using good housekeeping	
Maintaining existing equipment that use fuel, using efficient fueling procedures to ensure equipment and fuel maintenance <sup>21</sup>	<ul style="list-style-type: none"> <li>Ensuring engine-driven equipment fuel tanks are filled up.</li> <li>Ensuring that fuel filters are replaced in accordance with the operator's manuals and fuel standards and drain water separators regularly.</li> </ul>
Usage of special conditioners for fuel and diesel <sup>22</sup>	<ul style="list-style-type: none"> <li>Ensuring engine-driven equipment fuel tanks are filled up.</li> </ul>
Usage of special conditioners for fuel and diesel <sup>22</sup>	<ul style="list-style-type: none"> <li>Use special diesel fuel conditioners that act as multi-functional fuel additive products for year-round use to improve diesel fuel quality and maintain peak engine efficiency and performance</li> <li>Specific additives are also available for bulk fuel storage tanks and are especially formulated to improve engine performance conditions identifies as injector sticking, engine misfire, rough idling, excess exhaust smoking, power loss and hard starting conditions in modern high-pressure diesel fuel systems.</li> </ul>
Being prepared for a potential spill <sup>23</sup>	<ul style="list-style-type: none"> <li>Have a spill kit on-hand in case of a fuel or oil spill. Spill kits should contain absorbent pads, socks, and pillows.</li> <li>Be aware of what to do in case of a fuel or oil spill.</li> </ul>

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

<sup>22</sup> Ibid.

<sup>23</sup> Penn State Physical Plant, (2014). "Fuel Handling Practices, Spill Response, and Responsibilities for Contractors." [https://ehs.psu.edu/sites/ehs/files/contractor\\_spills\\_emergency\\_procedure\\_rev\\_7-16.docx](https://ehs.psu.edu/sites/ehs/files/contractor_spills_emergency_procedure_rev_7-16.docx)





It has been identified that the biggest challenge OFNTSC faces regarding fuel systems management is community engagement, more specifically having community members and having fuel systems related employees attend meetings and training sessions. Opportunities that OFNTSC can do to alleviate this issue is looking to community engagement best practices. As OFNTSC provides in-community training on managing fuel systems, it is important that community engagement best practices are used to ensure community participation and buy-in. The following best practices in community engagement, drawn from *Gaining Momentum: Sharing 96 Best Practices of First Nations Comprehensive Community Planning (2009)*, could provide the basis for improving community engagement for fuel systems-related training:

1) Understand the community social and political history<sup>24</sup>

Through research, conversations, interviews, surveys, and observing community meetings, it is possible to gain some social and political understanding of the community. However, the extent of the social and political dynamics may not be discovered until after community engagement. As a result, consultants need to ensure transparency and fairness, and that 1) no one person(s) or family is dominating the engagement; and 2) that the process is seen not to favour one person, group, or family; 3) that there is consensus on what the process(es).

2) Build Capacity<sup>25</sup>

Communities need to make sure that consultants leave capacity behind, versus creating more dependency or taking capacity away. Capacity needs to be built into everything that the consultants do in the community. Communities need to ensure that additional time and resources are adequate to support this focus.

3) Get Process buy-in<sup>26</sup>

Building ownership is essential right from the beginning. This can include how Fuel Systems management is introduced to the community, who oversees the process, and the degree to which the community is involved in the process. Building ownership is made possible by 1) asking members how they want to be involved and what planning methods and tools they prefer, 2) engaging members in the process (e.g. workshops, demonstrations, open houses, search conference, video project) 3) profiling fuel systems management (e.g. visual wall posters, referenced at community meetings, during negotiations); and 4) documenting and communicating the results (e.g. website, blog, brochure, newsletter).

<sup>24</sup> Jeff Cook, (2009). “Gaining Momentum: Sharing 96 Best Practices of First Nations Comprehensive Community Planning.” Page 58

<sup>25</sup> Ibid. Page 42

<sup>26</sup> Ibid. Page 46



#### 4) Create an engagement & communications strategy<sup>27</sup>

Brainstorm and analyze engagement and communications options. People who bring experience to the group can reflect on what planning methods have worked in the past and apply local lessons learned. The planning group could also, for example, conduct a community engagement survey and ask people for their ideas and preferences on involvement, information sharing and learning. Posters and notices can be circulated to solicit feedback and ideas. Once preferences and options have been assessed, the engagement and communications strategies need to be budgeted and organized into a work plan.

## 5. Challenges and Opportunities

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The biggest challenge OFNTSC faces is limited resources. OFNTSC needs more physical presence in First Nations communities to promote the importance of the Fuel System Management Program. There is a great need to educate communities and members about the importance of safe handling of petroleum products in order to protect both the environment and the safety of community members and community infrastructure. The only way to accomplish this is to have more feet on the ground, and thus, sustained and predictable funding to ensure a stronger community presence.

The biggest opportunity with respect to OFNTSC's Fuel Systems Management Program is that it is unique. There is an opportunity to further develop and expand the program which could serve as a best practise that First Nations across Canada can model after and benefit from.

## 6. Conclusion & Recommendations

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Ontario has 134 First Nations communities. The 31 remote northern communities are spread across a vast area which is largely only accessible by air service. It has proven a challenge for OFNTSC's Fuel System Management service to effectively and efficiently provide services to these 31 remote northern communities in addition to the 103 communities that also need Fuel System Management services.

Funding is critically required to expand the Fuel System Management program to provide all Ontario First Nations communities with complete Fuel Management services. It is therefore recommended that funding from ISC specifically for the Fuel Management program be increased to allow for proper staffing levels needed to provide this critical service.

First Nations in Ontario understand that petroleum safety is essential in protecting the environment and ensuring their communities and critical community infrastructure are safe from potential fuel-related disasters. There is a clear role for OFNTSC to continue leading in this regard, however, it is incumbent on ISC that the Fuel System Management program be expanded to meet this critical need.

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<sup>27</sup> Ibid. Page 54



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ONTARIO FIRST NATIONS  
TECHNICAL SERVICES  
CORPORATION

# EXPLORING FIRST NATIONS HOUSING NEEDS AND SOLUTIONS IN ONTARIO

## PHASE ONE REPORT

Prepared by: Ontario First Nations Technical Services Corporation

Date: September 12, 2018

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## ACRONYM LIST

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AANDC	Aboriginal Affairs and Northern Development Canada
AFN	Assembly of First Nations
AFNHIN	Atlantic First Nation Housing and Infrastructure Network
AOCC	All Ontario Chiefs Conference
CCoHI	Chiefs Committee on Housing and Infrastructure
CMHC	Canada Mortgage and Housing Corporation
COO	Chiefs of Ontario
FHS	First Nations Regional Health Survey
FNIGC	First Nations Information Governance Centre
FNMHF	First Nations Market Housing Fund
HASI	Home Adaptations for Seniors Independence Program
HIC	BC Housing and Infrastructure Council
INAC	Indian/Indigenous and Northern Affairs Canada
ISC	Indigenous Services Canada
MC	Memorandum to Cabinet
MLGs	Ministerial Loan Guarantees
NAN	Nishnawbe Aski Nation
NBC	National Building Code
NHS	National Health Survey
NIB	National Indian Brotherhood
O&M	Operations and Maintenance
OCAP	Ownership, Control, Access, and Possession
OFIFC	Ontario Federation of Indian Friendship Centres
OFNTSC	Ontario First Nations Technical Services Corporation
RCAP	Royal Commission on Aboriginal Peoples
RRAP	Residential Rehabilitation Assistance Program
TSAG	Technical Services Advisory Group Alberta



## EXECUTIVE SUMMARY

The Ontario First Nations Technical Services Corporation (OFNTSC) is mandated to work with First Nation housing departments to develop capacity and policies to assist First Nations with the delivery of housing services for on-reserve residents. OFNTSC's Housing Service also delivers training workshops to assist in capacity building for First Nations. The following report looks into Ontario First Nations housing needs, the historical and contemporary federal on reserve housing policies, contemporary regional approaches to on reserve housing, and outlines next steps for OFNTSC to better deliver on reserve housing solutions.

First Nations are widely known to be the fastest growing demographic in Canada; however, the current demand for housing on reserve is not being met, and backlogs continue to grow. It has been estimated that \$30 billion is needed to close the gap in repairs and upgrades to homes and related infrastructure. Findings from the OFNTSC First Nation Housing and Infrastructure Gap Assessment 2010-2011, estimated that by 2029, a total of \$8.7 billion will be needed to address community infrastructure needs and that \$2.2 billion will be needed for housing needs alone. These figures are different, demonstrating that there is no definitive figure that exists at present to truly capture Ontario First Nations housing needs. Furthermore, housing "need" is not homogenous and rather is defined differently by different people. Further investigation will be required to not only update the data but also ensure greater scope of primary and secondary research through First Nation Community and Tribal Council information.

To meaningfully and appropriately determine the overall housing needs for Ontario First Nations, needs and solutions must be looked at holistically (linking to physical and mental health, operations and maintenance, water and wastewater etc.). OFNTSC is committed to improving the quality and accuracy of Ontario on reserve housing and infrastructure data and the following report lays the foundation for OFNTSC's ongoing efforts to build on existing data sources in order to dig deeper into the state of housing needs in Ontario. In light of Canada's National Housing and Related Infrastructure Strategy, an opportunity exists for OFNTSC to advocate for Ontario First Nations in order to assist in the development and delivery of on reserve community-driven housing solutions.

While the federal government has not lived up to their treaty obligations, their fiduciary obligation to First Nations, and their commitment to implement the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP), the development of the National Housing and Related Infrastructure Strategy presents a welcomed opportunity to move forward with transformative change in on reserve housing. Innovative, culturally-appropriate solutions will be required, and indeed, exist in many First Nations communities at present. These solutions must be designed, constructed, and delivered by Indigenous communities and organizations consistent with the UN Declaration.



## 1.0 PURPOSE/INTRODUCTION

The housing crisis endemic to many First Nations reserves in Ontario is characterized by myriad factors including, but not limited to: long-term housing shortages, substandard living conditions (including overcrowding), lack of essential services (e.g. water, sewage, maintenance, and fire systems), pervasive poverty, lack of proper maintenance, lengthy bureaucratic processes stemming from the *Indian Act* legacy, and chronic underfunding. Geography also plays a role in the housing crisis, as many remote First Nations experience greater costs and limitations associated with transporting materials to their communities. It has been estimated that \$30 billion is needed to close the gap in repairs and upgrades to homes and related infrastructure.<sup>1</sup> First Nations are widely known to be the fastest growing demographic in Canada;<sup>2</sup> however, the current demand for housing on reserve is not being met, and backlogs continue to grow.

In light of ongoing developments in federal policy, in particular, the National Housing and Related Infrastructure Strategy, the following report intends to provide both a background and a current snapshot into the needs and potential solutions for First Nations housing in Ontario. This report shall act as ‘phase one’ in Ontario First Nations Technical Services Corporation’s (OFNTSC) ongoing efforts to develop capacity and policies to assist First Nations with the delivery of housing services for on-reserve First Nations. As such, Ontario First Nations leadership, housing technicians, and First Nations citizens concerned with the ongoing housing crisis and looking to develop change for the better represent the intended audience for this report.

It is a challenging task to determine what the overall housing needs are for Ontario First Nations. Housing needs and solutions must be looked at holistically (linking to physical and mental health, operations and maintenance, water and wastewater etc.), in order to meaningfully and appropriately determine the needs of Ontario First Nations. It will necessary to solicit responses from each of the 133 First Nations communities in Ontario based on their demographic context, new unit needs, replacement needs, decontamination needs, related infrastructure needs, financial gaps, and governance. OFNTSC is committed to improving the quality and accuracy of Ontario on reserve housing and infrastructure data and will be partnering with the Assembly of First Nations (AFN) to build on existing data sources in order to dig deeper into the state of housing needs in Ontario.

OFNTSC acknowledges and recognizes that as the rights holders, First Nations Chiefs, Councils, and communities have the jurisdiction and authority over housing and infrastructure; moreover, OFNTSC understands that Ontario on-reserve housing situations vary from community to community. Lastly, where data collection is concerned, OFNTSC adheres to the principle of First Nations ownership, control, access, and possession (OCAP).

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<sup>1</sup> Jordan Press (2018). “Feds offer \$30 million in prize money in bid to help Indigenous Housing Crisis.” *Toronto Star*. August 7, 2018.

<sup>2</sup> Kristy Kirkup (2017). “Canada’s Indigenous population growing 4 times faster than rest of country.” *Global News*. October 25, 2017.





## 2.0 CONTEXT/BACKGROUND

From 1989 to 1995, the Chiefs of Ontario (COO) negotiated with Indigenous Affairs<sup>3</sup> in response to plans for devolution. In the early 1990s, work began to transfer responsibilities from the Indian Inspection Unit to the Ontario First Nations Technical Services Corporation (OFNTSC). In February 1995, COO Chiefs in Assembly passed a resolution to cease operations of the Indian Inspector Unit and OFNTSC was officially incorporated as a non-profit corporation, thereby becoming the first organization of its kind serving First Nations in Ontario with a mandate for technical services which includes housing and infrastructure.

The following will provide the background into First Nations on-reserve housing policies and programs leading up to the announcement of the National Housing and Related Infrastructure Strategy (hereafter referred to as the ‘Strategy’)<sup>4</sup> and will explore the series of domestic and international obligations to which Canada is bound, as they relate to First Nations housing.

The Government of Canada has been supporting on-reserve housing since 1960 by providing financial and other support to First Nations for safe and affordable on-reserve housing. Public calls for greater attention to on-reserve housing date back to the early 1970s, where the predecessor of the AFN, the National Indian Brotherhood (NIB), lamented the federal government’s housing and community building policies, lobbying for greater First Nations control. In 1992, the AFN asserted that housing is a federal responsibility which flows from the relationship with the federal Crown as created by section 91(24) of the *British North America Act, 1867*, and treaty agreements themselves, further stating that the federal government “must work jointly with First Nations to establish a forum for bilateral discussion to resolve issues relating to Aboriginal and treaty rights to housing.”<sup>5</sup>

First Nations control of housing policies remains an important objective to this day, as federal commitments to on-reserve housing have fallen short of achieving substantive change and have failed meaningfully co-develop solutions, instead preferring unilateral and market-based options to address the housing crisis. According to the Ontario Federation of Indian Friendship Centers (OFIFC), market-based approaches to on-reserve housing “rarely include Indigenous perspectives on community development and social responsibility,”<sup>6</sup> and as a singular approach, will not work.

Today, the federal government provides on-reserve housing supports to First Nations through funding and programs offered by Indigenous Affairs and the Canada Mortgage and Housing Corporation (CMHC). The latter two entities perform different roles, as will be explained, and

<sup>3</sup> For the purposes of this report, ‘Indigenous Affairs’ is used as a catch-all term to refer to Indian and Northern Affairs (INAC), Aboriginal Affairs and Northern Development (AANDC), Indigenous and Northern Affairs (INAC). The current government department responsible for First Nations housing is the Department of Indigenous Services (referred in this report as ISC).

<sup>4</sup> The National Housing and Related Infrastructure Strategy will be examined in more depth in Section 5.0: Federal Government Policy Directions.

<sup>5</sup> Government of Canada. Royal Commission on Aboriginal Peoples. Report. Volume 3, Gathering Strength, Ottawa: Minister of Supply and Services Canada, 1996.

<sup>6</sup> Ontario Federation of Indigenous Friendship Centres (2018). “Response to the National Housing Strategy.” Ontario Federation of Indigenous Friendship Centres. 15.



according to a 2015 Standing Senate Committee report, “tend to operate in silos.”<sup>7</sup> Current housing programming forces communities to plan based on year-over-year federal fiscal cycles driven by Indigenous Affairs and CMHC, in effect preventing First Nations from managing housing and infrastructure on a long-term, multi-year delivery and funding approach.

Further, the Standing Senate Committee reported that there exists a lack of agreement and understanding of who bears responsibility for housing on reserve:

*...there is no agreement on the respective roles and responsibilities of each of these players with regard to providing housing... in many communities there is some ambiguity about responsibility for the maintenance of housing; it is unclear whether this responsibility falls primarily on the individuals who live in the housing unit, the First Nations’ leadership, or the federal government. This lack of clarity about responsibility for housing leads to... a situation where the housing shortage continues to grow, and the current housing stock continues to deteriorate.*<sup>8</sup>

The confusion noted in the above quote should not come as much of a surprise, as the patchwork of policies, processes, and programs that characterize federal on-reserve housing (as detailed below) are at best, confusing and at worst, demonstrably ineffective at ameliorating the First Nations housing crisis that has persisted for decades.

The Royal Commission on Aboriginal Peoples (RCAP), 1996, found that the federal government had consistently failed to recognize housing and community services as a matter of basic need, and indeed, a ‘right’ for First Nations:

*Not only have governments failed to create the circumstances for Aboriginal people to become economically self-reliant and meet their own housing needs, but the federal government has not provided assistance to the same degree as to other Canadians. First, specific needs of Aboriginal people, whether on- or off-reserve, were recognized only in 1974, more than two decades after social housing programs began in Canada in 1949. Second, First Nations people on-reserve have not enjoyed the same degree of support in relation to need as other Canadians.*<sup>9</sup>

Following the release of RCAP, the federal government allocated \$20 million to on-reserve housing and moved to partner with the AFN and CMHC to explore private sector investment, linkages with economic development, and alternative approaches to governance. This approach is similar to the current National Strategy approach, which was developed without adequate involvement of First Nations and will be described in later sections.

### ***On Reserve Housing: Policies, Programs, and Funding Mechanisms***

Indigenous Affairs supports the construction, renovation, management, and the maintenance of new homes, providing housing through three programs and initiatives: capital allocations for

<sup>7</sup> Standing Senate Committee on Aboriginal Peoples. (2015). On-Reserve Housing and Infrastructure: Recommendations for Change. Senate Committees Directorate. Government of Canada. 8.

<sup>8</sup> Ibid, 35.

<sup>9</sup> Government of Canada. Royal Commission on Aboriginal Peoples. Report. Volume 3, Gathering Strength, Ottawa: Minister of Supply and Services Canada, 1996.



First Nations who opted-in to the 1996 On Reserve Housing Policy; the Income Assistance Program; and the Ministerial Loan Guarantee program. CMHC delivers specific housing programs to fund the construction, renovation, and management of social housing, and provides capacity development training to First Nations to assist with design, building, inspection, management, and maintenance of on-reserve housing. The following provides a brief overview of how this complex web of programs and policies operates.

### ***1996 On Reserve Housing Policy***

Prior to the development of the 1996 On Reserve Housing Policy, federal policy was to provide a Housing Subsidy Program which provided proposal-based subsidies for home construction and renovation. When the 1996 On Reserve Housing Policy came into effect, First Nations were given the choice to opt-in or stick with the Housing Subsidy Program. The 1996 Policy stated that on reserve housing is a shared responsibility between the federal government and First Nations. Those who chose to opt-in were offered annual funding based on population and geographic location (remote/urban), whereby the funds could be used for construction, renovation, insurance, housing manager salary, and a wide range of other housing-related activities. In return, First Nations were required to develop housing policies, programs, and multi-year plans.<sup>10</sup>

### ***Income Assistance Program***

Indigenous Affairs supports low-income on-reserve First Nations to assist with rent, utilities, and other costs related to shelter. Under this model, individuals receive varied supports depending on factors including the amount of rent, family size, and provincial shelter allowance caps.

### ***Ministerial Loan Guarantee Program***

To assist First Nations in accessing loans to finance housing on reserve, Ministerial Loan Guarantees (MLGs) may be issued to First Nations as a means to address risks to lenders posed by Section 89(1) of the *Indian Act*. MLGs can be used to secure loans for the purpose of construction, acquisition, or renovation of on reserve housing projects. As reported in 2015, almost one-third of on reserve housing in Canada is financed through MLGs.<sup>11</sup>

### ***Canada Mortgage and Housing Corporation***

In addition to capacity development training, CMHC provides funding to First Nations communities primarily through four programs: (1) the Loan Insurance Program On-Reserve with MLG, which helps band councils or First Nation members on reserve access financing to build, purchase, and renovate homes or rental properties; (2) the On-Reserve Non-Profit Housing Program, which helps First Nation communities build, purchase and renovate affordable rental housing on reserve; (3) the Residential Rehabilitation Assistance Program (RRAP) On-Reserve, which helps First Nations repair substandard homes to a minimum level of health and safety; and

<sup>10</sup> James McKinnon, Julie DiCicco, and Zane Asyied (2016). “Atlantic First Nations Needs Assessment: Analysis of Findings.” Atlantic Policy Congress of First Nations Chiefs Secretariat. 19.

<sup>11</sup> Standing Senate Committee on Aboriginal Peoples. (2015):9.



(4) the Home Adaptations for Seniors Independence Program (HASI) On-Reserve, which helps First Nations and First Nation members pay for minor home adaptations to on-reserve housing to extend the time low-income seniors can live in their own homes independently.<sup>12</sup>

### ***First Nations Market Housing Fund***

First introduced in the 2003 Kelowna Accord, the First Nations Market Housing Fund (FNMHF) was established by the federal government in 2008. The FNMHF was developed to facilitate and broaden the range of housing options for residents of First Nations communities so that they may have the same housing choices and opportunities as people in non-First Nation communities. In particular, the FNMHF works to improve access and facilitate financing for market-based housing in First Nations communities. These loans, however, must be guaranteed by the First Nation, and can thus be problematic for communities with debt and limited resources who cannot act as insurers whilst carrying their own debt loads.

The FNMHF does not itself provide loans, rather it: (1) Supports arrangements between FNs and lenders; (2) respects the communal nature of reserve land (as land is held by the Crown, and thus lenders cannot use communal land as security, the FNMHF attracts lenders by offsetting the security issue while preserving the communal nature of the land); and (3) increases capacity of FNs through capacity development programs which target financial management, governance, or other issues which may need strengthening or improvement in order to meet the FNMHF's Credit Enhancement criteria.

Issues of land rights stemming from the *Indian Act* pose significant challenges to homeownership and market-based housing. Due to the communal nature of reserve land, a First Nation needs to guarantee the housing loans of its members. If a borrower defaults on an eligible loan, the lender will seek compensation from the First Nation; should the First Nation not honour their obligation as a guarantor, the lender is able to turn to FNMHF “for compensation up to the amount of Credit Enhancement accumulated by the lender for loans made in the community.”<sup>13</sup>

### ***Canada's Obligations and Binding International Agreements***

The right to housing for all Indigenous peoples is rooted in a number of international covenants and in Canada's fiduciary obligations to First Nations, as well as through Section 35 of the *Constitution Act, 1982*. In particular, the *International Covenant on Economic, Social, and Cultural Rights*, which was adopted by the United Nations General Assembly in 1966, the *Universal Declaration of Human Rights*, adopted in 1948, and the International Labour Organization, each express social and economic rights including a right to housing.<sup>14</sup>

The *United Nations Declaration on the Rights of Indigenous Peoples* (UN Declaration) is perhaps the most compelling international covenant insofar as in 2016, Canada committed to its

<sup>12</sup> McKinnon et al., (2016): 20.

<sup>13</sup> First Nations Market Housing Fund. “Annual Report 2017: Our Homes, our way.” FNMHF. (2017): 104.

<sup>14</sup> Vink, Cassandra (2017). “Policy Options Paper for an Urban and Rural Indigenous Housing Strategy.” Canadian Housing and Renewal Association. 9.



“full implementation” in Canadian law and policy “without qualification.”<sup>15</sup> With respect to housing, the UN Declaration states:

*Article 21: Indigenous peoples have the right, without discrimination, to the improvement of their economic and social conditions, including, inter alia, in the area of education, employment vocational training and retraining, housing, sanitation, health and social security; and*

*Article 23: Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, Indigenous peoples have the right to be actively involved in developing and determining [...] housing and other economic and social programmes through their own institutions.*

The UN Declaration asserts that self-determination, in the manner described above, will enable Indigenous people to maintain and strengthen their institutions, cultures, and traditions, and is thus of critical importance when discussing the issue of on reserve housing: the time to speak about the UN Declaration in general terms has passed.

While the Government of Canada has historically held the position that housing was provided for as a matter of social policy, and thus not a universal entitlement nor treaty or Aboriginal right,<sup>16</sup> this appears to have changed with the 2017 National Housing and Related Infrastructure Strategy which purports to recognize housing as a human right.

### 3.0 EXISTING DATA/EVIDENCE

As described earlier in this report, the data which exists at present does not provide the full picture of Ontario First Nations housing and related infrastructure needs, nor do available costing numbers exist. Despite this, the following section presents the data currently available with respect to on reserve housing in Ontario.

#### *OFNTSC Needs Analysis*

In 2010, COO mandated OFNTSC, through resolution, to undertake a First Nation Housing and Infrastructure Gap Assessment (also known as First Nation Needs Analysis) study that focused on evaluating community infrastructure needs related to housing, linear structures, water and wastewater treatment facilities, community buildings, access roads, power supplies, and operations and maintenance. The purpose of the study was to begin to determine needs and quantify current and future facility costs in First Nation communities. Various past studies commissioned did not assess the full scope of needs in Ontario. OFNTSC managed two rounds of detailed engineering assessments on the state of water and wastewater treatment facilities.

<sup>15</sup> Bennett, Carolyn (2017) “Intervention from the Floor on the 10th Anniversary of the United Nations Declaration on the Rights of Indigenous Peoples.” Speech. United Nations Permanent Forum on Indigenous Issues 16th Session. New York City: United Nations General Assembly Hall. April 25, 2017.

<sup>16</sup> Standing Senate Committee on Aboriginal Peoples. (2015): 36.



The engineering studies, conducted in 2002 and 2005, have identified estimated costs of \$192,000,000 in the forty-one (41) First Nations assessed.<sup>17</sup>

Findings from the OFNTSC First Nation Housing and Infrastructure Gap Assessment 2010-2011, estimated that by 2029, a total of \$8.7 billion will be needed to address community infrastructure needs and that \$2.2 billion will be needed for housing needs alone. Data for this study was generated using population projections from INAC (used in National Engineering Assessments); historical costs for water and wastewater treatment plants from INAC capital projects (\$6500 per person for water treatment plants and \$4500 for wastewater treatment plants; new or refurbished every 20 Years); building construction recommendations from capital funding studies (limited number of capital planning studies submitted to OFNTSC for review). Although the study provided a preliminary overview of the capital and housing needs in Ontario, further investigation will be required to not only update the data but also ensure greater scope of primary and secondary research through First Nation Community and Tribal Council information. See **Table 1** for a summary of findings from the 2010-2011 needs analysis.

*Table 1: Summary Findings First Nation Needs Analysis 2011*

<b>Housing</b>	<b>\$ 2,180,648,813</b>
<b>Buildings</b>	<b>\$ 2,498,276,412</b>
<b>Water/Wastewater Treatment Plants</b>	<b>\$ 2,060,751,690</b>
<b>Linear Structures</b>	<b>\$ 1,928,236,521</b>
<b>GRAND TOTALS</b>	<b>\$ 8,667,913,436</b>

Housing needs data was updated in 2015 revealing that in the year 2015, \$2 billion was needed to build an estimated 6,000 homes and that \$276 million was needed for renovations.<sup>18</sup>

### ***The First Nations Regional Health Survey***

The National First Nations Regional Health Survey (FHS) is a First Nations Information Governance Centre (FNIGC) and AFN research initiative that focuses on collecting information on reserve and in northern First Nation communities across Canada about health and well-being all in an effort to control their own data.<sup>19</sup> COO collaborates with FNIGC to complete regional reports related to the health and well-being of Ontario First Nations. The First Nations Regional

<sup>17</sup> As reported in an OFNTSC First Nation Needs Analysis presentation to Chiefs of Ontario at the Annual Conference, July 2011. National Engineering Assessments of water and wastewater facilities across Canada was completed in 2010.

<sup>18</sup> Data collected from 80 communities through surveys in 2010 and 2015 (combined) and an inflation rate was applied.

<sup>19</sup> First Nations Information Governance Centre (2018). "First Nations Regional Health Survey."



Health Survey (Phase 2: 2010) Ontario Region began in 2008 and was completed in the fall of 2010, involving twenty-four (24) First Nation communities across Ontario. The final report published in 2012 reported key findings in housing including:

- 65.2% of First Nations reported that their home was in need of some type of repair with 31% reporting a need for major repair;
- Almost 50% of First Nations surveyed reported mould and mildew present in their home; and
- 31% of First Nations consider their water supply not safe to drink.<sup>20</sup>

The report further indicated household occupancy density (average number of persons per house), which was 3.6 compared to 2.5 occupants per house in Canada.<sup>21</sup>

### ***AFN Forum Winnipeg, Manitoba***

Following the federal government's commitment to support and reform housing and infrastructure delivery in First Nation communities, the AFN through the Chiefs Committee on Housing and Infrastructure (CCoHI) and their respective technicians convened a forum on November 1-3, 2016 in Winnipeg, Manitoba. The purpose of the forum was to bring together First Nation and federal government housing and infrastructure professionals to begin discussions on reforming housing and infrastructure. The final report concluded that the delegates recognized significant gaps and deficits in infrastructure. Further, it noted that a redesign of current delivery systems is required and must be controlled by First Nations. The forum focused on four main areas including Funding and Finance, Skills and Capacity, Governance and Delivery, and Innovations.<sup>22</sup>

Under funding and finance, delegates indicated that funding models need to be flexible, comprehensive and responsive to First Nation needs and that models will be developed by and for First Nations. Models and future systems must include considerations for financial instruments and tools, leveraging, partnerships, First Nation led institutions, capacity, skills and government funding commitments.

For skills and capacity, the delegates identified a link between the First Nation community and technical services organizations (such as Tribal Councils) and that future strategies include these organizations. Knowledge sharing and networking were also highlighted as key areas.

The delegates concluded that governance and delivery systems need to be local, regional and national and be without political interference. The roles of OFNTSC and Technical Services Advisory Group Alberta (TSAG) were positively highlighted as examples of Indigenous-led organizations that can play a key role in housing governance and delivery.

The innovations focus provided opportunities to discuss other areas such as insurance, a First Nations national bank, and increasing buying power through First Nation community

<sup>20</sup> First Nations Information Governance Centre (2018). "First Nations Regional Health Survey." 22-25.

<sup>21</sup> Ibid, 25.

<sup>22</sup> Assembly of First Nations. (2016). *National Housing and Infrastructure Forum: Meeting Report*.



collaborations.

The Winnipeg forum substantiated the need to make fundamental changes in housing and infrastructure delivery. The main areas of Funding and Finance, Skills and Capacity, Governance and Delivery, and Innovations provided the focus needed to have deep conversations on how to move forward. The forum served as an impetus for future forums and regional engagements for which to build on.

### ***Standing Senate Committee on Aboriginal Peoples, 2015***

The 2015 Standing Senate Committee on Aboriginal Peoples concluded overall that First Nation communities face a severe housing shortage, overcrowding, housing in need of major repairs, and faced continued “barriers in implementing innovative solutions to meeting housing needs.”<sup>23</sup> Persistent pressures on First Nations identified include the 2% departmental escalator funding cap, inflation, remoteness, and population growth on reserve.<sup>24</sup>

A notable finding of the Senate Committee regards building code compliance. Under section 81 of the *Indian Act*, First Nations are provided bylaw making authority for the regulation of the construction, repair and use of buildings, whether owned by the band or by individual members of the band. The report found, however, that only a handful of First Nations have enacted housing-related bylaws under this provision.<sup>25</sup> Bylaws calling for building code compliance are necessary if a community wants to put in place a system of housing inspections during the construction phase and without such bylaws, the report found that “inspectors appear to have no authority to shut down a site or to force contractors to address construction deficiencies that breach the National Building Code or other housing standards.”<sup>26</sup>

The Senate report also argued that there is a need to: clarify roles and responsibilities where they apply to the patchwork of policies and programs for on reserve housing; apply flexibility to address the diversity of communities; and support capacity at the local level for building and managing housing.

### ***Evaluation of On Reserve Housing, 2016***

Indigenous Affairs evaluation of On-Reserve Housing, 2016, reported that First Nations on reserve housing is in a state where health and well-being can be compromised, and that government programs and policies have been ineffective.<sup>27</sup> The report further indicated that the current reactive approaches to housing do not foster the necessary capacity for First Nations to be self-determining. The evaluation observed that:

- INAC’s role in on-reserve housing has been ineffective. Given housing conditions have not materially improved over time, it is clear that the approach undertaken by Indigenous

<sup>23</sup> Standing Senate Committee on Aboriginal Peoples. (2015): 1.

<sup>24</sup> Ibid, 28.

<sup>25</sup> Ibid, 23.

<sup>26</sup> Ibid, 23.

<sup>27</sup> Indigenous and Northern Affairs Canada. (2016). Evaluation of On-Reserve Housing 2016. Evaluation, Performance Measurement, and Review Branch Audit and Evaluation Sector.





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Affairs since 1996, and its program activities relative to the stated objectives are misaligned.

- Housing conditions have seen limited long-term improvement, suggesting a need to provide more strategic support to First Nation-driven long-term capacity development and governance, in addition to ongoing support for construction and repair.<sup>28</sup>

### ***Evaluation of First Nation Market Housing Fund, 2012***

Indigenous Affairs produced an evaluation of the FNMHF in 2012 which found that while there is potential for the Fund to address housing needs in the long-term, in the short-term, “there should be no reasonable expectation that credit enhancement itself will necessarily reduce reliance on federal funding for housing on reserve.”<sup>29</sup> First Nations lacking in financial management capacity and economic resources are in an even weaker position insofar as the requirements for credit enhancement may preclude them from pursuing financing options.

The evaluation also found that while some bands receive funding specifically allocated to housing, “in most cases, federal funding included in capital grants is managed by band councils and thus, housing decisions may compete with other priorities such as road repairs, water treatment, and other infrastructure needs. As a result of insufficient financing, many bands take out a new Section 95 loan, continuing the cycle of reliance on outside assistance.”<sup>30</sup>

The evaluation addressed the issue of overcrowded houses on reserve, stating that they have been proven to deteriorate at a faster rate than houses that are not overcrowded: the result of this is that “demand for housing and population growth is outstripping the speed with which new houses can be built and existing ones repaired.”<sup>31</sup>

According to the evaluation, key to addressing on reserve housing needs is capacity development, governance, and community and individual interest in homeownership: “capacity development is essential to addressing housing need and potentially facilitating homeownership...” and it is thus “of critical importance that capacity development would comprise a key element of housing policy development.”<sup>32</sup>

### ***Other Reports***

Several other reports support the claim that on reserve physical housing in First Nation communities and the associated delivery systems are in dire need of attention. The 2016 Canadian census found that 42% of First Nations dwelling conditions are in need of regular repair, 27% are in need of major repairs, and 31% are in need of minor repairs.<sup>33</sup> A report in May 2018 from the Indigenous Caucus of the Canadian Housing and Renewal Association noted that some 118,500 Indigenous households (18.3%), lived in ‘core housing need,’ meaning they lived

<sup>28</sup> Ibid, 39.

<sup>29</sup> Indigenous and Northern Affairs Canada. “First Nations Market Housing Fund: Evaluation of the Broader Policy Implications for Housing On-Reserve.” Evaluation, Performance Measurement, and Review Branch Audit and Evaluation Sector. (2012): v.

<sup>30</sup> Ibid, 15.

<sup>31</sup> Ibid, 15.

<sup>32</sup> Ibid, 36.

<sup>33</sup> Statistics Canada (2016). Aboriginal Peoples Highlight Tables, 2016.



in homes that stretched them financially, required extensive repairs, or were too small for their families.<sup>34</sup>

Vink (2017) pointed to the reality that many First Nations live in housing that does not consider cultural needs,<sup>35</sup> and that attention to culture and traditional housing approaches must be considered in the development of the National Housing and Related Infrastructure Strategy.

The Nishnawbe Aski Nation (NAN) Amber Fire Safety Campaign arose from the all too common occurrence of fatal house fires and the chronic lack of firefighting services that is experienced in Northern Ontario First Nations communities in addition to the housing crisis. According to a 2007 CMHC report, First Nations people are 10 times more likely to die in a house fire than the rest of Canada.<sup>36</sup> The federal government stopped tracking on reserve fire fatalities in 2010, and it is therefore imperative that fire safety be considered and implemented as part of a housing strategy.

#### 4.0 INVESTMENTS IN ONTARIO

The federal government provides funding for on reserve housing through ISC and CMHC. Each agency is decentralized with funding flowing through regional offices.

##### *Indigenous Services Canada*

The 1996 On Reserve Housing Policy was developed by Indian and Northern Affairs as way for First Nations to gain greater control and flexibility over housing programs and was based on four elements:

- First Nation control (community-based housing programs)
- First Nation expertise (capacity development)
- Shared responsibility (shelter charges and ownership options)
- Better access to private capital (debt financing)

In Ontario, 20 First Nation communities who did not opt into the 1996 policy continue to receive allocation funding through regional offices. ISC Ontario Region provides approximately \$23 million towards housing each year through minor capital funding but does not track where the funding gets allocated as this is at the discretion of the First Nation.

In the 2010 Evaluation of Indigenous Affairs On Reserve Housing Support, housing expenditures were tabled from 1996-2008. See **Table 2** for a breakdown of Indigenous Affairs' housing expenditures. A substantial increase in funding was made in 2005.

The evaluation concluded that despite modest improvements to rates of new units built, lots serviced, and units repaired, the existing housing stock on-reserve was determined to be

<sup>34</sup> Jordan Press (2018). *Toronto Star*.

<sup>35</sup> Vink (2017): 6.

<sup>36</sup> Nishnawbe Aski Nation (2017). "Amber's Fire Safety Campaign – Update Report." Nishnawbe Aski Nation.



deteriorating more quickly than housing off reserve. Further, rates of overcrowding were found to be six times greater than non-Indigenous Canadians, as of 2006.

*Table 2: INAC Housing Expenditures 1996-2011*

Year	Total INAC funds spent on on-reserve housing 000's
1996-1997	\$161,000
1997-1998	\$166,000
1998-1999	\$ 198,000
1999-2000	\$169,000
2000-2001	\$ 175,000
2001-2002	\$153, 180
2002-2003	\$164,170
2003-2004	\$136, 784
2004-2005	\$136, 317
2005-2006	\$165, 155
2006-2007	\$254, 526
2007-2008	\$155,000
2008-2009	\$117,000
2009-2010	\$150,000 <sup>8</sup>
2010-2011	\$150,000

Following Budget 2005, in Canada's Economic Action Plan, the federal government committed \$400 million over two years to support on reserve housing. The funding was dedicated to new social housing projects, remediation of existing social housing stock, and to other housing activities through programming from CMHC and Indigenous Affairs.

Budget 2016 provided \$416.6 million over two years to improve on-reserve housing conditions, reduce overcrowding, and increase health and safety. This was in addition to about \$143 million annually provided by the department to First Nations to support a range of housing needs.

Federal Budget 2017 and Budget 2018 propose dedicated funding of \$600 million over three years to support First Nation housing on reserve as part of a Housing Strategy that is being developed with First Nations.

### ***Ontario Region***

In Ontario, ISC funding provided \$139 million from federal budget years 2016-2019 for on reserve housing and was allocated to the areas of 'Immediate Needs' (multi-units, renovations, lot servicing), 'Capacity Development' (governance, management and maintenance), and 'Innovation' (for projects such as housing authorities, alternative financing models and mentoring). See **Table 3** for a summary of Indigenous Services Canada Ontario Region housing allocations. These special funding initiatives are project/proposal based where First Nation communities must meet minimum criteria. Most communities in Ontario were provided funding under at least one of the areas of focus.

*Table 3: Summary of Indigenous Services Canada Ontario Region Housing Allocations 2016/17 and 2018/19*

Summary Fiscal Year 2016/17 and 2017/18						
		2016/2017 Approved	2017/2018 Approved	2018/2019 Approved	Total Approved	Total # of units Approved
Immediate needs	Multi-units	\$48,710,319.00	\$ 7,324,817.33	\$ 35,994,165.00	\$ 92,029,301.33	537
	Renovations/additions	\$ 4,092,080.00	\$ 9,964,981.00	\$ -	\$ 14,057,061.00	726
	Lot servicing	\$ 8,359,709.00	\$ 47,500.00	\$ -	\$ 8,407,209.00	171
	First Nation Housing Initiative	\$ -	\$ 15,000,000.00	\$ -	\$ 15,000,000.00	60
Capacity development	Governance	\$ 1,833,511.00	\$ 31,600.00	\$ 114,323.00	\$ 1,979,434.00	0
	Management	\$ 3,507,997.00	\$ 57,200.00	\$ -	\$ 3,565,197.00	0
	Maintenance	\$ 844,929.00	\$ 20,100.00	\$ 645,710.00	\$ 1,510,739.00	0
Innovation	Housing Authority	\$ 1,299,197.00	\$ -	\$ -	\$ 1,299,197.00	0
	Alternative financing models	\$ 782,750.00	\$ -	\$ -	\$ 782,750.00	0
	Mentoring	\$ 133,600.00	\$ -	\$ 343,212.00	\$ 476,812.00	0
	Aggregation of housing service delivery*	\$ 150,854.00	\$ -	\$ 30,500.00	\$ 181,354.00	0
	<b>Total</b>	<b>\$69,714,946.00</b>	<b>\$ 32,446,198.33</b>	<b>\$ 37,127,910.00</b>	<b>\$139,289,054.33</b>	<b>1494</b>

### *Shelter Allowance*

ISC provides funding under their Shelter Allowance program which is a social program providing income assistance to First Nation communities on reserve for basic needs including food, clothing, and shelter. Shelter allowance under the income assistance program is based on financial need and eligibility set by the provinces.<sup>37</sup>

In 2017-18, Ontario was provided \$43 million in funding towards shelter allowance.

### *CMHC Ontario*

Federal budgets provide funding for on-reserve housing programs through CMHC under their regular On-Reserve Nonprofit Housing Program (Section 95) and renovation programs.

The Ontario budget for regular program funding in 2015-2016 was approximately \$28 million, for the building (Section 95) and renovating 362 housing units. Funding increased in the next two years to approximately \$40 million in each year building and renovating 518 housing units under the On-Reserve Nonprofit Housing Program (Section 95) and renovation programs. See **Table 4** for CMHC's Ontario Region funding commitments since 2008.<sup>38</sup>

As reported by the AFN, in spite of First Nations opposition, CMHC made a unilateral decision to change its delivery service and awarded a national contract to a single service provider, 'OZHI First Nations Professional Services' to provide technical services under CMHC's on-reserve

<sup>37</sup> Aboriginal Affairs and Northern Development Canada. "Evaluation of Shelter Allowance as it Relates to On-Reserve Housing." Evaluation, Performance Measurement, and Review Branch, Audit and Evaluation Sector.

<sup>38</sup> Data obtained from CMHC First Nations Housing (Ontario) by email August 16, 2018.

non-profit housing programs.<sup>39</sup> As a result, many technical service providers in Ontario lost a revenue stream where they made great strides in obtaining the certifications required for performing these services. Further, client First Nation communities lost the ‘local presence’ that they once had in place with their technical service provider. Currently, Chiefs and First Nations across Canada continue to advocate that CMHC revert the provision of technical services back to regional organizations.

Table 4: CMHC First Nations Housing (Ontario) Funding Commitments 2008-2019

<b>CMHC Ontario Commitments - Regular</b>						
Fiscal Year	On-Reserve Housing		Renovation Programs		Shelter Enhancement	
	Contributions (Millions)	Number of Units	Contributions (Millions)	Number of Units	Contributions	Number of Units
2008-2009	\$28.26	187	\$3.04	239	\$887,812	26
2009-2010	\$20.90	144	\$10.76	773	\$85,000	24
2010-2011	\$28.20	132	\$10.79	837	\$144,843	29
2011-2012	\$28.37	150	\$2.84	202	\$95,240	30
2012-2013	\$20.23	80	\$2.76	205	\$250,890	35
2013-2014	\$19.34	78	\$3.07	223	\$70,000	10
2014-2015	\$22.34	106	\$2.95	214	\$0	0
2015-2016	\$23.88	126	\$2.99	219	\$22,790	9
2016-2017	36.85	179	3.27	81		
2017-2018*	36.84	170	3.30	88		
2018-2019**	36.80	146	0	84		
<b>Total</b>	<b>\$302.01</b>	<b>1498</b>	<b>\$45.77</b>	<b>3165</b>	<b>\$668,763.00</b>	<b>137</b>

\*Planned as of 2017      \*\*Projected

<b>Special Initiatives Funding</b>						
Fiscal Year	On-Reserve Housing		Renovation Programs		Shelter Enhancement	
	Contributions (Millions)	Number of Units	Contributions (Millions)	Number of Units	Contributions	Number of Units
2016-2017	\$12.30	754	\$2.95	214	\$0.00	0
2017-2018	\$5.14	216	\$2.99	219	\$2.35	13
<b>Total</b>	<b>\$17.44</b>	<b>970</b>	<b>\$39.20</b>	<b>2912</b>	<b>\$2.35</b>	<b>137</b>

### ***First Nations Market Housing Fund***

In their 2017 Annual Report, the First Nations Market Housing Fund (FNMHF) noted they are partnered with 65 Ontario First Nations. Of these, 9 First Nations are participating in the assessment process; 38 First Nations have been approved for credit enhancement and capacity development; and that 10 First Nations have been approved for strictly capacity building. Capacity development, according to FNMHF, “is critical to establish and sustain a market-based

<sup>39</sup> Assembly of First Nations (2018). “AFN Update: Housing and Infrastructure Review of Indigenous Services Canada CMHC On-Reserve Programs and Technical Service Providers.”

housing system.”<sup>40</sup>

FNMHF cited an overall \$293 million in approved credit for Ontario First Nations, 2,554 potential home loans, and 100 fund-backed home loans. FNMHF is anticipating increased demand for capacity development services from those already approved, in addition to the First Nations who may decide to apply and participate. The fund also cited that increasing demand is putting pressure on costs for capacity development services.<sup>41</sup>

## 5.0 FEDERAL GOVERNMENT POLICY DIRECTIONS

Since their 2015 election victory, the Trudeau Liberals has repeatedly stated that “no relationship is more important” to the Government of Canada than that with Indigenous peoples.<sup>42</sup> With respect to housing and infrastructure, at the 2016 AFN Annual General Assembly in Niagara Falls, Indigenous Affairs Minister Carolyn Bennett implored First Nations to ‘think outside the box,’ ‘be bold,’ and think of institution building. The federal government is currently developing an ‘Indigenous Rights and Recognition Framework,’ with the intended purpose to “move beyond the *Indian Act*,” and as a part of this framework, are seeking to further devolve program and service delivery to First Nations in the spirit of reconciliation and self-determination. Much criticism exists on the methods and approaches being undertaken by the federal government with respect to the Rights and Recognition Framework; however, this report will not delve into those debates.<sup>43</sup>

As discussed in Section 4.0, Budget 2016 proposed \$416.6 million over two years to ISC to address immediate housing needs (Ontario’s share for fiscal year 2016-17 was \$61.9 million) and \$137.7 million over two years to CMHC to support housing renovation and retrofitting.<sup>44</sup> Spending from the Liberals’ first budget in 2016 has, as of the end of March, paid for the construction and renovation of 8,786 homes, the government said, with work underway on 5,178 units.<sup>45</sup> Budgets 2017 and 2018 set aside a further \$600 million for First Nations housing over three years.<sup>46</sup> In spite of the funding announced in Budget 2016, and in subsequent federal budgets, as a matter of fiscal policy, the 2% funding cap remains in place (despite increasing inflation and the Consumer Price Index), which is clearly not in keeping with the growing and changing demographics of First Nations populations in both Ontario and in Canada more broadly.

ISC Minister, Jane Philpott has stated that government funding alone cannot surmount the scale of the housing crisis, suggesting that federal spending rules can get in the way, and that going along with business as usual is not going to close the housing gap quickly.<sup>47</sup> To this end, on August 7, 2018, the federal government announced a contest with a \$30 million prize offered to Indigenous communities to develop concepts to fund housing projects that can be replicated, that

<sup>40</sup> First Nations Market Housing Fund (2017): 12.

<sup>41</sup> Ibid, 12.

<sup>42</sup> Prime Minister’s Office (2017). “Statement by the Prime Minister on National Aboriginal Day.” June 21, 2017.

<sup>43</sup> For more information on analysis of the federal ‘Rights and Recognition Framework,’ see Yellowhead Institute reports.

<sup>44</sup> Government of Canada (2016). “Budget 2016: Growing the Middle Class.” Ministry of Finance.

<sup>45</sup> Press (2018). *Toronto Star*.

<sup>46</sup> Government of Canada (2018). “Budget 2018: Equality and Growth: A Strong Middle Class.”

<sup>47</sup> Press (2018). *Toronto Star*.





bring back traditional Indigenous building styles and techniques, and that can create an economic boost for communities that could be sourcing materials locally or providing job training to young people.<sup>48</sup> Key to the contest is to draw in private sector builders to help finance the construction and repair of homes on reserve. This contest has been widely panned by commentators and First Nations who claim that it will not benefit First Nations who lack the capacity to develop proposals, and that it represents another example of the federal government skirting their fiduciary obligation to deliver housing to on reserve First Nations.

On November 22, 2017, the federal government released Canada’s National Housing and Related Infrastructure Strategy, an ambitious \$40 billion plan to help ensure access to needs-based, affordable housing. Indigenous peoples are identified as ‘vulnerable’ in the Strategy, and while according to the OFIFC, this categorization reflects the lived circumstances of many Indigenous people, it does not account for the “strength, diversity, and resilience” of Indigenous communities, institutions and infrastructure. Vulnerability, the OFIFC continues, “exists in Indigenous communities as a result of colonial policies aimed at destroying the fabric of Indigenous families and culture.”<sup>49</sup> This notwithstanding, as stated earlier, the Strategy is significant insofar as it reflects a departure from former federal on-reserve housing policy in the acknowledgement of housing as a human right.

As per AFN Resolutions,<sup>50</sup> the AFN Chiefs Committee on Housing and Infrastructure (CCoHI) is working in partnership with First Nations and the Government of Canada on the development of the Strategy. According to the AFN, ISC will be presenting a Memorandum to Cabinet (MC) related to an Indigenous Housing Strategy that includes three separate strategies including First Nations, Inuit and Métis. The AFN is also a participant of the joint Working Group (which includes the AFN, the Chiefs Committee on Housing and Infrastructure (CCoHI), ISC, CMHC, and Health Canada) which has co-developed a Policy Reform Framework (the ‘Framework’) towards a First Nations Housing and Infrastructure Strategy. The Framework was introduced at the 2018 AFN Annual General Assembly as a ‘working document,’ and can be found in **Appendix A**. The final version of the Framework is expected to be added to the ISC MC as an appendix to further inform the impending policy change.

The AFN is currently developing a data collection exercise (August to October 2018) that will seek to acquire actual housing statistics in addition to operations and maintenance (O&M), infrastructure, and human resources capacity (trained housing managers, housing inspectors etc.) statistics. OFNTSC is a full participant in the various housing and infrastructure AFN committees, and is fully committed to working in partnership to advance First Nations housing and infrastructure goals and aspirations.

As housing and infrastructure must be holistically, identifying the linkages to critical infrastructure, O&M, physical and mental health, and safe drinking water, among other items, the following provides a brief update on federal policy direction with respect to operations and

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<sup>48</sup> Ibid.

<sup>49</sup> Ontario Federation of Indian Friendship Centres. (2017): 13.

<sup>50</sup> AFN Resolution 98/2016, *Support the Development of a First Nations National Housing and Infrastructure Strategy*, and AFN Resolution 27/2017, *Development of First Nations Housing and Infrastructure Strategy*.



maintenance and safe drinking water.

### *Operations and Maintenance*

The 2018 AFN Housing and Infrastructure Update on ISC O&M Policy states that current policy is outdated, inadequate, and does not provide sufficient funding for First Nations to protect and prolong the life of their community assets.<sup>51</sup> The federal government only funds a portion of the estimated costs for the O&M of on-reserve community infrastructure such as buildings, roads and bridges, etc.

The AFN is currently working with ISC to identify options for the co-development of a new O&M Policy Framework and formula that will reflect new infrastructure technologies as well as economic and environmental factors that will contribute to addressing the socio-economic gap in First Nations. A Joint Work Plan has been co-developed, and the AFN is seeking funding to support the work ahead. A draft report will be developed identifying concerns, challenges, and recommendations on the development of a new O&M Policy Framework.<sup>52</sup>

### *Safe Drinking Water for First Nations*

In accordance with AFN Resolution 88/2017,<sup>53</sup> the AFN is proposing the establishment of a joint Working Group comprised of AFN, CCoHI and Regional Technicians, federal representatives, legal counsel for AFN and the federal government, and other experts, as necessary to co-develop a draft framework for new legislation and a framework for a First Nations Water Commission that is respectful of First Nations inherent rights and Indigenous laws, and meets the spirit and intent of the UN Declaration.

## **6.0 REGIONAL DIRECTIONS**

### *Ontario*

In June 2005, at the All Ontario Chiefs Conference (AOCC) held at Eagle Lake First Nation, the Ontario Chiefs-in-Assembly passed resolution 05/34 which refers to the “Strategic Planning for Housing Capacity Development Initiative.” The resolution provided the mandate to advance a self-determining housing strategy related to developing housing authorities in Ontario. The strategies were to be developed and implemented through pilot communities with the support of the Steering Committee on Housing and OFNTSC. Funding was sought and was subsequently turned down, deeming the project closed.

COO Resolution 08/07 re-established the mandate to pursue an Ontario Regional Housing Strategic Plan as a joint COO-OFNTSC initiative. A strategic plan was to be presented to the Political Confederacy at a Steering committee on Housing meeting in August 2016 and suggested that the strategy be presented at the Chiefs in Assembly later that year. But, attempts to address housing at that assembly and later assemblies were defeated due to other priorities.

<sup>51</sup> Assembly of First Nations (2018). “Update on O&M Policy.”

<sup>52</sup> Ibid.

<sup>53</sup> AFN Resolution 88/2017, First Nations led Engagement Process for Safe Drinking Water Legislation



COO Resolution 09/49 provided the mandate to put in place an Ontario First Nations Housing Commission that would lead in the development of partnerships and strategies for housing in Ontario. A business plan was to be presented to the Chiefs in Assembly within six months of the resolution's adoption; however, to date, the Commission has yet to be established.

Presently, OFNTSC is working with the Ontario Chiefs Committee on Innovative Housing to begin initial discussions on moving forward with the development of an Ontario-wide housing and related infrastructure strategy pursuant to past AOCC resolutions, current priorities, and in alignment with ongoing federal processes.

Regional initiatives are also underway in Ontario. NAN, in particular, is undergoing a grassroots housing needs assessment in partnership with Ryerson University as part of a broader housing strategy. Rather than focusing on metrics which are typically used to assess housing 'need,' NAN is developing a unique set of metrics, per community, which are 'people-focused' and examine how to meet the needs of the people who need housing. This bottom-up approach has relied on significant engagement with communities, including sessions with elders, youth, leadership, and the broader community. The need to change how communities identify with housing while acknowledging that housing need is felt differently by different people within a community is a core tenant of NAN's housing strategy. NAN's strategy is community driven, long-term focused, and shifts the discussion from understanding housing needs and evaluating federal programs with federal metrics towards evaluating how one feels in their home, and building an understanding of housing need from there.

### *Quebec*

Following the AFN forum in Winnipeg 2016, Quebec has committed to moving towards care and control of housing and infrastructure delivery. Taking the streams developed at the AFN forum in Winnipeg, (Funding and Finance, Skills and Capacity and Governance and Delivery), Quebec is developing a strategy closely related to their data and their participation on the Regional Tripartite Housing Committee. After sessions with housing professionals, Quebec's strategy will first focus on Capacity and Skills that will support a regional institution. The engagement sessions supported the main components to be developed over a two year period and will include skills and capacity at all levels with innovation, more funds and financing options with innovation, and more First Nation autonomy with innovation.<sup>54</sup>

### *Alberta*

Alberta Chiefs have committed to developing a regional housing and related infrastructure strategy. Through sessions coordinated through Technical Services Advisory Group, they will pursue future engagements with Alberta First Nations and develop self-determining housing and infrastructure delivery frameworks based on the AFN focus areas of Funding and Finance, Skills and Capacity and Governance and Delivery.

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<sup>54</sup> Presentation to The Special Chiefs Assembly of the AFNQL, May 17, 2018.



## *Saskatchewan*

The Federation of Saskatchewan Independent Nations and the Prince Albert Grand Council have provided forums for leadership and housing, health and education professionals. Sessions focused on the four areas discussed at the Winnipeg forum. Saskatchewan is moving towards community-driven strategies that will lead to self-determining housing delivery.<sup>55</sup>

## *British Columbia*

British Columbia developed a Housing and Infrastructure Council (HIC) in 2018 to work towards the creation of a First Nations-controlled Housing & Infrastructure Authority. The BC First Nations Housing and Infrastructure authority will represent a wholesale transfer of program management and service delivery, partially in response to the federal government's directive to transfer authority and control of Indigenous programs to Indigenous organizations. The HIC is creating an overarching delivery model that will include all BC First Nations, although some elements may allow communities to opt-in (e.g., market housing, financing), and has undertaken extensive engagement to ensure the delivery model reflects the needs of BC First Nations. According to the HIC, the most probable outcome is that the transfer happens will occur incrementally with the target to begin transfer by March 2019.<sup>56</sup>

## *Atlantic Region*

Atlantic First Nation Housing and Infrastructure Network (AFNHIN) was created in June 2006 to provide quality advice and strategic direction and advocacy in the areas of housing, water, wastewater, and emergency response planning. According to the Atlantic Policy Congress of First Nations Chiefs Secretariat, by 2027, it is envisioned that with respect to housing and infrastructure, Atlantic First Nations will have control of decision making, planning and opportunities linked to housing marked by economic prosperity and employment, sustainability, and with a holistic focus that links to health, closes the backlog, depoliticizes housing, and strong capacity to meet growing future needs.<sup>57</sup>

## 7.0 CONCLUSION

While the federal government has not lived up to their treaty obligations, their fiduciary obligation to First Nations, and their commitment to implement the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP), the development of the National Housing and Related Infrastructure Strategy presents a welcomed opportunity to move forward with transformative change in on reserve housing. Innovative, culturally-appropriate solutions will be required, and indeed, exist in many First Nations communities at present. These solutions must be designed, constructed, and delivered by Indigenous communities and organizations consistent with the UN Declaration.

<sup>55</sup> FSIN. (2017). Executive Report. The Foundation of Our Homes Engagement Forum. Saskatoon.

<sup>56</sup> First Nations Housing and Infrastructure Council BC (2018). "Resources."

<sup>57</sup> Atlantic Policy Congress of First Nations Chiefs Secretariat (No Date). "Atlantic Regional Update: AFN National Housing & Infrastructure Forum."



First Nations are the fastest growing segment of the Canadian population, and therefore, it is imperative that not only are current housing needs assessed, but also anticipated future needs. This is especially important when considering demographics and population projections for First Nations in Ontario.

The importance of linking housing and infrastructure outcomes to health, social, and economic outcomes cannot be overstated. As stated in the 2015 Standing Senate Committee on Aboriginal Peoples, a “one size fits all approach” will not work for First Nations, rather, local needs should determine housing priorities. Housing is only one step, and the infrastructure and maintenance associated with proper housing must be an intrinsic part of determining housing priorities. The housing crisis experienced in Canada, and in Ontario, demands holistic solutions which encompass everything that from housing, infrastructure, maintenance, and asset management, to water and wastewater, as these key issues can affect education attainment and economic opportunities. Future work related to housing and infrastructure must consider the needs of elders, those with disabilities, and the mental and physical health of First Nations.

OFNTSC is committed to working with First Nations, the AFN, and the federal government to help eliminate the housing crisis, and as this report details, there is much work to be done. This report is but one step in OFNTSC’s efforts to move towards developing a meaningful and accurate assessment of the needs of Ontario First Nations with respect to housing and infrastructure. The following section details OFNTSC’s recommendations and maps out the next steps that will be critical to achieving substantive and transformative change for on reserve housing.

## 8.0 RECOMMENDATIONS/NEXT STEPS

This report represents ‘phase one’ in OFNTSC’s ongoing commitment to assist First Nations with the delivery of on reserve housing and infrastructure needs. ‘Phase two’ will see OFNTSC leverage the planned data collection efforts of AFN to identify and collect a more fulsome picture of the needs and aspirations of First Nations in Ontario and nationally.

*In the short term, OFNTSC will advance the following key strategic priorities:*

1. **Data collection exercise:**
  - a. Work with AFN on their data collection initiative (occurring August 2018 - October 2018) to better identify the housing and related infrastructure needs of Ontario First Nations, as part of the ongoing National Strategy on Housing and Related Infrastructure;
  - b. Refresh OFNTSC’s existing data (most recent to 2015) with the data collected from the AFN data collection exercise, analyze, and report back to Ontario First Nations.
2. **Advance Regional Housing and Infrastructure Strategy**
  - a. Partner and continue to work with the Ontario Chiefs, Tribal Councils, and First Nations housing technicians, in addition to the Chiefs Committee on Innovative



Housing to advance a regional Housing and Infrastructure Strategy.

*In the medium to long-term, OFNTSC is committed to the following ongoing priorities:*

**1. On Reserve Housing Policy and Capacity Development**

- a. Develop capacity and policies to assist First Nations with the delivery of housing services for on reserve First Nations;
- b. Monitor federal policies and report back to Ontario First Nations on progress, changes, and relevant information.
- c. Review existing service delivery models and propose governance models that will empower communities and First Nation organizations to play a lead role in the future of housing delivery systems.



Vink, Cassandra (2017). “Policy Options Paper for an Urban and Rural Indigenous Housing Strategy.” *Canadian Housing and Renewal Association*. 1-91. [http://chra-achru.ca/sites/default/files/Annual\\_Reports/chra-indigenous\\_housing\\_policy\\_options\\_paper\\_-\\_final\\_-\\_may\\_14\\_17.pdf](http://chra-achru.ca/sites/default/files/Annual_Reports/chra-indigenous_housing_policy_options_paper_-_final_-_may_14_17.pdf)



## 10.0 APPENDIX A: AFN HOUSING & INFRASTRUCTURE FRAMEWORK

DRAFT FOR DISCUSSION PURPOSES ONLY

# DRAFT 10 Year First Nations National Housing and related Infrastructure Strategy

### **Co-Development Team**

The Assembly of First Nations (AFN) is mandated pursuant to AFN Resolution 27/2017, *Development of a First Nations National Housing and Infrastructure Strategy*, to jointly develop, with the Chiefs Committee on Housing and Infrastructure (CCoHI) and the federal government, a Terms of Reference for the establishment of a joint Working Group that will develop a First Nations National Housing and related Infrastructure Strategy, which will include housing both on- and off-reserve.

A Joint Working Group with representatives from the AFN, CCoHI, Indigenous Services Canada (ISC), Canada Mortgage and Housing Corporation (CMHC) and Employment and Social Development Canada (ESDC) co-developed the Draft Strategy for discussion purposes.

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DRAFT FOR DISCUSSION PURPOSES ONLY

July 4, 2018

## 1. VISION

- 1.1 Responsive innovative housing governance systems that support First Nations transition to care, control and management of housing and related infrastructure.<sup>1</sup>

## 2. PURPOSE OF THE STRATEGY

- 2.1 To have a First Nations housing and related infrastructure strategy developed by First Nations for First Nations to ensure the strategy is based on First Nations perspectives and respects Aboriginal and Treaty rights. The Strategy is written in collaboration with the federal government in order to harmonize with government priorities.
- 2.2 The Strategy builds the environment and lays out a road map for the research, design and implementation of new housing systems that will lead to a complete federal government withdrawal and a full transfer of authority from the federal government to First Nations care, control and management over housing and related infrastructure.
- 2.3 The Strategy provides a long-term approach for First Nations housing and related infrastructure on-reserve as well as housing for First Nations who live in urban, rural, and northern areas.
- 2.4 The Strategy implements the AFN Resolutions passed by Chiefs-in-Assembly that support and promote the transfer of authority over housing and related infrastructure to First Nations care, control and management.
- 2.5 The Strategy is a significant step towards the federal government's goal that design and delivery of housing and related infrastructure services be led by Indigenous peoples for Indigenous peoples.
- 2.6 The Strategy draws from and builds on the feedback from engagement with First Nations and national forums with First Nations, the [United Nations Declaration on the Rights of Indigenous Peoples](#) (UN Declaration), the [2015 Senate Report On-reserve Housing and Infrastructure Recommendations for Change](#) and other sources.

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<sup>1</sup> Related infrastructure refers to the infrastructure associated with the construction of residences which are public utilities: connection to drinking water, sanitary sewer, storm sewer, and street lighting (excluding water and wastewater treatment facilities).

There are, in general, 3 types of development in First Nations communities:

- a) urban (with paving, curbstones and underground storm drainage network);
- b) semi-urban (without street paving nor curbstones and with storm drainage ditches);
- c) rural (individual installations of water supply and waste water treatment).



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The UN Declaration states the importance of housing in Article 21, “Indigenous peoples have the right, without discrimination, to the improvement of...housing.” Article 23 states that “Indigenous peoples have the right to determine and develop priorities and strategies for exercising [that] right.”

**2.7** The Strategy is part of a broader initiative of First Nations care, control and management of housing and related infrastructure that includes the following building blocks:

- 1) The Policy Reform Framework Towards a First Nations Housing and Infrastructure Strategy (December 2017)
- 2) Strategic Plan with short, medium and long-term goals and objective (Fall/Winter 2018)
- 3) Regional Strategies and Plans (currently underway and on-going)

### **3. BACKGROUND**

**3.1** The legacy of colonization has removed the opportunity for First Nations to meet their housing needs and has prevented them from accessing necessary financial instruments, developing capacity, and establishing appropriate housing governance systems, which has left them almost solely dependent on government programs. First Nations leadership has had the optics of control while being excluded from significant decision-making authority. As a result housing has become the cause of conflict and disruption in many First Nations.

**3.2** Government programs and policies have failed to provide sustainable long term positive housing outcomes and have led to persistent substandard living conditions with negative impacts on health, education, economic development, and child welfare, etc. These substandard living conditions are felt more deeply by First Nations women and girls, seniors, youth, homeless, people with disabilities and First Nations people in the north.

**3.3** First Nations housing delivery has been measured by how well it fulfills the government financial and program priorities rather than how well it addresses First Nations housing needs. As a result, there is an urgent need for improved housing and living conditions to better suit the First Nations populations across Canada.

**3.4** First Nations housing has been delivered in fragmented ways across federal, provincial, municipal and territorial jurisdictions. This has caused a separation between on and off reserve housing delivery leaving many First Nations people to fall through the gaps. First Nations are changing the direction of housing and related infrastructure services from dependency-based to self-determined and governed by First Nations.



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#### 4. GUIDING PRINCIPLES

- 4.1 The Strategy is guided solely by the aim of ensuring that all First Nations members living in or away from their First Nations will have access to housing that suits their needs.
- 4.2 The transition to First Nations care, control and management of housing and related infrastructure will:
- a) Respect regional approaches and treaty implications
  - b) Be transparent and accountable
  - c) Account for economic considerations and geographic locations
  - d) Respect cultural differences
  - e) Include a holistic approach to housing that is inclusive of all generations and all aspects of life
  - f) Have respect for individual First Nations' level of readiness and capacity
  - g) Align with community needs
  - h) Be based on feedback from First Nations engagement
  - i) Be First Nations led

#### 5. TRANSITION PROCESS

- 5.1 The transition process from federal housing and infrastructure programming to First Nations care, control and management of housing and related infrastructure requires dedicated financial resources to implement the Strategy that include designing, developing and implementing regional and local strategies and plans.
- 5.2 An on-going commitment from the federal government and First Nations is required to support the transition process.
- 5.3 The transition process will rely on continued engagement with First Nations and leadership. During the transition period negotiations between First Nations and the federal government will respect a government to government relationship.

The Chiefs Committee on Housing and Infrastructure (CCoHI), through the AFN, will provide guidance on how the transition process will be implemented. The advice and guidance provided will respect other First Nations organizations and regional partners to implement their own processes.

- 5.4 Engagement with First Nations will inform short, medium, and long-term transition milestones that will respond to regional variances.
- 5.5 The Strategy will be reviewed in accordance with an evaluation process as outlined in the Strategic Plan.



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## 6. GOALS AND ACTIONS

- 6.1** The Strategy has themes with supporting goals and actions related to: Governance and Delivery; Funding and Finance; Skills and Capacity and First Nations Information Sessions. These actions will be undertaken concurrently.

### GOVERNANCE AND DELIVERY

- 6.2** The process of transitioning care, control and management to First Nations will not be a “devolution” of existing government programs and services. It will result in the creation of new systems, new housing institutions and new ways to deliver housing services to First Nations people.
- 6.3** Goal: Establish a First Nations Housing Policy and Research Institute. Its primary functions will be to design new housing delivery options and governance systems, develop new financing options and mechanisms and to function as a research centre and archive for housing information, tools, and best practices.
- a) Action: Develop a business case for the Housing Policy and Research Institute and acquire sufficient funding.
  - b) Action: Staff the policy institute with experts in the appropriate fields.
  - c) Action: Establish the mandate of a First Nations Housing Policy and Research Institute.
- 6.4** Goal: Establish national and regional housing and related infrastructure delivery frameworks to assist in the design of governance models that are independent from political influence.
- a) Action: Research existing international Indigenous housing and infrastructure models to support the design of governance housing systems.
  - b) Action: Develop strong governance systems, through engagement with First Nations that can respond to cultural variances and regional needs and priorities.
  - c) Action: Determine the relationship through engagement, between First Nations leadership and housing governance systems.
- 6.5** Goal: Coordinate housing governance delivery systems across all jurisdictions to better serve First Nations members living away from their community in urban, rural and northern areas.
- a) Action: Build relationships between First Nations and existing Indigenous housing service delivery agents for off-reserve housing.
  - b) Action: Determine the role of First Nations, Indigenous housing service providers, federal, provincial, territorial and municipal governments on providing housing and related infrastructure delivery. In order to build a system where First Nations people no longer fall through the gaps between jurisdictions.

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## FUNDING AND FINANCE

- 6.6** First Nations must be in control of funding in order to address their needs and priorities. Funding and financing for a variety of different First Nations housing falls along a continuum of need, for example, shelters, social housing, housing for disabled community members, seniors' housing, rental units and rent to own, market based and private home ownership.

As a result of the new housing approach there is a need to access new financial instruments and additional government funding if First Nations are to improve housing and living conditions for people living in or away from their First Nation and to close the current housing and related infrastructure gap.

This will require:

- a) a financial commitment by all levels of government and innovative approaches;
  - b) identifying effective ways to leverage investments and finding new ways to finance housing;
  - c) increasing First Nations and individual First Nations peoples' financial commitment to their homes;
  - d) exploring the potential economic benefits of housing and related infrastructure including identifying revenue generating opportunities; and
  - e) research private sector investments.
- 6.7** Goal: The transition will require sufficient, sustainable and predictable funding to support First Nations and First Nations organizations to undertake the care, control and management of housing and related infrastructure.
- a) Action: Acquire funding for local, regional and national First Nations organizations to levels comparable to government and other relevant counterparts.
  - b) Action: Fund the implementation of the strategy. Results of national and regional studies will determine funding levels required.
- 6.8** Goal: Ensure the new First Nations driven housing systems have funding that is adequate, predictable and long-term that is geared to satisfying First Nations housing needs.
- a) Action: Identify funding needs, collect consistent and standardized data and review and analyze existing data in order to provide a comprehensive picture of housing and related infrastructure needs in First Nations.
  - b) Action: Secure funding to address the backlog of new units and related infrastructure, and renovation of existing units which includes different types of housing such as shelters and supportive care homes.
  - c) Action: Acquire dedicated funding for housing manager positions in First Nations.
  - d) Action: Reduce the competition for funds and proposal driven approaches for individual First Nations.



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- e) Action: Develop new approaches to allocation of funds to regions and First Nations.
  - f) Action: Fund proper planning and sound management of housing programs.
  - g) Action: Adopt stronger service delivery models where program delivery is streamlined and simplified.
- 6.9** Goal: Develop ways to leverage government housing and related infrastructure investments to enhance financial opportunities.
- a) Action: Evaluate current financial mechanisms and tools that support housing and infrastructure.
  - b) Action: Explore and develop other appropriate financial tools such as revolving housing loan funds.
- 6.10** Goal: Identify and develop new financial mechanisms for housing delivery.
- a) Action: Develop ways to leverage First Nations' own source revenues to enhance financial opportunities for housing.
  - b) Action: Develop revenue-generating opportunities and ways to leverage funding to finance housing ventures.
  - c) Action: Develop ways to increase individual First Nations people's financial commitment to their homes.
  - d) Action: The Policy Institute will research ways for First Nations members to have access to home financing alternatives.
- 6.11** Goal: Maximize funding for housing delivery systems across all jurisdictions to better serve First Nations members living away from their local First Nation in urban, rural and northern areas.
- a) Action: Investigate and evaluate the funding mechanisms and accountability frameworks currently existing between Indigenous and other housing service providers and federal, provincial, and municipal governments.
  - b) Action: Determine the funding and financing roles of First Nations, Indigenous and other housing service providers, federal, provincial, territorial and municipal governments for housing and related infrastructure delivery.

#### SKILLS AND CAPACITY

- 6.12** The transition from federal control to First Nations care, control and management of housing and related infrastructure requires investments in skills and capacity as well as the flexibility to direct where and how the funding can be used to better support home occupants, housing and related infrastructure personnel, and First Nations organizations who serve them.
- 6.13** Goal: First Nations have the skills and capacity to exercise their responsibility, care, control and management over housing and related infrastructure.



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- a) Action: Conduct a skills and capacity analysis on the needs at the local, regional and national level for managers, leadership, administration, housing management, community members, technical trades, and professionals.
- b) Action: Analyze current gaps and develop strategies to improve skills and capacity.
- c) Action: Establish and/or restore adequate capacity for Tribal Councils and technical service providers to deliver technical services to First Nations for the care, control and management of housing and related infrastructure.
- d) Action: Provide more access to relevant training and professional certification for housing and related infrastructure professionals.

#### FIRST NATIONS INFORMATION SESSIONS

**6.14** First Nations fall along a continuum where some First Nations are ready to take on care, control and management of housing and infrastructure while other First Nations may want to first address the issues of the legacy of federal programs and clarify their treaty relationships.

**6.15** Goal: Hold information sessions with First Nations leadership, communities, technical experts, regional organizations, and under-represented groups, etc., on strategic considerations of what incremental steps can be taken now, during and after transition.

- a) Action: Support regions on continued communications and information sessions on the goal and objectives of this Strategy.
- b) Action: Hold information sessions with urban, rural and northern Indigenous Housing Service Providers, provinces, territories and municipalities to coordinate services for housing.

## **7. RESULTS**

The transition of care, control and management to First Nations organizations and housing service providers is expected to contribute to a greater range of housing choice for First Nations, including supportive housing, social housing, rental housing, and home-ownership. This will lead to improved housing conditions for First Nations, and create sustainable and healthy First Nations.





ONTARIO FIRST NATIONS  
TECHNICAL SERVICES  
CORPORATION

# ON RESERVE OPERATIONS AND MAINTENANCE POLICY

## *THE CASE FOR REFORM*

Prepared by: Ontario First Nations Technical Services Corporation

Date: November 23, 2018



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## ACRONYM LIST

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ACRS	Asset Condition Reporting System
AFN	Assembly of First Nations
AMP	Asset Management Plans
CAIS	Capital Asset Inventory System
CFMP	Capital Facilities and Maintenance Program
CIRC	Canadian Infrastructure Report Card
CRM	Cost Reference Manual
FNIP	First Nation Infrastructure Investment Plan
ISC	Indigenous Services Canada
LLC	Life Cycle Cost
O&M	Operations and Maintenance
OCWA	Ontario Clean Water Agency
MMP	Maintenance Management Plan



## EXECUTIVE SUMMARY

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The current Indigenous Services Canada (ISC) operations and maintenance (O&M) policy and funding allocation framework is significantly flawed. The discrepancy between actual O&M costs First Nations experience and ISC contributions (which are based on project costs rather than life-cycle costs), in addition to the lack of a structured asset management policy, leads to higher costs and prevents First Nations infrastructure and community assets from achieving their full life cycles. This situation represents the case of many First Nations in Ontario and illustrates the need for significant policy change. The funding shortfalls experienced by First Nations prevent both the necessary operations and maintenance work and the protection and prolonging of critical community infrastructure. This leads to physical and financial maintenance deficits, which accumulate and compound. O&M policy must meet the needs of First Nations communities and must ensure that safeguards and proper training are in place to mitigate risks to the life-cycle of critical infrastructure. In its current form, O&M policy fails to achieve this for First Nations.

The problems with the current O&M funding formula, unit prices, and cost indices as defined by the CRM, in addition to problems with the gross/net funding requirements, are well-documented both in government and First Nations publications. The issue is two-fold: on one hand, funding provided for O&M has not increased in spite of increasing O&M costs; and on the other, the funding formula methodology, which determines O&M funding levels is founded upon flawed and dated calculations which do not compare to other data sources employed for off-reserve O&M calculations (e.g. Statistics Canada or RS Means datasets). Additionally, the “net funding requirement” (NFR) is an arbitrary number that has no relationship to reality: if First Nations are without means to supplement O&M funding received by ISC, the O&M simply does not occur.

Evidence exists that supports asset management plans (AMP) as a tool to save costs, prolong infrastructure life-cycles, and overall, improve processes related to O&M. A goal of asset management is to consider full life-cycles of infrastructure assets and extend them by making informed decisions regarding the building, operating, maintaining, renovating, replacing, and disposing of assets. Asset management plans will provide evidence-based needs for the capital, operations, and maintenance investments to achieve and maintain a desired levels of service in First Nations communities.

Asset management systems could further assist First Nations in facilitating better data governance which will result in positive institutional changes to community asset management, improved services and performances, more accurate financial planning, and ultimately reduced life cycle expenditures and premature replacements.

Operator training, and salaries levels remain outstanding issues in the broader O&M reform discussions. There is a clear need for proper training dollars and fair operator compensation commensurate with off-reserve O&M professionals. Indeed, O&M reform must also provide greater resources for the costs associated with primary and secondary operator training and succession planning to ensure gaps in O&M personnel are mitigated in advance of potential vacancies. In addition to this, and there is a need to address the wage disparity between on-



reserve and off-reserve O&M personnel salaries and benefits. It is also understood that increasing O&M to allow an increased salary will help in reducing operator turn-over.

Decisions about maintaining, replacing and repairing on reserve infrastructure have significant consequences not only for a First Nation's bottom line, but also for community health and wellness, and the natural environment. Many First Nations communities experience complex challenges in the management of infrastructure assets. These challenges include not only a perpetual shortage of housing, infrastructure, and funding to operate and maintain assets, but also the lack of tools and capacity to effectively manage assets. To contrast, municipalities enjoy consistent expenditures from year to year, assumed to be a result of predictable budgets, and a focus on asset management strategies.

The following report makes four key recommendations, which include the following, and are fleshed out further in the report:

- Recommendation #1: Move Away from Existing O&M Policy Framework Towards Asset Management Plans
- Recommendation #2: Update Cost Reference Manual as Interim Measure Towards Development of Asset Management Plan
- Recommendation #3: Develop and Implement First Nations Infrastructure Report Card
- Recommendation #4: Ensure Fair Wages, Salaries & Benefits for O&M Operators

OFNTSC is ideally suited to provide advisory services to First Nations for whole life cycle of infrastructure assets including both capital and O&M funding. OFNTSC envisions a future where First Nations have the capacity and resources to maximize the lifespan of their community assets, are able to plan and respond to climate change risks, and where asset management planning strategies characterize the operations and maintenance of critical community infrastructure and are inclusive of a cultural component. To this end, OFNTSC has been working on asset management planning for Ontario First Nations, including the development of the First Nations Infrastructure Resilience Toolkit.

As a technical service provider, an opportunity exists for OFNTSC to become a centre of excellence for the provision of sustainable asset management planning for First Nation Communities in Ontario. OFNTSC will also be working with AFN on the development of a new O&M policy framework, and is currently designing an Ontario-based AMP pilot.



## 1.0 PURPOSE/INTRODUCTION

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The current Indigenous Services Canada (ISC) operations and maintenance (O&M) policy and funding allocation framework and is significantly flawed. The discrepancy between actual O&M costs First Nations experience and ISC contributions (which are based on project costs rather than life-cycle costs), in addition to the lack of a structured asset management policy,<sup>1</sup> leads to higher costs and prevents First Nations infrastructure and community assets from achieving their full life cycles. This situation represents the case of many First Nations in Ontario and illustrates the need for significant policy change. In addition to ensuring assets reach their full life cycle, proper O&M is widely regarded as the key to mitigating health and safety concerns in First Nations communities. This is especially the case when referring to critical community infrastructure such as water and wastewater facilities.

The funding formulas and cost indices defined by ISC's Cost Reference Manual (CRM) are dated and must be updated in order to eliminate the disparities between ISC allocations and actual O&M costs to First Nations. O&M reform must also provide greater resources for the costs associated with primary and secondary operator training and succession planning to ensure gaps in O&M personnel are mitigated in advance of potential vacancies. In addition to this, and there is a need to address the wage disparity between on-reserve and off-reserve O&M personnel salaries and benefits.

Many of these issues were addressed in the 2009 then-AANDC Audit of the Capital Facilities and Maintenance Program (CFMP); however, no substantive improvements have been developed and implemented in the O&M sector, and the stated programmatic objectives are not being met. In spite of this, in July 2017, the Minister of ISC stated her support for O&M policy reform and committed to collaborate with First Nations (through the Assembly of First Nations (AFN)) to identify options for the co-development of a new O&M policy framework that will contribute to address the socio-economic gap in First Nations.<sup>2</sup> The AFN Chiefs in Assembly, in turn, passed Resolution 80/2017, "Support for Review of Canada's Operations and Maintenance Policy," which outlines the plan to reform O&M policy in Canada. AFN Resolution 80/2017 can be found in **Appendix A**.

The purpose of this paper is to advance OFNTSC's position with respect to the impending changes to ISC's O&M policy. OFNTSC envisions a future where First Nations have the capacity and resources to maximize the lifespan of their community assets, are able to plan and respond to climate change risks, and where asset management planning strategies characterize the operations and maintenance of critical community infrastructure and are inclusive of a cultural component. To this end, OFNTSC has been working on asset management planning for Ontario First Nations, including the development of the First Nations Infrastructure Resilience Toolkit. As a technical service provider, an opportunity exists for OFNTSC to become a centre

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<sup>1</sup> Asset Management incorporates the full costs of maintaining assets through a combination of best practices applied to physical assets and an objective to provide required levels of services in the most cost-effective manner. Asset management systems could assist First Nations in facilitating better data governance which will result in positive institutional changes to community asset management, improved services and performances, more accurate financial planning, and ultimately reduced life cycle expenditures.

<sup>2</sup> Assembly of First Nations. "Operation and Maintenance: Summary Report." 2018: 4.



of excellence for the provision of sustainable asset management planning for First Nation Communities in Ontario.

## 2.0 BACKGROUND

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Operations and Maintenance is typically defined as follows: where operations are the performance of work or services and the provision of materials and energy to ensure the day to day proper functioning of an asset, maintenance refers to the work performed on an asset to preserve it as near as practical to its original condition and to realize its normal life expectancy.<sup>3</sup> For on-reserve First Nations, ISC provides subsidies for the operations and maintenance of community infrastructure. The following section will: outline the respective responsibilities of both First Nations and the federal government where O&M is concerned; describe how O&M funding allocations are determined; discuss recent budget federal commitments as they relate to O&M; and will provide an overview of the federal O&M investments in Ontario.

### 2.1 FEDERAL AND FIRST NATIONS O&M RESPONSIBILITIES

ISC provides O&M funding to First Nations as a matter of social policy, rather than a treaty or rights-based obligation. In addition to O&M, ISC supports the planning, acquisition, design, construction, and disposal of First Nations capital assets, through two main programs: the Capital Facilities and Maintenance Program (CFMP), and the First Nations Infrastructure Investment Fund (FNIF). The level of O&M funding provided to First Nations varies from 20 percent to 100 percent depending on the type of asset, First Nations are expected to make up the difference in O&M funding through user fees or other sources of revenue.<sup>4</sup> First Nations are also expected by law to comply with a series of federal statutes and regulations (see **Appendix B**) with respect to ISC funded infrastructure.

The objective of the CFMP is to provide First Nations with financial support to: invest in physical assets (or services) that mitigate health and safety risks in their communities; ensure that assets meet established codes and standards; ensure that assets are managed in a cost-effective and efficient manner that protects, maintains and maximizes asset life cycle; and ensure that the above activities are undertaken in an environmentally sound and sustainable manner.<sup>5</sup> CFMP asset categories include the following:

- Water supply, treatment and distribution systems;
- Wastewater collection, treatment and disposal systems;
- Solid Waste collection and disposal;
- Elementary and secondary educational facilities;
- Housing;
- Roads and bridges;
- Fire protection including fire halls, fire vehicles and firefighting equipment;

<sup>3</sup> Indigenous and Northern Affairs Canada. "Protocol for INAC-Funded Infrastructure." 2016.

<sup>4</sup> Indigenous and Northern Affairs Canada. "Protocol for INAC-Funded Infrastructure." 2016.

<sup>5</sup> Aboriginal Affairs and Northern Development Canada. "National First Nations Infrastructure Investment Plan, 2015-2016." 2015: 5.



- Electrical power generation and distribution;
- Community buildings such as community/recreation halls and band offices;
- Bulk fuel storage and distribution (non-commercial use);
- Structural Mitigation;
- Waste Management;
- Energy Systems;
- Remediation of contaminated sites;
- Land acquisition for approved community expansion; and
- Connectivity.

CFMP funding is allocated by ISC headquarters to the regions based on a ‘global’ funding methodology adopted in 1998-1999. Here, funds for the delivery of most programs to First Nations are transferred to regions as a single block or the ‘core budget,’ which includes funding for minor capital and O&M expenditures.<sup>6</sup>

The FNIF is a proposal-based program that provides infrastructure funding to First Nation communities who have developed a First Nation Infrastructure Investment Plan (FNIIP) which identified all eligible infrastructure projects. Annual FNIIPs and supporting documents are then submitted to ISC. There are eight categories of projects eligible for funding through the FNIF:

- planning and skills development;
- solid waste management;
- roads and bridges;
- energy systems;
- connectivity;
- structural mitigation;
- cultural and recreational facilities; and
- fire protection.

In partnership with ISC, First Nations develop their FNIIP to strategically plan investments, in the short and medium term, while supporting a base of infrastructure that protects the health and safety and enables engagement in the economy. In addition to FNIIP’s, First Nations are expected to develop and implement Maintenance Management Plans (MMPs) for major capital assets. First Nations are then required to carry out the O&M of community infrastructure, housing, and assets in accordance with their Council-approved MMP, which is made available to ISC. A First Nations MMP must identify the following:

1. An up-to-date inventory of all infrastructure and housing assets for which O&M funds are provided by ISC;
2. The maintenance activities and their frequency that will be conducted for each asset;
3. An estimate or the most recent three-year average total annual cost of operating and maintaining all community infrastructure and housing assets for which a funding subsidy is provided by ISC;

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<sup>6</sup> Indian and Northern Affairs Canada. “Audit of the Capital Facilities and Maintenance Program.” 2009: 12.



4. Measures to ensure that satisfactorily trained personnel are available at all times to operate and maintain technical systems according to the design standards of the specific facility or asset (e.g., for water and wastewater treatment plants, operators shall be certified to the level of the plant);
5. The provision of adequate fire protection services; and
6. The data that is necessary to update the Integrated Capital Management System (ICMS) by reporting deadlines.

The primary instrument to monitor and support First Nations in achieving O&M performance objectives is the Asset Condition Reporting System (ACRS). Through ACRS, ISC undertakes inspections in all regions as a means to indirectly assess the extent to which O&M activities are being undertaken by First Nations. These inspections target one third of all First Nations each year where reports are produced that include general and specific asset conditions, the identification of asset deficiencies and an assessment of criticality with recommendations to address these deficiencies. First Nations have responsibility to act on recommendations to address asset deficiencies.<sup>7</sup> The 2009 ISC audit of the CFMP found that significant gaps exist in ISC's regional controls over the management of O&M funding.<sup>8</sup> Further, the audit found that the lack of sufficient management and oversight has contributed to the shortened life span of First Nations critical community assets.<sup>9</sup>

O&M funding agreements carry terms and conditions by which First Nations must abide, which identify the minimum performance obligations of the First Nation. Examples of terms and conditions include adherence to codes and standards for the design, construction, operation and maintenance of facilities. First Nations or Tribal Councils that fail to meet the terms and conditions of a funding arrangement are deemed to be in default of a contract, and in such cases, ISC may take action to remedy the default to ensure that necessary O&M work is carried out.

## **2.2 O&M FUNDING FORMULA**

As will be discussed later in the paper, perhaps the most compelling case for O&M reform lies in framework through which O&M funding is allocated. The determination of O&M contributions varies from region to region; however, all regions start with ISC's Cost Reference Manual, and an internal database, maintained by ISC, named the Integrated Capital Management System (ICMS), formally known as Capital Asset Inventory System (CAIS), which contains capital asset information for First Nations and is used to calculate the annual O&M gross and net funding requirements for First Nations. Estimates of the O&M funding requirements for funded assets are generated by the ICMS using the asset location, type and quantity data together with a cost look-up table that is linked to the CAIS.<sup>10</sup> In order to receive O&M funding, capital assets must be included in the ICMS. Updates to ICMS are done on an annual basis, as required by O&M funding requirements.<sup>11</sup>

<sup>7</sup> Indian and Northern Affairs Canada. "Audit of the Capital Facilities and Maintenance Program." 2009: 18.

<sup>8</sup> Ibid, ii.

<sup>9</sup> Ibid, 20.

<sup>10</sup> Ibid, 18.

<sup>11</sup> Indigenous and Northern Affairs Canada (2016). "Protocol for INAC-Funded Infrastructure."





The gross funding requirement (GFR) is that amount required to operate and maintain a facility to generally accepted standards, while amount of subsidy, the net funding requirement (NFR), is the GFR less any amount the operator or administrator received as a result of user fees or other income, typically varying between 20-100% of the GFR. According to ISC, only in the case of education facilities is O&M funded at 100% of the net funding requirement; however, this 100% of value is determined by ISC calculations rather than actual need, and as will be described later in the paper, does not amount to full funding for education-related O&M costs. Regardless of this, in policy, apart from education, O&M funding is determined according to cost-sharing levels between ISC and First Nations. Typically, ISC's contributions to O&M costs is subject to approval and availability of funds.

The Cost Reference Manual (CRM) was first published in the mid-1980s to support funding decisions for construction, operations and maintenance activities in First Nations communities across Canada. The CRM has seen few updates, with the most recent updates occurring in 1996 and 2004, and as a result, the CRM is widely seen as an outdated means to determine accurate O&M costs. A 2009 ISC audit of the CFMP concurred with this sentiment, stating that CFMP funding allocations from ISC Headquarters to the regions is “based on dated reference levels.”<sup>12</sup> According to the Cost Reference Manual, O&M costs are determined in the following manner: O&M costs (GFR) = Base Unit Cost x City Centre Index x Zone (Remoteness) Index x Asset Count.

Up until 2005, the Cost Reference Manual (CRM) was “published” annually. Although the CRM was updated annually, the changes primarily focused on updating current formulas for inflationary changes. The formulas were derived much further back. After 2005, the formulas have continued to be updated for inflation, however it has been done electronically in ISC's Integrated Capital Management System. A 2012 update to the CRM was listed in audits as a deliverable to be undertaken with First Nations and Tribal Councils, and while this joint effort never occurred, the update is shown to have happened and ultimately never released.

A 2007 report commissioned by ISC (then INAC), and produced by Hanscomb, found that while the approach of the CRM is “generally acceptable,” there is concerns that “without a bridge between the current update approach and the original methodology, the [CRM] is at risk of producing estimates that may not reflect regional market conditions.”<sup>13</sup> The original methodology, according to the report, has not been carried forward in time, and site specific factors have not been updated since the inception of the CRM.<sup>14</sup> For example, as ‘city centre index’ (in the case of Ontario, Toronto) is a metric in determining O&M costs, the Hanscomb report found that in the absence of meaningful updates, the CRM may not reflect actual and probable costs in Toronto, and that over time, regional differences by asset class are no longer reflective of CRM city centre indices.<sup>15</sup> While the report recommended that the CRM cost trending be updated in a more robust way reflecting an appropriate level of precision, and that users of guide must be consulted, no substantive changes have occurred within the CRM.

<sup>12</sup> Indian and Northern Affairs Canada. “Audit of the Capital Facilities and Maintenance Program.” 2009: 18.

<sup>13</sup> Indian and Northern Affairs Canada. “Cost Reference Manual: Update on INAC Cost Reference Manual.” 2007: 8.

<sup>14</sup> Ibid, 8.

<sup>15</sup> Ibid, 24.



## **2.3 FEDERAL COMMITMENTS**

Budget 2016 announced approximately \$4 billion to improve First Nations community infrastructure through ISC programs. This investment included: \$1.8 billion over five years to improve on reserve water and wastewater infrastructure; \$409 million over five years to improve solid waste management on reserve; and \$255 million over two years to the First Nation Infrastructure Fund.<sup>16</sup> In spite of these commitments, a 2017 Parliamentary Budget Office report stated that the allocations, where water and wastewater allocations are concerned, remain insufficient.<sup>17</sup> Budget 2017 proposed to invest an additional \$4 billion over 10 years through the Investing in Canada Plan, starting in 2018–19, to build and improve community infrastructure in partnership with Indigenous peoples.<sup>18</sup>

In addition to budget commitments, Canada committed to the “full implementation” of the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) in Canadian law and policy “without qualification.” With respect to operations and maintenance, the UN Declaration states:

*Article 19: States shall consult and cooperate in good faith with the Indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them.*

*Article 23: Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, Indigenous peoples have the right to be actively involved in developing and determining [...] their own institutions.*

The above articles are relevant to the O&M discussion insofar as Canada continues to implement administrative measures that relate to O&M, for example, the CRM, which continue to have adverse effects on First Nations’ ability to adequately protect and preserve their critical community infrastructure.

In July 2017, the Minister of ISC stated her support for O&M policy reform and committed to collaborate with First Nations (through the Assembly of First Nations (AFN)) to identify options for the co-development of a new O&M policy framework that will contribute to address the socio-economic gap in First Nations.<sup>19</sup> The AFN Chiefs in Assembly, in turn, passed Resolution 80/2017, “Support for Review of Canada’s Operations and Maintenance Policy,” (see Appendix A) which outlines the plan to reform O&M policy in Canada.

In March 2018, the AFN hosted an O&M expert meeting to seek input on how a revised policy

<sup>16</sup> Government of Canada (2016). “Budget 2016: Growing the Middle Class.” Ministry of Finance.

<sup>17</sup> Parliamentary Budget Office (2017). “Budget Sufficiency for First Nations Water and Wastewater Infrastructure.”

<sup>18</sup> Government of Canada (2017). “Budget 2017: Building A Strong Middle Class.” Ministry of Finance.

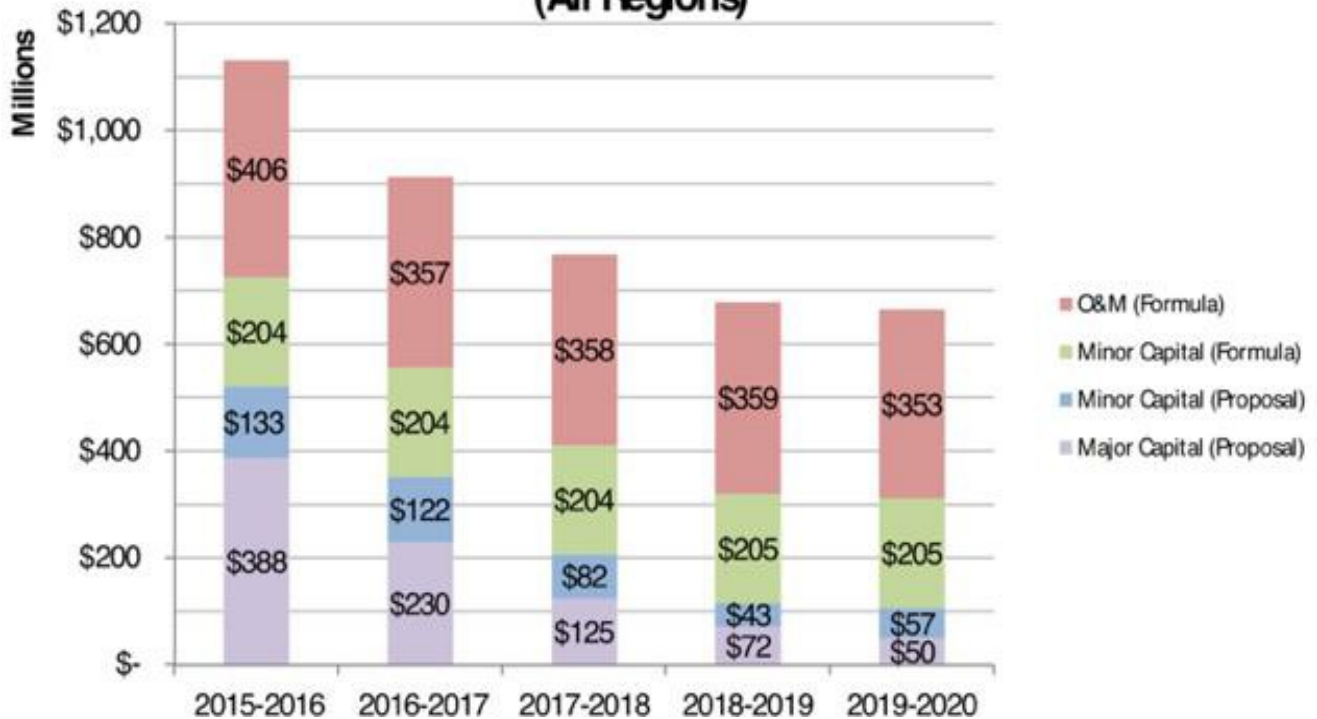
<sup>19</sup> Assembly of First Nations. “Operation and Maintenance: Summary Report.” 2018: 4.



framework should look. Flowing from this meeting were a number of recommendations, including namely, that First Nations adopt an asset management approach to O&M.<sup>20</sup> Currently, the AFN is working with the regions to develop asset management pilot projects which will develop fully costed asset management plans. When complete, the findings will be compared to current ISC O&M funding levels to help inform ISC of the new levels of funding required to support the asset management approach for the future. The results of the AFN-sponsored pilots are expected to be complete by early 2019. With respect to linkages to the *Safe Drinking Water Act* in 2013, ISC has agreed that the *Act* may need to be repealed and replaced with legislation ‘co-developed’ with First Nations (through the AFN). This work is ongoing and will influence how that new water and wastewater legislation approaches O&M funding for First Nations water and wastewater infrastructure.

Current O&M contributions are depicted below in Figure 1. In spite of ISC’s commitments to develop new solutions for O&M, including the above-mentioned asset management pilots, O&M contributions for all regions are projected to decrease from \$359 million for fiscal year 2018-19 to \$353 million for fiscal year 2019-20.<sup>21</sup> On top of this, Figure 1 depicts a downwards trend in spending on not only O&M, but also minor and major capital.

**Figure 1 – Planned ISC Funding for All Regions  
2015-2016 to 2019-20 Planned Funding by Funding Stream  
(All Regions)**



Source: INAC (2015), “National First Nations Infrastructure Investment Plan, 2015-2016,”

<sup>20</sup> Ibid.

<sup>21</sup> Assembly of First Nations. “Operation and Maintenance: Summary Report.” 2018: 13.

## 2.4 INVESTMENTS IN ONTARIO

According to Table 1, planned O&M spending for Ontario region is set to decline significantly from fiscal year 2014-15 levels through to 2019-20. While planned spending for community infrastructure and education would remain stable, the total planned spending for water and wastewater would be virtually cut in half from the 2014-15 levels to the levels planned for 2016-17 through to 2019-20.

**Table 1 – Planned ISC Funding for Ontario Region**

Ontario Summary						
Project Category	Previous Year (Planned Amount in 2014-2015)	Planned Spending				
		2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
<b>Proposal Based Capital Projects</b>						
Community Infrastructure	40,550,797	20,525,582	12,789,257	193,570	279,656	359,429
Contaminated Sites	1,943,023	1,841,710	656,659	-	-	-
Education	49,712,674	41,612,486	17,281,113	946,311	-	-
Housing	5,075,000	1,340,727	-	-	-	-
Water and Wastewater	34,950,501	45,266,093	23,927,436	7,039,318	-	-
<b>Sub-Total (Proposal)</b>	<b>\$ 132,231,995</b>	<b>\$ 110,586,598</b>	<b>\$ 54,654,465</b>	<b>\$ 8,179,199</b>	<b>\$ 279,656</b>	<b>\$ 359,429</b>
<b>Formula Driven Capital</b>						
Community Infrastructure	23,496,174	23,183,305	23,183,305	23,183,305	23,183,305	23,183,305
Contaminated Sites	-	-	-	-	-	-
Education	1,991,954	1,916,517	1,916,517	1,916,517	1,916,517	1,916,517
Housing	22,531,915	22,318,234	22,318,234	22,318,234	22,318,234	22,318,234
Water and Wastewater	-	-	-	-	-	-
<b>Sub-Total (Formula)</b>	<b>\$ 48,020,043</b>	<b>\$ 47,418,056</b>	<b>\$ 47,418,056</b>	<b>\$ 47,418,056</b>	<b>\$ 47,418,056</b>	<b>\$ 47,418,056</b>
<b>Operations &amp; Maintenance</b>						
Community Infrastructure	39,568,318	37,290,688	37,220,688	37,220,688	37,220,688	37,220,688
Contaminated Sites	-	-	-	-	-	-
Education	35,736,940	35,669,354	35,669,354	35,669,354	35,669,354	35,669,354
Housing	6,951,334	-	-	-	-	-
Water and Wastewater	41,251,600	31,684,444	22,058,034	22,058,034	22,058,034	22,058,034
<b>Sub-Total (O&amp;M)</b>	<b>\$ 123,508,192</b>	<b>\$ 104,644,486</b>	<b>\$ 94,948,076</b>	<b>\$ 94,948,076</b>	<b>\$ 94,948,076</b>	<b>\$ 94,948,076</b>
<b>Grand Total</b>						
Community Infrastructure	103,615,289	80,999,575	73,193,250	60,597,563	60,683,649	60,763,422
Contaminated Sites	1,943,023	1,841,710	656,659	-	-	-
Education	87,441,568	79,198,357	54,866,984	38,532,182	37,585,871	37,585,871
Housing	34,558,249	23,658,961	22,318,234	22,318,234	22,318,234	22,318,234
Water and Wastewater	76,202,101	76,950,537	45,985,470	29,097,352	22,058,034	22,058,034
<b>Grand Total</b>	<b>\$ 303,760,230</b>	<b>\$ 262,649,140</b>	<b>\$ 197,020,597</b>	<b>\$ 150,545,331</b>	<b>\$ 142,645,788</b>	<b>\$ 142,725,561</b>

Source: INAC (2015): "National First Nations Infrastructure Investment Plan, 2015-2016,"

The data contained in Table 2 shows the actual funding received by Ontario region over a three fiscal year period. In contrast to Table 1, actual funding far exceeds planned funding. The actual figures show that from fiscal year 2015/16-2016/17 funding increased by 1.2%, and increased an additional 0.6% to 1.8% in fiscal year 2016/17-2017/18. Water and wastewater, which shows a large drop in funding in 2015/16-2016/17, followed by a substantial increase in 2016/17-2017/18, can be explained by the federal government's budget contributions that year in addition to the stated priority of the elimination of boil water advisories.



**Table 2 – Actual ISC O&M Funding for Ontario Region, 2015/16 – 2017/18**

<b>ONTARIO REGION ACTUALS – OPERATIONS AND MAINTENANCE</b>			
<b>Asset Class</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>
EDUCATION FACILITIES	36.0	37.8	40.6
HOUSING	0.1	0.1	0.2
OTHER COMMUNITY INFRASTRUCTURE AND ACTIVITIES	54.3	59.7	45.9
WATER AND WASTEWATER	34.0	28.5	41.2
RENEWABLE ENERGY AND ENERGY EFFICIENCY	0.8	0.5	1.0
<b>Grand Total (millions)</b>	<b>125.1</b>	<b>126.6</b>	<b>128.9</b>

*Source: Indigenous Services Canada, 2018.*

The above data is limited by the fact that figures representing actual First Nations need are not available (suggesting again the need for asset management plans and proper data collection. In spite of the discrepancies between planned and actual ISC contributions, this data should not be taken as a sign that ISC is going far and above in their commitment to O&M; rather, these vastly different figures highlight the fact that the current policy and funding framework simply are not working and are in dire need of reform.

### **3.0 THE CASE FOR REFORM**

O&M policy must meet the needs of First Nations communities and must ensure that safeguards and proper training are in place to mitigate risks to the life-cycle of critical infrastructure. In its current form, O&M policy fails to achieve this for First Nations. The following section will outline OFNTSC's position with respect to the need for O&M reform.

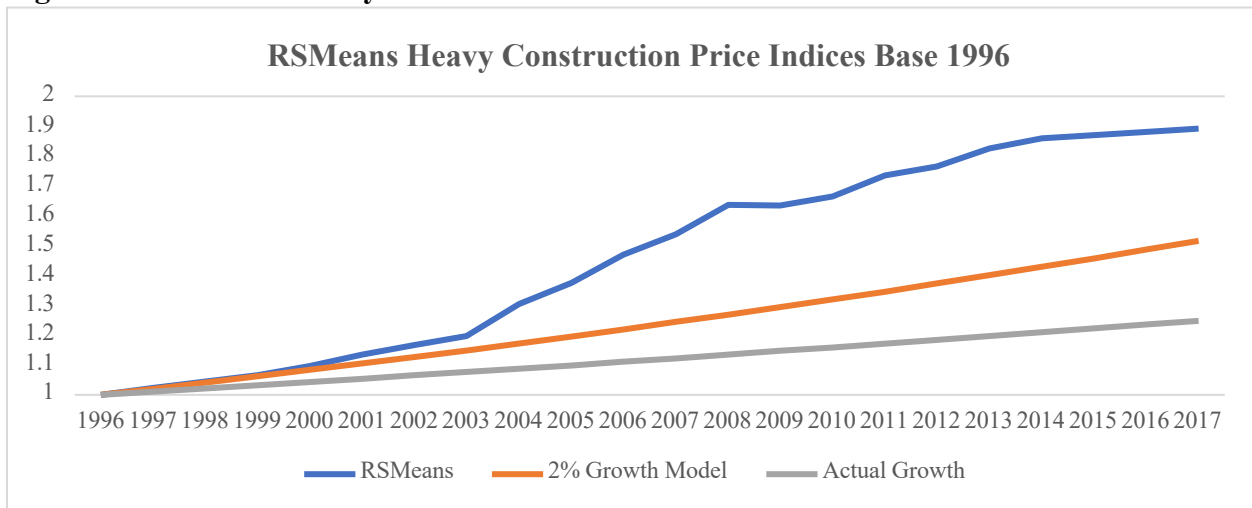
➤ ***Actual vs Allocated: O&M Funding Formula and Cost Indices are Failing First Nations***

The problems with the current O&M funding formula, unit prices, and cost indices as defined by the CRM, in addition to problems with the gross/net funding requirements, are well-documented both in government and First Nations publications. The issue is two-fold: on one hand, funding provided for O&M has not increased in spite of increasing O&M costs; and on the other, the funding formula methodology, which determines O&M funding levels is founded upon flawed and dated calculations which do not compare to other data sources employed for off-reserve O&M calculations (e.g. Statistics Canada or RS Means datasets). Additionally, the “net funding requirement” (NFR) discussed earlier in the paper is an arbitrary number that has no relationship to reality: if First Nations are without means to supplement O&M funding received by ISC, the O&M simply does not occur.

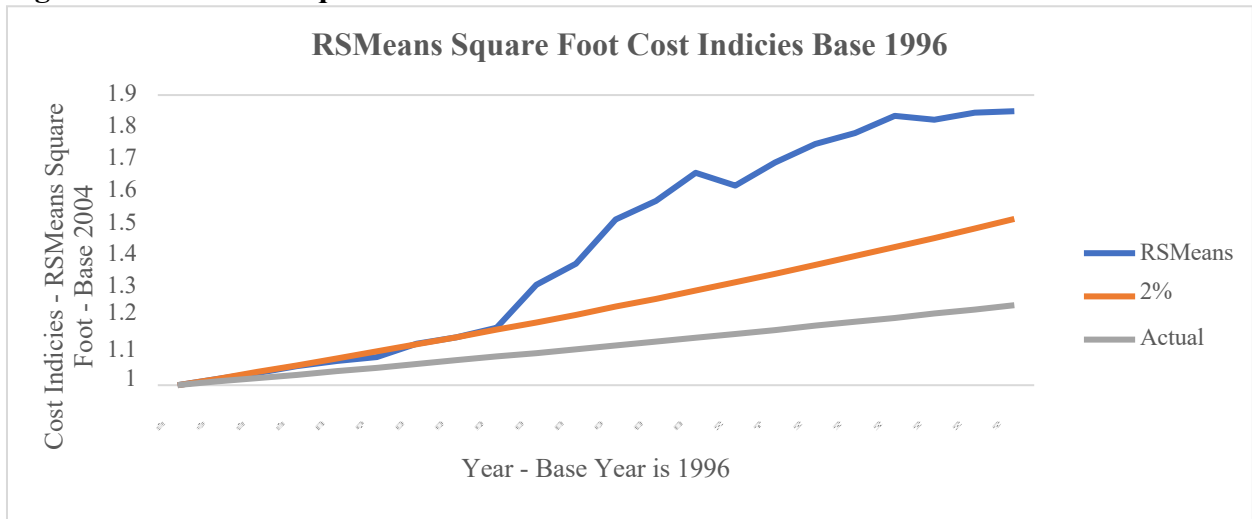


If comparing RSMeans<sup>22</sup> data for heavy construction with the actual cost indices in the ISC CRM dating back to 1996, it becomes apparent that O&M dollars should have increased by 89% from 1996 to the present. In actuality, funding for heavy construction increased a mere 25%, which has led to 13 years of increasing maintenance deficits. The actual growth in dollars for heavy construction also falls well below the 2% funding cap first imposed by the Canadian government in 1996, as a limit placed on annual increases to First Nations budgets. Plotting the growth that would have been expected since 1996 reveals the following in Figure 2.

**Figure 2 – RSMeans Heavy Construction Price Indices**



**Figure 3 – RSMeans Square Foot Cost Indices**



Comparing RSMeans data to square foot cost index data in the CRM similarly shows a significant gap, as depicted in Figure 3. Figure 3 indicates that the 1996 values should have

<sup>22</sup> RSMeans datasets are a North American Industry Standard publisher of Construction Cost Data which is actively monitored by experienced Cost Engineers and published by The Gordian Group, Inc. annually. According to The Gordian Group, Inc., RSMeans datasets represent “the most comprehensive construction cost database in North America.” RSMeans maintain a set of Historical Cost Indexes for various locations over time; one location is Toronto, from 1950 to 2017, which has been used for the purpose of this analysis.

increased by 89% by 2017. The actual growth for O&M contributions for square foot costs remains well under both the RSMeans figures and what the contribution should have been as per ISC's 2% funding cap. According to Figure 4, this would suggest a required increase of approximately 48%.

As the above information demonstrates, funding on O&M has not been based on 'need,' but rather, on arbitrary figures that fall below both off-reserve unit costs and the 2% cap on funding which typically characterizes ISC spending policy.<sup>23</sup>

According to the 2009 CFMP audit, the absence of program funding based on need has resulted in insufficient funding to meet First Nations O&M requirements.<sup>24</sup> The audit further found that relative proportions of [CFMP] funding allocated to regions has not been altered since the launch of the Global Funding Methodology and effectively since the 1990-1991 re-basing. Consequently, the current funding allocation to regions is based on dated reference levels and the lack of updated funding allocations to regions "has resulted in the ineffective or inefficient use of these resources, and that more deserving projects are not being funded at an appropriate level."<sup>25</sup> The 2009 audit itself recommended a review of the methodology for allocating CFMP funding from HQ to regions, however, this recommendation has yet to be acted upon.

The chart in **Appendix C** provides a detailed list of assets in addition to their unit prices as identified in the 1996 CRM, the 2004 CRM, and the 2017-18 O&M unit costs provided by ISC. The chart also provides the ratio increase per asset from 1996 to 2017 in addition to the annual compounding rate per asset. Over the 21-year period from 1996 to 2017, the minimum increase to unit rates was 40%, the average was 43%, and the maximum increase was 50%. In terms of the annual compounding increases, the minimum yearly increase was 1.6%, the average was 1.7%, and the maximum annual compounding increase was 1.9%. While these figures do not offer a picture of what the increases *should* have been, they do offer *actual* ISC increases, and suggest that the actual O&M contributions fell short of the 2% funding cap. It is likely, however, that even with a 2% annual increase in unit costs, O&M funding would still be insufficient to meet the O&M needs of First Nations. In short, the figures provided in Appendix C are grossly undervalued.

➤ ***A Move to Asset Management will improve processes related to O&M***

Evidence exists that supports asset management plans (AMP) as a tool to save costs, prolong infrastructure life-cycles, and overall, improve processes related to O&M. A goal of asset management is to consider full life-cycles of infrastructure assets and extend them by making informed decisions regarding the building, operating, maintaining, renovating, replacing, and disposing of assets. Asset management plans will provide evidence-based needs for the capital, operations, and maintenance investments to achieve and maintain a desired levels of service in First Nations communities.

Asset management systems could further assist First Nations in facilitating better data

<sup>23</sup> Indian and Northern Affairs Canada. "Audit of the Capital Facilities and Maintenance Program." 2009: 17.

<sup>24</sup> Ibid, 20.

<sup>25</sup> Ibid, 12.



governance which will result in positive institutional changes to community asset management, improved services and performances, more accurate financial planning, and ultimately reduced life cycle expenditures and premature replacements.

OFNTSC's approach to effective asset management is described below:

1. Investing in community infrastructure is critical for creating sustainable communities. However, First Nations face challenges that endure infrastructure sees their full life-cycle. Recognizing the challenges, OFNTSC intends to create an asset management plan that ensures the predictability and safety of all assets are maintained.
2. First Nations should be on the similar page n asset management as municipalities. This would create relevant and realistic benchmarks, along with consistent comparisons. This will help level the playing field and provide a more accurate picture of the state of infrastructure, based on an industry approach.
3. Asset Management processes should be aligned with a community plan and ensure stakeholders and community members place value on the functionality, reliability and health & safety of their infrastructure.
4. Capacity development is paramount to effectively implement an asset management plan in First Nation communities. Training that improves local asset management and creates the skill sets to take asset management from theory to practice, so that communities can optimize delivery of the services that residents need and want, at costs they can afford.

According to the Federation of Canadian Municipalities, asset management planning represents a solution to making better infrastructure investments through its innovative approach to managing physical assets in a way that is socially, environmentally and economically sustainable in the long term.<sup>26</sup> Asset management addresses specific infrastructure needs while also preparing for climate change and can help identify the infrastructure investments that make the most financial sense in the long run.”<sup>27</sup> In fact, a recent PIEVC climate risk assessment indicate the value of maintaining the infrastructure in a state of good repair and capital investments at the end of its service life, is an important measure to mitigate risks. Asset management promotes investments in preventative maintenance and regular repairs which prolong asset service life, and aid in avoiding premature and costly reconstruction and service disruption.<sup>28</sup>

The adoption of sound asset management practices over the past decade has helped Canadian municipalities manage their infrastructure deficits and establish acceptable, affordable, and sustainable levels of service for their communities. In Canada, 62% of large municipalities, 56% of medium-sized municipalities, and 35% of small municipalities have formal asset management plans in place.<sup>29</sup> The Federation of Canadian Municipalities also administers a federally-funded

<sup>26</sup> Federation of Canadian Municipalities. “Municipal Asset Management Program.” 2018.

<sup>27</sup> Ibid.

<sup>28</sup> Canadian Infrastructure Report Card. 2016: 5.

<sup>29</sup> Canadian Infrastructure Report Card. 2016: 6.





\$50 million Municipal Asset Management Program designed to help Canadian municipalities make informed infrastructure investment decisions based on sound asset management practices.<sup>30</sup>

Understanding that there is a clear interest of the federal government and First Nations to move towards an Asset Management approach, it is in First Nations' best interest to be developing tools to assist in the transition to asset management.

One tool which could be developed is a First Nations State of Infrastructure Report Card, similar to the Canadian Infrastructure Report Card (CIRC). In 2012, a consortium of four national associations (Canada Construction Association, Canadian Public Works Association, Canadian Society for Civil Engineering, and the Federation of Canadian Municipalities) published the first CIRC for core municipal infrastructure. In 2016, the second CIRC was published serving as a powerful communications tool and providing a reliable foundation for decision makers. The CIRC states that "having an objective understanding of the physical condition is an area that requires continued attention;" therefore, intermittent risk assessments and periodic inspections of infrastructure, as in the case of many First Nations as per current O&M policy, are simply inadequate.

According to the Canadian Infrastructure Report Card, "one-third of [Canada's] municipal infrastructure is in fair, poor, or very poor condition."<sup>31</sup> The same statistic is not clearly known for First Nations. In order to have a fulsome picture of the state of First Nations infrastructure, it will be prudent and critical to begin the development and implementation of a First Nations State of Infrastructure Report Card, which can be started with existing data in ACRS and ICMS.

Ensuring Climate Risks are understood and mitigated is a key component of a broader asset management plan. Long-term asset management planning is required to ensure First Nations can begin to rely upon essential services without disruption and will allow First Nations to keep up with technological innovations, plan for population growth, and better deal with the increasing volatility of climate change and other extreme weather events. Planning for population growth will become increasingly important considering the Indigenous population in Canada is growing four times faster than the rest of the country, both off and on reserve.<sup>32</sup>

Climate change adaptation strategies are essential for AMPs. To this end, OFNTSC's (PIEVC) Infrastructure Resilience Toolkit addresses two key issues facing First Nations in Ontario: how to manage assets (infrastructure, facilities, buildings etc.) that provide essential services to communities; and, how to consider and identify future and potential risks due to climate change and uncertainty. The OFNTSC (PIEVC) Infrastructure Resilience Toolkit Framework is depicted in the graphic contained in **Appendix D**.

Many First Nations communities experience complex challenges in the management of infrastructure assets. These challenges include not only a perpetual shortage of housing, infrastructure, and funding to operate and maintain assets, but also the lack of tools and capacity

<sup>30</sup> Federation of Canadian Municipalities. "Municipal Asset Management Program" 2018.

<sup>31</sup> Canadian Infrastructure Report Card. 2016: 4.

<sup>32</sup> Kirkup, Kristy. "Canada's Indigenous population growing 4 times faster than rest of country." *Global*. October 25, 2017.



to effectively manage assets. According to the 2009 CFMP Audit, “significant gaps exist in regional controls over the management of [O&M] funding to ensure that key risks are being managed and mitigated.”<sup>33</sup> According to the audit’s findings, the lack of sufficient management, oversight, and monitoring of O&M can lead to shortened life spans for First Nations assets.<sup>34</sup> A move to asset management will help to further improve basic management and oversight controls.

➤ ***Ensuring Equity in Operator Salaries will improve O&M of Community Infrastructure***

There is a clear need for proper training dollars and fair operator compensation commensurate with off-reserve O&M professionals. Indeed, O&M reform must also provide greater resources for the costs associated with primary and secondary operator training and succession planning to ensure gaps in O&M personnel are mitigated in advance of potential vacancies. In addition to this, and there is a need to address the wage disparity between on-reserve and off-reserve O&M personnel salaries and benefits. It is also understood that increasing O&M to allow an increased salary will help in reducing operator turn-over.

**Table 3 – Average Water and Wastewater Operator Salaries**

	OIT	Level I	Level II	Level III	Level IV	Unlicenced
<b>First Nation Operators</b>	\$32,500	\$36,900	\$42,800	\$52,100	\$48,400	\$34,700
<b>Municipal Operators</b>	\$52,300	\$55,100	\$58,900	\$62,800	\$66,800	\$44,300
<b>OCWA Operators</b>	\$50,700	\$51,800	\$52,200	\$55,700	\$56,800	
<b>OCWA – Overall Responsible Operators</b>	\$54,900	\$55,900	\$56,300	\$59,900	\$60,900	
<b>% Less First Nation Operators Earn compared to Municipal Operators</b>	38%	33%	27%	17%	28%	22%
<b>% Less First Nation Operators Earn Compared to OCWA</b>	36%	29%	18%	13%*	21%*	

\* level III and IV operators are compared to OCWA ORO

Source: Ontario First Nations Technical Services Corporation, 2018.

With respect to water treatment plant operators, in 2018, OFNTSC undertook an operator salary survey which confirmed this critical need. OFNTSC looked at the salaries of First Nations operators in Ontario and compared them to salaries of operators in municipalities and at the Ontario Clean Water Agency (OCWA). As depicted in Table 3, based on license level, First Nation Operators earn 22% to 38% less than their municipal counterparts and 13% to 36% less than their counterparts at OCWA.<sup>35</sup> While operator salaries in the municipalities and with OCWA are generally within 12% of each other, First Nations operators earn significantly less.

While the First Nations salaries varied, the average First Nation operator salary was \$40,200: “14% of the First Nations operators earned less than the current minimum wage of \$14 / hour,

<sup>33</sup> Indian and Northern Affairs Canada. “Audit of the Capital Facilities and Maintenance Program.” 2009: ii.

<sup>34</sup> Ibid, 20.

<sup>35</sup> Hamilton, Tricia. “Ontario First Nations Operator Salary Survey.” OFNTSC. 2018: 2.



and 19% of the operators earned less than the minimum wage of \$15 / hour as of January 1, 2019. 4% earned less than the poverty line for a single-person household of \$20,676 and 61% earned less than the poverty line for a four-person household of \$41,351.”<sup>36</sup>

According to the water operator salary survey report, low salaries have the potential to increase operator turn-over, which in the context of water and wastewater, can put safe drinking water at risk: “High turnover is expected when operators are not paid a fair wage. This can lead to loss of expertise, can be a contributing factor to drinking water advisories, increased wear and capital costs to the plant if the operators are not knowledgeable, and can be a risk factor in the safety of the First Nations’ drinking water.”<sup>37</sup> While ISC recognizes the important of community involvement and the need for trained personnel, the funding available to enable this remains inadequate. While no empirical research has been undertaken on the salaries of other O&M personnel on reserve, it can be reasonably assumed that this issue is not confined to water operators.

## 4.0 RECOMMENDATIONS & NEXT STEPS

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### RECOMMENDATIONS

The following recommendations range from broad to specific and largely target changes that need to occur at ISC.

#### **Recommendation #1: Move Away from Existing O&M Policy Framework Towards Asset Management Plans**

- OFNTSC acknowledges that the policy framework for on reserve O&M is significantly flawed. The funding formulas are arbitrary and antiquated and have left First Nations under resourced to properly perform basic O&M requirements and to plan for the long-term, taking into consideration, for example, risks related to climate change.
- OFNTSC recommends using existing examples and best practices drawn from Canadian municipalities where the successful experience and deployment of asset management can help First Nations develop and implement sound asset management practices considering full infrastructure life cycle costs.

#### **Recommendation #2: Update Cost Reference Manual as Interim Measure Towards Development of Asset Management Plan**

- Many First Nation Technical Representative believe Asset Management is the long-term path to identifying appropriate funding levels for asset maintenance, and comparability to municipal funding levels. However, in the interim, OFNTSC strongly recommends that immediate upward adjustments to O&M funding levels are required to slow deterioration on underfunded assets and infrastructure deficits./

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<sup>36</sup> Ibid, 2.

<sup>37</sup> Ibid, 5.



### Recommendation #3: Develop and Implement First Nations Infrastructure Report Card

- As a tangible measure towards the implementation of an asset management plan, and in order to have a fulsome picture of the current condition of community assets, and the current capital, operations, and maintenance investment needs, OFNTSC recommends the development and implementation of a “First Nations State of Infrastructure Report Card” starting with data currently available.
- A First Nations State of Infrastructure Report Card can achieve benefits than those the municipal CIRC’s have produced. A factual report based on a sound methodology will establish a solid and accepted foundation for discussions on mechanisms to fund the capital, operations and maintenance investment needs. Moreover, the report could be utilized at the regional and national levels for the purpose of better program planning.

### Recommendation #4: Ensure Fair Wages, Salaries & Benefits for O&M Operators

- OFNTSC recommends that ISC update its funding formula such that First Nations operators are paid a fair wage comparable to what they would earn off-reserve, and further, that a fair escalation factor be included in these rates, such as 2% a year, or a rate in line with the consumer price index.
- OFNTSC recommends that ISC assign a fair wage as average of the salary for municipal water operators and OCWA as summarized in **Appendix E**. (OFNTSC recommends that unlicensed operators are assigned the same salary as Operators-in-training, as First Nations operators hold the same responsibility and liability for providing safe drinking water to the community but may face licensing barriers due to difficulties in meeting the requirements for a GED).

### NEXT STEPS

Asset management is here: governments acknowledge it, value and accept the principles identified in this paper. As stated earlier, the AFN is currently working with ISC as per resolutions from the Chiefs in Assembly to develop a new O&M policy framework. OFNTSC supports the ongoing efforts of AFN and ISC in the co-development of a new O&M policy framework and will be working with AFN on this ongoing process. In addition to this, OFNTSC intends to further develop asset management pilots for the Ontario region. More details will be forthcoming in 2019.



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## APPENDIX A: AFN Resolution 80/2017: Support for Review of Canada's O&M Policy

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**SPECIAL CHIEFS ASSEMBLY**  
December 5, 6 & 7, 2017, Ottawa, ON

**SPECIAL CHIEFS ASSEMBLY**  
December 5, 6 & 7, 2017, Ottawa, ON

Resolution no. 80/2017

Resolution no. 80/2017

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<b>TITLE:</b>	<b>Support for Review of Canada's Operations and Maintenance Policy</b>
<b>SUBJECT:</b>	Housing and Infrastructure
<b>MOVED BY:</b>	Chief Dan George, Burns Lake Indian Band/Ts'il Kaz Koh, BC
<b>SECONDED BY:</b>	Chief Lance Haymond, Kebaowek First Nations, QC
<b>DECISION:</b>	Carried by Consensus

---

**WHEREAS:**

- A.** The United Nations Declaration on the Rights of Indigenous Peoples (UN Declaration) states:
- i. Article 19: States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them.
  - ii. Article 23: Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, indigenous peoples have the right to be actively involved in developing and determining health, housing and other economic and social programmes affecting them and, as far as possible, to administer such programmes through their own institutions.
- Article 19: States shall consult and cooperate in good faith with the indigenous peoples concerned through
- B.** The federal government only funds a portion of the estimated costs for the operations and maintenance (O&M) of on-reserve community infrastructure such as buildings, roads and bridges, etc.
- C.** The current funding formulas and cost indices as identified in Indigenous and Northern Affairs Canada's (INAC) O&M Policy are outdated, inadequate, and do not provide sufficient funding for First Nations to protect and prolong the life of their community assets.

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**Certified copy of a resolution adopted on the 7<sup>th</sup> of December 2017 in Ottawa, ON**

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**PERRY BELLEGARDE, NATIONAL CHIEF**

**80 - 2017**  
Page 1 of 2



**SPECIAL CHIEFS ASSEMBLY**  
**December 5, 6 & 7, 2017, Ottawa, ON**

**SPECIAL CHIEFS ASSEMBLY**

**Resolution no. 80/2017**

- D. The Assembly of First Nations is committed to working with INAC to identify options for the implementation of a new O&M policy framework and formula that will reflect new infrastructure technologies as well as economic and environmental factors that will contribute to addressing the socio-economic gap in First Nations.
- E. A joint work plan will need to be developed that will identify options for the co-development of a new O&M Policy Framework.
- F. INAC will be requested to commit the necessary resources to undertake engagement sessions with First Nations and regional organizations, and the Chiefs Committee on Housing and Infrastructure and Regional Technicians.

**THEREFORE BE IT RESOLVED that the Chiefs-in-Assembly:**

1. Support the co-development of new Operations and Maintenance Policy Framework (O&M Policy Framework) with full involvement of First Nations and/or their organizations, the Assembly of First Nations (AFN) and the Chiefs Committee on Housing and Infrastructure.
2. Direct the AFN to jointly develop a Draft Joint Work Plan with Indigenous and Northern Affairs Canada (INAC) and report on progress to the Chiefs Committee on Housing and Infrastructure.
3. Direct the AFN to urge INAC to provide funding to support the Joint Work Plan and the development and implementation of the O&M Policy Framework.

Support the co-development of new Operations and Maintenance Policy Framework (O&M Policy Framework) with full involvement of First Nations and/or their organizations, the Assembly of First Nations (AFN) and the

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Certified copy of a resolution adopted on the 7<sup>th</sup> of December 2017 in Ottawa, ON

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PERRY BELLEGARDE, NATIONAL CHIEF

**80 - 2017**  
 Page 2 of 2





## APPENDIX B: Applicable Federal Statutes and Regulations

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Without limitation, the following statutes and regulations are applicable on reserve lands and therefore First Nations are required as a matter of law to comply with the most up to date version of each of the following:

- *An Act respecting the safety of drinking water on First Nation lands, 2013*
- *Canadian Environmental Protection Act, 1999 (S.C. 1999, c. 33)*
- *Canadian Environmental Assessment Act, 2012 (S.C. 2012, c. 19, s. 52)*
- *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, (SOR/2008-197)*
- *Fisheries Act (R.S.C., 1985, c. F-14)*
- *Wastewater System Effluent Regulations (SOR/2012-139)*
- *Species at Risk Act (S.C. 2002, c. 29)*
- *Indian Reserve Waste Disposal Regulations (C.R.C., c. 960)*
- *Arctic Waters Pollution Prevention Act (R.S.C. 1985, c. A-12)*
- *Canada Petroleum Resources Act (R.S.C. 1985, c. 36 (2<sup>nd</sup> Supp.))*
- *Energy Efficiency Act (S.C. 1992, c. 36)*
- *Canada Labour Code (R.S.C., 1985, c. L-2)*
- *Canada Occupational Health and Safety Regulations (SOR/86-304)*
- *Hazardous Products Act (R.S.C., 1985, c. H-3)*
- *Hazardous Materials Information Review Regulations (SOR/88-456)*



## APPENDIX C: Asset Rates and Ratio Increase Chart

Asset Description	1996 O&M Rates CRM	2004 O&M Rates CRM	2017-2018 O&M Unit Cost	1996-2017 Ratio Increase	1996-2017 Annual Compound Rate
Office	\$ 40.99	\$ 46.98	\$ 59.20	0.444	0.01685
Trade Shop/Workshop (Mun.)	\$ 17.10	\$ 19.67	\$ 25.13	0.470	0.01765
Garage (Municipal)	\$ 17.10	\$ 20.04	\$ 25.13	0.470	0.01765
Warehouse (Band Or School)	\$ 17.10	\$ 19.67	\$ 25.13	0.470	0.01765
School	\$ 49.29	\$ 54.66	\$ 69.36	0.407	0.01565
Daycare Centre	\$ 50.04	\$ 55.49	\$ 70.41	0.407	0.01564
Fire Station	\$ 22.76	\$ 26.39	\$ 33.18	0.458	0.01728
Student Residence	\$ 45.55	\$ 51.81	\$ 65.39	0.436	0.01657
Teacherage	\$ 12.72	\$ 15.00	\$ 18.79	0.477	0.01789
Water Supply Treatment	\$ 17.33	\$ 20.04	\$ 24.84	0.433	0.01650
Wastewater Treatment Disposal	\$ 17.33	\$ 20.04	\$ 24.84	0.433	0.01650
Electric Power Generation	\$ 17.33	\$ 20.04	\$ 24.84	0.433	0.01650
Solid Waste Disposal	\$ 17.33	\$ 20.04	\$ 24.84	0.433	0.01650
Central Heating Plant	\$ 17.33	\$ 20.04	\$ 24.84	0.433	0.01650
Ctty Rec Ctr/Halucult Ctr	\$ 26.04	\$ 29.72	\$ 37.45	0.438	0.01665
Arena	\$ 26.04	\$ 29.72	\$ 37.45	0.438	0.01665
Gymnasium	\$ 26.04	\$ 29.72	\$ 37.45	0.438	0.01665
Indoor Swimming Pool	\$ 26.04	\$ 29.72	\$ 37.45	0.438	0.01665
Club House/Youth Ctr/Sr Cit/Drop-In	\$ 26.04	\$ 29.72	\$ 37.45	0.438	0.01665
Heated Water Mains	\$ 3.14	\$ 3.78	\$ 4.72	0.503	0.01870
Water Mains	\$ 1.92	\$ 2.20	\$ 2.78	0.448	0.01697
Water Treatment System	\$ 19,250.00	\$ 22,007.98	\$ 27,789.17	0.444	0.01683
Water Treatment Unit	\$ 3,165.00	\$ 3,618.71	\$ 4,569.29	0.444	0.01683
Water Storage	\$ 684.00	\$ 778.04	\$ 980.38	0.433	0.01650
Community Wells	\$ 2,840.00	\$ 3,331.44	\$ 4,185.52	0.474	0.01778
Water Standpipes	\$ 725.00	\$ 818.22	\$ 1,038.70	0.433	0.01648
High Level Liftstation	\$ 7,900.00	\$ 9,256.46	\$ 11,640.86	0.474	0.01778
Low Level Liftstation	\$ 3,645.00	\$ 4,275.60	\$ 5,371.74	0.474	0.01778
Sanitary Main	\$ 0.99	\$ 1.14	\$ 1.44	0.455	0.01718
Storm Main	\$ 0.99	\$ 1.14	\$ 1.44	0.455	0.01718
Rbc/Trickling Filter	\$ 17,660.00	\$ 20,171.78	\$ 25,470.62	0.442	0.01679
Extended Aeration Plant	\$ 20,120.00	\$ 22,981.35	\$ 29,018.23	0.442	0.01679
Lagoon	\$ 3,530.00	\$ 3,949.10	\$ 5,007.08	0.418	0.01602
Ctty Septic Tank And Field	\$ 315.00	\$ 358.34	\$ 452.66	0.437	0.01662
Jet-Pump Disposal	\$ 745.00	\$ 851.29	\$ 1,075.36	0.443	0.01682
Liftstation	\$ 6,195.00	\$ 7,267.27	\$ 9,130.39	0.474	0.01779
Aerated Lagoon	\$ 7,750.00	\$ 8,860.34	\$ 11,187.83	0.444	0.01683
Low Pressure Connection	\$ 157.50	\$ 180.85	\$ 228.45	0.450	0.01705
Street Lights	\$ 112.00	\$ 125.59	\$ 158.91	0.419	0.01603



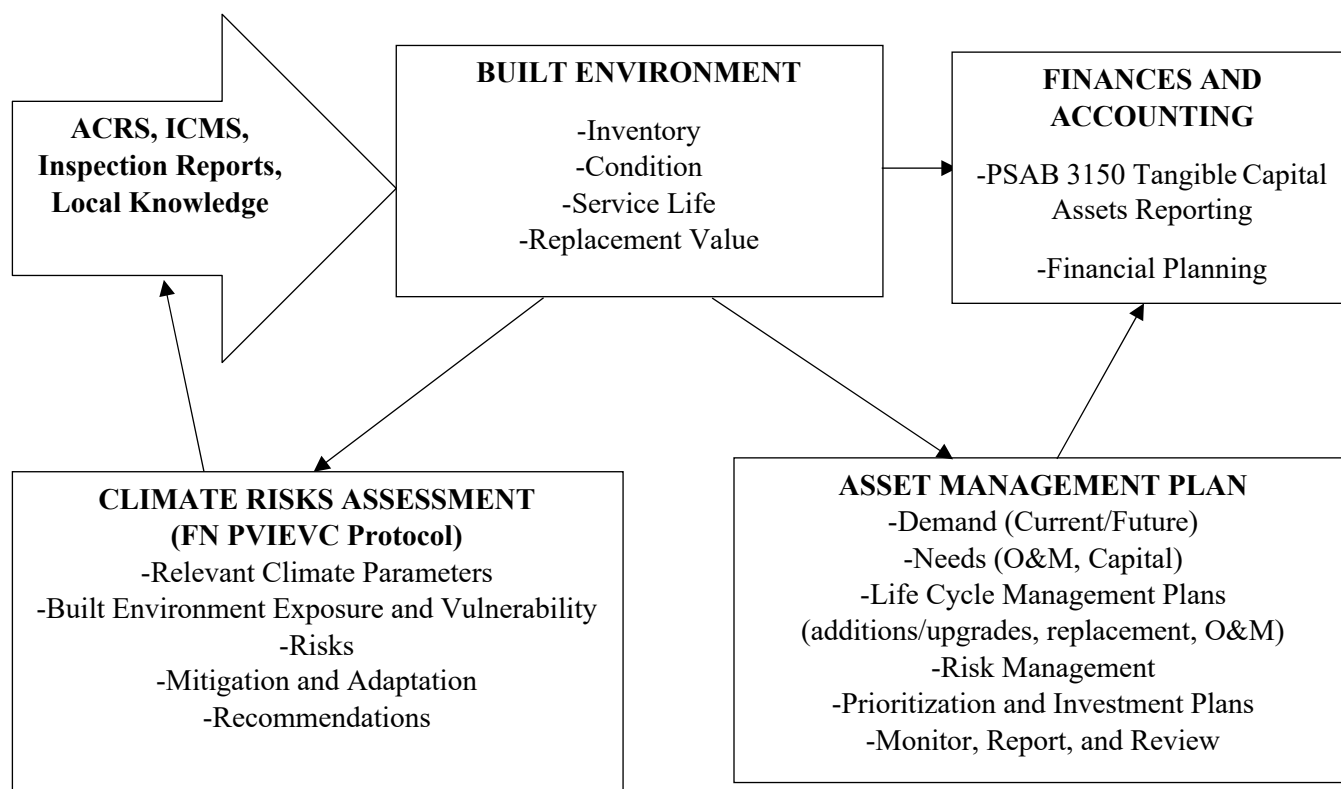
Asset Description	1996 O&M Rates CRM	2004 O&M Rates CRM	2017-2018 O&M Unit Cost	1996-2017 Ratio Increase	1996-2017 Annual Compound Rate
Transmission Lines	\$ 1,150.00	\$ 1,278.64	\$ 1,614.52	0.404	0.01554
Distribution Lines	\$ 2,380.00	\$ 2,675.60	\$ 3,385.44	0.422	0.01615
Refuse Site	\$ 2,130.00	\$ 2,419.24	\$ 3,058.54	0.436	0.01658
Landfill Site	\$ 8,650.00	\$ 9,256.27	\$ 12,421.65	0.436	0.01659
Incinerator	\$ 11,620.00	\$ 13,255.12	\$ 16,743.99	0.441	0.01674
Earth Roads	\$ 2,685.00	\$ 3,024.41	\$ 3,818.88	0.422	0.01614
Gravel Roads	\$ 3,920.00	\$ 4,406.52	\$ 5,564.05	0.419	0.01605
Surface Treated Roads	\$ 3,330.00	\$ 3,735.67	\$ 4,716.98	0.417	0.01595
Paved Roads	\$ 3,330.00	\$ 3,735.67	\$ 4,718.32	0.417	0.01597
Vehicular Bridges	\$ 25.60	\$ 28.60	\$ 36.11	0.411	0.01576
Pedestrian Bridges	\$ 25.60	\$ 28.60	\$ 36.12	0.411	0.01577
Large Culverts	\$ 25.60	\$ 28.60	\$ 36.13	0.411	0.01578
Mini-Pumper	\$ 6,780.00	\$ 7,636.21	\$ 9,658.11	0.425	0.01621
Triple Combination Pumper	\$ 7,640.00	\$ 8,646.51	\$ 10,924.62	0.430	0.01639
Compactor	\$ 41,000.00	\$ 46,630.04	\$ 58,854.66	0.435	0.01657
Unmodified Vehicle	\$ 22,820.00	\$ 25,954.07	\$ 32,758.24	0.436	0.01657
Commercial Pumper	\$ 40,100.00	\$ 45,606.02	\$ 57,562.18	0.435	0.01657
Unmodified Vehicle	\$ 22,820.00	\$ 25,954.07	\$ 32,758.24	0.436	0.01657
Commercial Tanker	\$ 40,000.00	\$ 45,492.24	\$ 57,418.57	0.435	0.01657
Unmodified Vehicle	\$ 22,820.00	\$ 25,954.07	\$ 32,758.24	0.436	0.01657



## APPENDIX D: Climate Risks and Asset Management - OFNTSC Resilience Toolkit

OFNTSC's (PIEVC) Infrastructure Resilience Toolkit addresses two key issues facing First Nations in Ontario: how to manage assets (infrastructure, facilities, buildings etc.) that provide essential services to communities; and, how to consider and identify future and potential risks due to climate change and uncertainty.

The Toolkit Framework is depicted in the graphic below:



## **APPENDIX E: Water Treatment Plant Operator Salary Scale Recommendations**

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OFNTSC recommends that ISC assign a fair wage as average of the salary for municipal operators and OCWA's ORO for the Primary Operator, and the average of the salary for municipal operators and OCWA's rates for non- ORO for secondary operators, as summarized below:

### **PRIMARY OPERATORS**

- Unlicensed / Operator-in-Training - \$53,600
- Level I - \$55,500
- Level II - \$57,600
- Level III - \$61,400
- Level IV - \$63,900

### **SECONDARY OPERATORS**

- Unlicensed / Operator-in-Training - \$51,500
- Level I - \$53,500
- Level II - \$55,600
- Level III - \$59,300
- Level IV - \$61,800

OFNTSC further recommends that 18% be added to include the cost of providing benefits, the recommended salaries can be seen below:

### **PRIMARY OPERATORS (including 18% allocated for benefits)**

- Unlicensed / Operator-in-Training - \$63,200
- Level I - \$65,500
- Level II - \$68,000
- Level III - \$72,500
- Level IV - \$75,400

### **SECONDARY OPERATORS (including 18% allocated for benefits)**

- Unlicensed / Operator-in-Training - \$60,800
- Level I - \$63,100
- Level II - \$65,600
- Level III - \$70,000
- Level IV - \$72,900

It is recommended that a fair escalation factor be included in these rates, such as 2% a year, or a rate in line with the consumer price index. As a comparison, OCWA's rates are set increase 1% every six months over the next three years.



ONTARIO FIRST NATIONS  
TECHNICAL SERVICES  
CORPORATION

## **On-Reserve Water and Wastewater Systems in Ontario**

### *The Role of OFNTSC and Recommendations for Improvement*

Prepared by: Ontario First Nations Technical Services Corporation  
Date: October 02, 2019

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## 1. Introduction

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Access to clean, healthy drinking water and sanitation services is integral for building healthy communities. Despite living with a country with some of the largest freshwater sources in the world, many First Nation communities in Canada continue to face challenges when it comes to accessing clean water and proper wastewater services, adequate infrastructure and quality training programs.

The Right to Water and Sanitation was adopted by the UN General Assembly on July 28, 2010, and in Canada the federal government has stated that “access to safe drinking water, the effective treatment of wastewater and the protection of sources of drinking water on First Nation lands are priorities for the Government of Canada.”<sup>1</sup>

Unfortunately, it remains true that First Nations have some of the poorest water quality in Ontario, and across the country.<sup>2</sup> Long-term boil water advisories continue—in some communities, an entire generation has been unable to drink tap water<sup>3</sup>—and communities have declared states of emergency as recently as July 2019.<sup>4</sup> Failing or absent water and wastewater systems also contribute to overall systemic challenges on reserve. For example, funding provided for programming will at times need to be diverted to water and wastewater systems,<sup>5</sup> and in some cases much-needed additional housing units cannot be added due to limitations on water and wastewater infrastructure.<sup>6</sup>

There are several challenges associated with on-reserve water and wastewater systems which include a lack of infrastructure, limited funding, and human resources and skills training. While the situation has seen improvements, there is still much to do to improve water and wastewater systems on-reserve in Ontario.

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<sup>1</sup> Indigenous and Northern Affairs Canada, “First Nations Water and Wastewater Action Plan.” <https://www.aadnc-aandc.gc.ca/eng/1466537196019/1466537216230>

<sup>2</sup> Ontario Ministry of The Attorney General. *Part Two Report of the Walkerton Inquiry: A Strategy for Safe Drinking Water*. 2002, 486

<sup>3</sup> Human Rights Watch. “Make it Safe: Canada’s Obligation to End the First Nations Water Crisis.” 2016, 9.

<sup>4</sup> Barrera, Jorge. “Another Ontario First Nation declares a state of emergency over water.” CBC News. July 15, 2019. <https://www.cbc.ca/news/indigenous/fn-ont-water-1.5211728>

<sup>5</sup> Human Rights Watch, 53

<sup>6</sup> “A Snapshot of On Reserve Clean Water Issues.” *Working Effectively with Indigenous Peoples* (blog). March 2 2018. Accessed July 19, 2019. <https://www.ictinc.ca/blog/a-snapshot-of-on-reserve-clean-water-issues>





The Ontario First Nations Technical Services Corporation (OFNTSC) plays a critical role in delivering water and wastewater engineering services to First Nations in Ontario. As First Nations continue to experience water quality issues it is essential that water and wastewater systems are delivered by and for First Nations consistent with a First Nations-led approach.

The following report will explore OFNTSC's Water and Wastewater Services, and the issue of water and wastewater more broadly within Ontario. The report will include an overview and analysis of federal legislative framework, funding mechanisms, policies, and challenges for water and wastewater on reserve First Nations in Ontario. Finally, it will explore opportunities and recommendations on improving water and wastewater systems on reserve.

## 2. OFNTSC's Approach to Water and Wastewater

---

OFNTSC is committed to ensuring that all Ontario First Nations communities have access to safe, clean and potable drinking water. To that end, OFNTSC's engineering service was established in 1996 and provides technical advice related to water and wastewater for Ontario First Nations. Specific services include project planning, project management, capital planning, and oversight throughout a project life cycle. OFNTSC works with communities to identify and communicate issues with their water and wastewater systems, develop action plans, assist with securing funding, and work as part of a project team to implement solutions. A key part of our mandate is to transfer technical knowledge and skills to First Nations members to build capacity in First Nations communities across the province.

OFNTSC's engineers also provide guidance and oversight to First Nations when making funding applications, which collectively increases the number of First Nations who are receiving money through funding sources like the federal Clean Water and Wastewater Fund and Investing in Canada Infrastructure Program.

OFNTSC administers the Circuit Rider Training Program (CRTP), which trains First Nations water and wastewater operators on the safe delivery of drinking water on-reserve. OFNTSC trainers provide Continuing-Education-Unit (CEU) and On-the-Job-Training (OJT) hours directly in First Nations communities to help water and wastewater system operators maintain their provincial licences. By providing onsite training on the community water and wastewater systems, the CRTP provides knowledge needed so that operators can confidently and effectively operate treatment systems.

## 3. Background

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### 3.1 Federal policy/legislative framework

Water treatment regulation is a federal authority governed under the *Safe Drinking Water for First Nations Act* (SDWFNA), which requires that the Government of Canada create regulations for drinking water, the effective treatment of wastewater, and to protect drinking water sources on First Nations' reserve lands.<sup>7</sup> Under the Act, Chief and Council are responsible for drinking water quality including sampling and testing, issuing drinking water advisories, and facilities planning, development, operations and maintenance.<sup>8</sup>

The SDWFNA was created in 2013 and has been criticized for ignoring the recommendations of First Nations, creating a regulatory framework without appropriate investments in resources, and passing the liability of failing infrastructure onto First Nations communities.<sup>9</sup> The Assembly of First Nations (AFN), in particular, has been critical of the Act and in 2015 passed Resolution 76/2015 “Safe Drinking Water for First Nations” to repeal it, stating – among other things – that it was “developed without meaningful consultation with First Nations, is contrary to inherent authority of First Nation governments and does not reflect the principles of Customary Laws regarding water.”<sup>10</sup> Following that resolution, the AFN passed Resolution 01/2018 “First Nations Led Process to Develop New Federal Safe Drinking Water Legislation,” which mandated work with the federal government to create a co-developed process.<sup>11</sup> Indigenous Services Canada (ISC) has agreed to work with the AFN on this process, and the two are working together to create safe-drinking water legislation and a long-term water and wastewater strategy.<sup>12</sup>

Water and wastewater system operation and maintenance are supported by federal funding via the Capital Facilities and Maintenance Program (CFMP) and the First Nations Infrastructure Investment Fund (FNIF). This funding mix, however, leads to its own set of challenges that OFNTSC has identified in the past: funding has not increased to meet increasing rising costs, the funding formula is based on dated information, federal contributions are based on project costs

<sup>7</sup> Indigenous and Northern Affairs Canada. “Safe Drinking Water for First Nations Act.” Accessed July 19, 2019. <https://www.aadnc-aandc.gc.ca/eng/1330528512623/1330528554327>

<sup>8</sup> Indigenous and Northern Affairs Canada. “Roles and Responsibilities.” Accessed July 2019, 2019. <https://www.aadnc-aandc.gc.ca/eng/1314034319353/1314034564208>

<sup>9</sup> Assembly of First Nations. “First Nations Led Process for New Safe Drinking Water and Wastewater Legislation.” Technical Bulletin. July 2018. <https://www.afn.ca/wp-content/uploads/2018/08/18-07-09-Housing-Sector-Technical-Update-re-Water-July-2018-V4.pdf>

<sup>10</sup> Assembly of First Nations. Special Chiefs Assembly. “First Nations Led Process to Develop New Federal Safe Drinking Water Legislation.” Resolution no. 01/2018. May 2, 2018.

<sup>11</sup> Ibid

<sup>12</sup> Indigenous Service Canada. “Indigenous Services Canada: Departmental Plan 2019-20”. <https://www.sac-isc.gc.ca/eng/1553090854386/1553090905214?wbdisable=true>. Accessed July 24, 2019.



rather than life-cycle costs and First Nations are obligated to meet a net funding requirement.<sup>13</sup> If communities are unable to meet this last requirement, operations and maintenance needs are unmet. Taken all together, these issues lead to “higher costs and prevents First Nations infrastructure and community assets from achieving their full life cycles.”<sup>14</sup>

OFNTSC has also argued that federal funding for operations and maintenance must be amended to “provide greater resources for the costs associated with primary and secondary operator training and succession planning...and address the wage disparity between on-reserve and off-reserve O&M personnel salaries and benefits.”<sup>15</sup> Compared to operator salaries in Ontario municipalities and the Ontario Clean Water Agency (OCWA), First Nation operators earn 22-38% (municipalities) and 13-36% less (OCWA) than their counterparts.<sup>16</sup> The consequences of this salary discrepancy cannot be understated: low salaries have the potential to increase turnover, which in turn could put safe drinking water and communities at risk. Without support for training, succession planning and competitive salaries, First Nations will continue to face challenges maintaining their water and wastewater facilities and providing those essential services to communities.

Federal funding is provided to run the Circuit Rider Training Program, which First Nations communities are automatically enrolled in if they operate a public drinking water or wastewater system.<sup>17</sup> OFNTSC administers this program, which provides training to on-reserve operators on how to provide ongoing maintenance to water and wastewater systems.

As First Nations reservations are federal lands, there is no provincial regulatory regime governing water or wastewater in First Nations communities.

### *3.2 Federal policy direction*

The Federal government has made a commitment to water and wastewater projects, with a promise to end all long-term drinking water advisories by March 2021.<sup>18</sup> This commitment led to the creation of the Trilateral Steering Committee, whose mandate is to monitor and develop

<sup>13</sup> Ontario First Nations Technical Services Corporation. “On Reserve Operations and Maintenance Policy: The Case for Reform”. November 23, 2018: 4

<sup>14</sup> Ibid, 4

<sup>15</sup> Ibid: 6

<sup>16</sup> Hamilton, Tricia. Ontario First Nations Technical Services Corporation. “Ontario First Nations Operator Salary Survey.” August 27, 2018: 2

<sup>17</sup> Indigenous and Northern Affairs Canada. “Circuit Rider Training Program.” <https://www.aadnc-aandc.gc.ca/eng/1313424571273/1313424692733> Accessed July 24, 2019.

<sup>18</sup> Indigenous Services Canada. “Ending Long-Term Drinking Water Advisories.” Accessed July 24, 2019. <https://www.sac-isc.gc.ca/eng/1506514143353/1533317130660>.



action plans for resolving long-term drinking water advisories. As of January 2019, 32 long-term drinking water advisories had been ended in 19 First Nations communities throughout the province. OFNTSC is a member of this committee along with the Chiefs of Ontario, Ontario First Nations Political Territorial Organizations (Anishinabek Nation, Association of Iroquois & Allied Indians, Grand Council Treaty No. 3, Nishnabwe Aski Nation), Indigenous Services Canada, and the Province of Ontario (Ministry of Environment, Conservation and Parks).

Over the years there have been several budget commitments made, including:

- Budget 2016: \$1.8 billion over five years for on-reserve water and wastewater infrastructure.<sup>19</sup>
- Budget 2017: invested an additional \$4 billion over 10 years, starting in 2018-2019, to build and improve infrastructure in First Nation and Inuit communities.<sup>20</sup>
- Budget 2018: proposed to invest an additional \$172.6 million over three years, starting in 2018-2019, to improve access to clean and safe drinking water on reserve and accelerate the pace of construction and renovation of affected water systems.<sup>21</sup>
- Budget 2019: proposed an additional \$739 million over five years, beginning in 2019-2020, with \$184.9 million per year ongoing.<sup>22</sup>

In May 2016, the Minister of Indigenous and Northern Affairs announced Canada is a full supporter, without qualification, of the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP).<sup>23</sup> Articles 25 and 32 of the UNDRIP state, respectively:

*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.*

*1. Indigenous peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and other resources. 2. States shall consult and cooperate in good faith with the indigenous peoples concerned through*

<sup>19</sup> Canada. Ministry of Finance. “Budget 2016: Growing the Middle Class.” William Francis Morneau. (2016): 95, 103

<sup>20</sup> Indigenous Services Canada. “Water in First Nations Communities”. Accessed July 24, 2019. <https://www.sacisc.gc.ca/eng/1100100034879/1521124927588>

<sup>21</sup> Ibid

<sup>22</sup> Ibid

<sup>23</sup> Indigenous and Northern Affairs Canada. “United Nations Declarations on the Rights of Indigenous Peoples.” Accessed July 24, 2019. <https://www.aadnc-aandc.gc.ca/eng/1309374407406/1309374458958>



*their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources. 3. States shall provide effective mechanisms for just and fair redress for any such activities, and 24 appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.<sup>24</sup>*

These Articles of the UN declaration demonstrate the need for active First Nations involvement in developing and administering water and wastewater programs, which to date have not been developed with adequate funding, training, or regulatory support from either the federal or provincial governments.

### *3.3 Federal funding mechanisms*

The federal government provides funding for water and wastewater through several programs including:

- Capital Facilities and Maintenance Program: \$1 billion annually in housing, education, water and wastewater, and other infrastructure funding.<sup>25</sup>
- First Nations Infrastructure Investment Fund: provides funding for infrastructure projects including planning and skills development as identified in First Nations Infrastructure Investment Plans.
  - FNIIF does not fund continued operations and maintenance, or salaries for positions responsible for ongoing maintenance.<sup>26</sup>

The federal government provides Operation and Maintenance funding for water and sewage systems through a funding formula. This formula funding is intended to cover 80 per cent of the operational costs, however, it often covers significantly less. Many First Nations are concerned that the funding formulas are outdated and do not represent the actual cost of operating a water and sewage system properly.

<sup>24</sup> United Nations. UN General Assembly. “United Nations Declaration of the Rights of Indigenous Peoples.” General Assembly Resolution 61/295. (2008)

<sup>25</sup> Canada. Indigenous Services Canada. “Capital Facilities and Maintenance Program.” Accessed July 24, 2019. <https://www.sac-isc.gc.ca/eng/1100100016395/1533641696528>

<sup>26</sup> Canada. Indigenous Services Canada. “First Nation Infrastructure Investment Fund.” Accessed July 24, 2019. <https://www.sac-isc.gc.ca/eng/1497275878022/1533645265362>



### 3.4 Planned funding for Ontario Region

In an update to First Nations communities, Indigenous Services Canada has provided the following funding commitments to Ontario:

- \$255 million to infrastructure projects on-reserve in 2018-2019, and
- The creation of a Major Projects Implementation Office, which is meant to “enhance service delivery and maximize benefits to communities.”<sup>27</sup>

## 4. Best Practices in Water and Wastewater

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Although First Nations do not fall under provincial jurisdiction, all new or upgraded water or wastewater system in Ontario must meet the most stringent of federal or provincial guidelines and regulations in order to comply with ISC Protocols, meet any future regulations, and ensure that the quality of drinking water on reserve is as good as those of Ontario municipalities. OFNTSC contributes to the successful adoption of these best practices through the services its engineering team provides as well as through the delivery of the Circuit Rider Training Program.

Guidelines and regulations for water and wastewater systems include:

- Protocol for Safe Drinking Water in First Nations Communities
- Protocol for Centralised Drinking Water Systems in First Nations Communities
- Protocol for Decentralised Water and Wastewater Systems in First Nations Communities
- Design Guidelines for First Nations Water Works
- Maintenance Management Plan for drinking water and wastewater systems in First Nations communities
- Emergency Response Plan for Drinking Water Systems in First Nations communities
- Emergency Response Plan for Wastewater Systems in First Nations communities
- Ontario Drinking Water Standards, Objectives and Guidelines, Ministry of Environment, Conservation and Parks
- Procedure for Disinfection of Drinking Water in Ontario, Ministry of Environment, Conservation and Parks
- Ontario Regulation 169/03: Ontario Drinking Water Quality Standards
- Ontario Regulation 170/03: Drinking Water Systems

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<sup>27</sup> Canada. Indigenous Services Canada. “Indigenous Services Canada Capital & Housing Update. OFNTSC All Tribal Councils, Large & Unaffiliated First Nations Meeting.” Presentation. 2018



- Health Canada Guidelines for Canadian Drinking Water Quality

As noted in this paper, these overarching protocols must also be supported with support for:

- Ongoing maintenance, completed by trained professionals in a safe environment;
- Regular consistent training; and
- Enforceable standards and protocols. In this case, on-reserve water and wastewater systems should be held to federal and provincial standards, with the federal government holding ultimate responsibility while respecting First Nations rights, as noted by AFN and others.<sup>28</sup>

Following the Report of the Walkerton Inquiry in response to the deaths of six people in the Ontario town there were several suggestions for best practices for on-reserve water and wastewater systems, including:

- Recommendation 93: 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.<sup>29</sup>

Throughout that process, it is important to note that federal and provincial policies and regulations carry with them a strong potential to infringe on inherent, treaty, Aboriginal title, and human rights of First Nations if they are created in isolation. These policies must be co-created with First Nations to acknowledge these rights in order to be considered feasible solutions to water and wastewater on reserve.

## 5. Challenges and Opportunities

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Despite commitments that have been made to water and wastewater systems and the improvements that have been made in recent years, First Nations communities still suffer from the lack of binding regulations, funding for maintenance and the lack of support for household water systems.

Water and wastewater systems require adequate funding for design and construction, but ongoing maintenance and monitoring are crucial to their ongoing operations. Two per cent of all First Nations communities in Canada lack any type of water and wastewater system<sup>30</sup> and those

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<sup>28</sup> Ontario Ministry of The Attorney General. Part Two Report of the Walkerton Inquiry: A Strategy for Safe Drinking Water. Toronto: Queen's Printer for Ontario (2002); AFN "First Nations Led Process".

<sup>29</sup> Ibid.

<sup>30</sup> Islam and Yuan, 7



communities that do have access often suffer because the systems are poorly constructed or lack access to ongoing maintenance. In a 2011 study, one quarter of all existing systems on-reserve in Ontario were considered high-risk with potential health and safety issues—one of the highest percentages in the country.<sup>31</sup>

OFNTSC cites the following challenges with respect to on-reserve water and wastewater systems:

- Insufficient capital and maintenance funding.
- Inopportune timelines for funding: capital projects are often notified of approval in July or August, after the construction season.
- No clear regulations governing water and wastewater on-reserve. It is therefore up to each community to enforce standards.
- Insufficient funding for maintenance of water and sewage systems, which contributes to early equipment failures and ongoing challenges in delivering safe drinking water.
- The current funding process requires First Nations to apply for a finite amount of funding, requiring communities to compete against one another.
- Funding allocations are done by the federal government in isolation, without any input from First Nations communities or representatives.

## 6. Conclusion & Recommendations

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The challenges associated with on-reserve water and wastewater systems—including a lack of infrastructure, limited funding, and human resources and skills training—indicate the need for widespread improvements and a sustained commitment from the federal government. The challenges also suggest the importance of the OFNTSC in helping bring First Nations water and wastewater systems to a level comparable to municipalities in Canada. The OFNTSC makes the following recommendations with respect to water and wastewater systems:

- Include operator training and salary levels in broader discussions related to water and wastewater operations and management.
- Shift federal funding allocations from a project-cost approach to asset management planning, which will address specific needs while also preparing for future needs, preventative maintenance and regular repairs.

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<sup>31</sup> Ibid, 8





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