

# RESTORING THE LIFEBLOOD: WATER, FIRST NATIONS AND OPPORTUNITIES FOR CHANGE



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BACKGROUND REPORT

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# TABLE OF CONTENTS

1.	INTRODUCTION: A NEW RELATIONSHIP WITH PHILANTHROPY .....	1
1.1	WHY IS PHILANTHROPY NEEDED? .....	1
1.1.1	Limitations of Government Funding .....	1
1.1.2	Limitations to Proactive Fundraising Action .....	2
1.1.3	Tax Status Barriers .....	3
1.1.4	Limited First Nation Water Sector .....	3
1.2	A NEW RELATIONSHIP WITH PHILANTHROPY .....	3
2.	THE CRITICAL CONTEXT OF WATER USE IN CANADA .....	5
2.1	THE WATER MYTH .....	5
2.2	POOR WATER MANAGEMENT .....	6
2.3	THE COMMODIFICATION OF WATER .....	6
2.4	WATER MARKETS .....	6
2.5	WATER PRICING AND PRIVITISATION .....	7
2.6	WATER EXPORT AND DIVERSION .....	8
3.	OVERVIEW OF WATER CHALLENGES FACING FIRST NATIONS .....	10
3.1	A LOST OPPORTUNITY: ACHIEVING SUSTAINABLE WATER .....	10
3.2	CULTURAL CONNECTIONS TO WATER .....	11
3.3	FIRST NATION DRINKING WATER .....	12
3.4	DENIAL OF FIRST NATION WATER RIGHTS .....	13
3.3.1	Undefined Nature of Water Rights .....	13
3.3.2	Competing Claims To Water By Multiple First Nations .....	14
3.3.3	Existence of an Historic Treaty .....	14
3.5	REGULATORY GAP .....	15
3.6	HUMAN RIGHT TO WATER .....	15
3.7	CAPACITY DEFICITS .....	16
3.7.1	Human Resources Capacity .....	16
3.7.2	Lack of Financial Resources .....	16
3.7.3	Information Deficit .....	16
3.8	PUBLIC AWARENESS AND UNDERSTANDING .....	16
3.8.1	Public Awareness .....	16
3.8.2	Government Awareness .....	16
3.8.3	ENGO Role and Awareness .....	17
3.9	SUMMARY .....	17

- 4. OPPORTUNITIES FOR PROGRAM AND PROJECT DEVELOPMENT ..... 18
  - 4.1 ADDRESSING KNOWLEDGE GAPS THROUGH RESEARCH ..... 18
    - 4.1.1 Indigenous Water Laws Project ..... 18
    - 4.1.2 Water Rights Implementation Strategies ..... 19
    - 4.1.3 Effective Drinking Water Delivery ..... 19
    - 4.1.4 Water and Human Health ..... 19
    - 4.1.5 Water Governance Strategies and Tools ..... 19
  - 4.2 DEVELOPING ADVOCACY AND LEADERSHIP CAPACITY ..... 19
    - 4.2.1 Water Management Community of Practice ..... 19
    - 4.2.2 Indigenous Water Rights Experts Network ..... 19
    - 4.2.3 Water Leaders ..... 19
    - 4.2.4 Indigenous Journalists Training ..... 20
    - 4.2.5 Campaigning for Change ..... 20
    - 4.2.6 Water Funding Flow-through Structure ..... 20
  - 4.3 TOOLS AND INFORMATION FOR DECISION-MAKING BY FIRST NATIONS ..... 20
    - 4.3.1 Water Pathfinder ..... 21
    - 4.3.2 Water Webinars, How-To Fact Sheets, and Water Management Manuals ..... 21
    - 4.3.3 Water Mapping Series ..... 21
    - 4.3.4 Resources for Youth ..... 21
  - 4.4 IMPROVING WATER QUALITY IN HOMES ..... 22
  - 4.5 LOCAL COMMUNITY LEADERSHIP, LEARNING AND ENGAGEMENT ..... 22
    - 4.5.1 Video Documenting Water Issues (Digital Story-telling) ..... 22
    - 4.5.2 Community-Based Monitoring ..... 22
    - 4.5.3 Gardening ..... 22
  - 4.6 CREATING SUSTAINABLE ECONOMIC OPPORTUNITIES IN WATER ..... 23
    - 4.6.1 Relevant Market-Based Tools ..... 23
    - 4.6.2 Technology Clusters ..... 23
    - 4.6.3 Corporate Roles in First Nation Water Management ..... 23
  - 4.7 LEVERAGING WATER AS A CULTURAL DRIVER ..... 24
    - 4.7.1 Indigenous Water Ethics Series ..... 24
    - 4.7.2 Elder’s Traditional Water Storytelling Series ..... 24
    - 4.7.3 Language Programs dealing with Water ..... 24
    - 4.7.4 Water Festivals ..... 24
- 5. APPENDIX A ..... 25

# 1. INTRODUCTION: A NEW RELATIONSHIP WITH PHILANTHROPY

**T**his document scopes the main barriers and opportunities regarding First Nations and the management and state of their waters. In doing so, it sets out a conceptual pathway, including a series of initiatives that may signal are role for philanthropy in working with First Nations in building their resilience and sustainability, and their capacity regarding management and sustainability of their waters.

## 1.1 WHY IS PHILANTHROPY NEEDED?

### 1.1.1 Limitations of Government Funding

First Nations are bound up in a structure that prevents addressing the key water challenges they face (later sections of this report explain the environmental and legal barriers such as the well-known ‘regulatory gap’ regarding First Nations safe drinking water). The reason for this is structural, relating to existence of out-dated and restrictive legal regimes that severely limit both the personal or individual and

the governmental-level choices of First Nations. First Nations (both individuals and their elected leadership and governments), have the unique status of falling under the complete jurisdiction of the federal government (discharged primarily but not solely through the department of Aboriginal Affairs and Northern Development under the Indian Act<sup>1</sup>). This, in practical terms, means that the lives and decisions (especially at the governance level) of most First Nations are dictated by the Indian Act and the decisions and policies that have been enacted under the authority of that jurisdiction.

This jurisdictional domination results in two impacts. The first is that governments, tending to be risk-averse and conscribed by the limits of the laws that govern their behavior, are not generally leaders in trying new technology or approaches that might result in widespread change. Liability concerns can weigh heavily, especially where human health

<sup>1</sup> There are alternative governance structures that exist, some of which grant greater autonomy to First Nations, however none grant full authority.



issues are involved. In the drinking water case, this might mean that a choice is made to continue the expensive approach of shipping in bottled water, rather than testing the application of new approaches and technology in water delivery. This is a significant (and in almost all cases so far, impenetrable) barrier to innovation.

The second impact is that non-legal aspects of government decision-making, that is decisions, considerations, and priorities set through the policy realm, are largely determined by the policy direction of the government of the day, and in particular, their unique views of the liabilities that must be discharged under legislation that they are accountable under, rather than according to broader principles of fairness and equity (such as might be evidence through a 'human right to water' approach). First Nation community priorities tend not to weigh heavily in these decisions, as evidenced by the continual media and other reports of First Nations challenging capital and operational decisions of government.<sup>2</sup>

In water management, for example, the federal government does not engage in source water protection, and has been gradually withdrawing funding from all water related research programs (FLOW, 2006). First Nations however, have been calling for more resources to engage in these activities, yet there have been no programs created to

<sup>2</sup> See for example the Report of the Royal Commission on Aboriginal Peoples (1994) and the Report of the Expert Panel on Safe Drinking Water for First Nations (2006) for general and water-specific examples of the failure of the federal government to meaningfully consider the priorities of First Nations and their governments in many matters.



allow First Nations to address these critical water related matters. In the interim, drinking water issues are worsening<sup>3</sup> and infrastructure deficits on First Nation lands are deepening.<sup>4</sup>

<sup>3</sup> As evidenced by the continued high level of Drinking Water Advisories in place regarding First Nations drinking water on reserves.

<sup>4</sup> The Aboriginal Affairs and Northern Development department has conducted an assessment of the state of First Nations infrastructure, and while preliminary informal indications are that the infrastructure backlog is increasing, the report has yet to be released.

#### 1.1.2 Limitations to Proactive Fundraising Action

First Nations are faced with extraordinary challenges to fundraising and financing should they attempt to address their water challenges themselves:

- First Nations do not 'own' their land, instead it is held in trust for them by the federal government. This limits their ability to raise capital, engage in economic partnerships, levy taxes, promote entrepreneurialism or engage in any of the usual activities engaged by governments to

raise the revenue needed to manage and maintain infrastructure-related basic services;

- In general, they receive no fees from governments for use of their lands by the Crown or Crown agencies. For example, in Manitoba, First Nations do not receive water or land rental fees from the Crown despite use of those lands and waters by Crown utilities to generate hydro-electric power;
- First Nations' cultural systems are generally opposed to the idea of paying for water services, given the long-standing belief that water is a sacred gift from the Creator.

First Nations need access to non-governmental support that can be used to address the concerns and needs they have defined at the community level, even when these matters are beyond those defined or limited by non-First Nation governments.

### 1.1.3 Tax Status Barriers

Taxation-related barriers exist to First Nations involvement in the charitable sector, including:

- First Nations are generally not subject to taxation when resident on reserve or working for reserve-based organisations. Thus, charitable tax receipts are not of relevance to them in terms of a motivation to donate;
- The taxation exemption

status has further meant that few First Nation organisations have seen the need for and have not applied or received a charitable number. Thus, they have not benefitted from the opportunities afforded by philanthropic funding;

- Few First Nations are aware of the need for and opportunity in, and thus have not applied for or received, 'qualified donee' status (as an alternative to being a charitable organisation);
- Mainstream charitable organisations have only recently (within the last ten years) begun taking a focused interest in First Nation needs and issues, however environmental issues have not generally featured prominently in their funding decisions.

The philanthropic sector could assist First Nations in capacity-building around and capitalizing regarding taxation, charitable, NGO and other related matters under the purview of the Canada Revenue Agency.

### 1.1.4 Limited First Nation Water Sector

Due to many of the issues outlined above, there are only now just the beginnings of a First Nations water sector across Canada:

- Certain charitable organisations (such as CIER) have programs and initiatives focused on water, and the Keepers of the Water have

been working solely on water issues since approximately 2008.

- The Gordon Foundation has provided support regarding First Nation water issues, particularly in the north, and also to FLOW to (among other things) highlight First Nation water rights issues in its Changing the Flow report in 2006.
- The Canadian Water Network has supported the creation of a network (ResEau) aimed at improving operations-level capacity in the drinking water area.
- The Royal Bank of Canada's Blue Water Project has had a focus on approving projects that have integrated First Nations elements.



Despite these efforts, there remains a great need to develop a networked NGO, community of practice, and institutional Indigenous water sector.

## 1.2 A NEW RELATIONSHIP WITH PHILANTHROPY

Given the above realities, in order to address the water

challenges that are described in this report, there are pivotal roles that may be played by the philanthropic sector at this time to advance First Nations water needs. In particular, philanthropy can play a critical role in supporting the capacity of First Nations to design and implement innovative solutions to these challenges. Foundations are much better placed to take risk and support new approaches, ideas, pilots, and experimentation than governments. This comfort with risk-taking is a core attribute that philanthropy can bring to the table and if performed in active partnership with First Nations, it has the potential to be a powerful force for change.

These new approaches and ideas could materialize through program relationships focused on water that are created by First Nations and the philanthropic sector. A number of suggested programs and initiatives, by no means an exhaustive list, are described in Section 4 of this report. Additionally, as mentioned above, the philanthropic sector can play an important advocacy role as regards Canada Revenue Agency in the area of eliminating barriers to a charitable relationship and creating charitable or qualified donees. Lastly, Foundations and philanthropists can work collaboratively with each other and First Nations to support the networks and communities of practice that can give rise to a robust First Nations water sector.

Far from being hopeless, there are many opportunities for making progress on these water challenges and a tremendous opportunity for a new relationship with philanthropy to make a game-changing contribution.



# 2. THE CRITICAL CONTEXT OF WATER USE IN CANADA

**T**his section will provide a brief overview of a number of the most current water-related issues facing all Canadians. While this information will be familiar to most readers, where the issues have aspects that impact First Nations uniquely this is elaborated upon.

## 2.1 THE WATER MYTH

It is well known that 97% of the water on this planet is salty leaving only 3% of it fresh enough to sustain terrestrial life. Of that 3% much of the world's fresh water is bound in ice or inaccessible to us by depth at which it resides below the surface of the Earth. Thus, the same four one-thousandths of 1% of the Earth's total water sustains us as it did every civilization since the beginning of time.

Thus, contrary to general belief, Canada is not a particularly water rich country. We have 20% of the world's total fresh water, but we only have about 2850 cubic kilometres or roughly 6.5% of the world's total renewable water – which is to say volume

of water renewed annually by the hydrological cycle. This is about the same amount as is found in the United States (which country Canadians generally perceive as being quite arid). We should also recognize that most of our water is in the north and flowing away from where we need it, within 300 kilometres of the American border where most Canadians live.

The most significant global impact, to which Canada is not immune, is the effect of climate change on water systems. We are already seeing the effects in Canada through arctic ice, glacier, and permafrost melting. We are seeing climate change increasing flooding (Manitoba) and drought (see image indicating the increasing areas of aridity in Canada over the next 60 years).

Projections of area burned based on weather/fire danger relationships suggest a 75-120% increase in area burned by the end of this century according to the Canadian and Hadley climate prediction models respectively (such as was recently seen in the massive fires that destroyed half of the town of Slave

Lake in northern Alberta).

First Nations tend to have low levels of resiliency to the impacts of climate changes due to their chronic infrastructure deficit, lack of resources and capacity, lack of emergency preparedness, remote locations, social challenges, and their direct dependence upon the health and productivity of local ecosystems which they rely upon for food, water, and cultural activities. This will make water management solutions more challenging to create as time progresses.

## 2.2 POOR WATER MANAGEMENT

There is an incorrect perception that Canadians are world leaders in the management of water. In reality, we have lax environmental regulation (that is increasingly lax over time given the deregulation efforts of the federal government), in that we legally approve the discharge of many chemicals and pollutants into our waters without a clear understanding of the effects of so doing. We do not consistently enforce the limits or approvals we give and we do not comprehensively monitor our water systems to determine the total load of pollution they are carrying and the effects on ecosystems. An excellent example is the eutrophication of many of Canada's lakes and rivers. This problem is exacerbated where governments have over-allocated waters to many water users as this leaves less water in the system to assimilate the nutrients and the water body eutrophies more quickly. Many of our waterways are polluted, some, like Lake Winnipeg, are in a crisis state, and almost all surface waters require treatment before being available for human consumption

or domestic use. Many groundwater sources also require treatment before use.

The situation on First Nations lands is even more challenging in that few of the laws that exist are either applicable or enforced on First Nations lands and waters. The most noteworthy symptom of this poor regulation and management is the intransigent problem of First Nation lack of access to safe drinking water and the lack of Indigenous involvement in water planning.

## 2.3 THE COMMODIFICATION OF WATER

The discussion around commodification of water centres on what is perceived to be the shift in our relationship with water from one of reverence, respect, and recognition of its critical life-sustaining characteristics to one where we think of it as a 'natural resource' that can be bought, sold, and is subject to all the same issues regarding unsustainable levels of use, degradation in quality, and impacts on ecosystems that characterize other natural resources (such as trees, minerals, fish).

The language around commodification often focuses upon the idea that water can be made into 'property', where someone 'owns' it and can thus control its use. This is referring to the 'private ownership' of water, and is seen as a very contentious issue because of the obvious ability that private owners would have to hoard water, or export it to the highest bidder, even in times of scarcity. In this situation, converting water into 'own-able' property is how it becomes a commodity that can be bought and sold.

Previously, water was seen in

western legal systems as 'common property', where it was, in essence, jointly held by all members of a society and used to the greatest extent possible in the best interests of all. While there are some problems with this model, the general assumption is that when all members of a society have an interest in water, the push and pull of negotiations will result in the fairest possible final use. To some, this is the role of government: to hold water as a trust on behalf of society and ensure its continued wise use and the protection of enough water for nature.

The commodification of water is particularly troubling for Indigenous peoples in that it directly affects not only their spiritual beliefs regarding the relationship between humans and water, but it also threatens their rights and access to water over time. Given the relative state of poverty of many First Nations, commodified waters are more difficult to access and decision-making regarding their use is highly limited to non-Indigenous actors (that is, those with rights to the commodified product).

## 2.4 WATER MARKETS

Governments create water markets to allow the market to determine the distribution of water rights, and thus, water use. In very general terms, when a person or company receives a water license, it is for a certain amount of water (such as 10,000 litres per hour), however, often people do not use their full entitlement at all times (and in Canada we do not have a 'use it or lose it' policy). In this circumstance, the 'excess' water could be redistributed to those who

need it, and this could happen in at least two ways. Governments could take back the unused water by amending and lowering the entitlement given to the user. This is seen as a politically lethal thing to do in, especially in parts of the country where there is water scarcity (such as Alberta).

The other way to redistribute water is through a water market. In a water market, people with water rights are allowed to sell excess water to others through the market. Who gets what is determined by the highest price (as with all markets) and so ability to pay dictates the movement of water. This is a particularly vociferous topic in Alberta, where the government is facing difficult choices given their earlier decisions regarding water allocation (such as in the SSRB). In this method government doesn't have to make the politically untenable decision of re-allocating unethical or unjust holdings of water, however, those without financial resources will forever be shut out of the market.

For First Nations, water markets can only work if First Nation water rights have been acknowledged, characterized, allocated, and protected first. Otherwise people selling 'excess' water on the market are selling water that is not theirs to sell.

## 2.5 WATER PRICING AND PRIVITISATION

The discussion about 'water pricing' is complex and fraught with confusion in public circles. Some assert that water pricing can be an effective environmental conservation tool because setting higher prices on water discourages its consumption.



Others see water pricing as a dangerous advancement towards commodification as it implies that water is a 'resource' to which an economic value can be attributed.

What is important in this dialogue is to distinguish between the pricing of water per se, and pricing the true and full cost of the service of providing water to humans (such as including in the costs of a barrel of oil the full costs of securing, using, and treating water when mining oil from oil sands, including in our water bills the costs of building and maintaining infrastructure to transport drinking water, including in our electricity bill and the fees paid by hydro companies to government the full environmental, social, in addition to economic costs of using water to create hydro-electricity). When the water service is priced accurately, then this may a useful tool to accomplish water conservation.

Use of this economic tool is very controversial in First Nations communities which tend to be of the view that water is gift of nature and/or the Creator, and that when in a proper and respectful relationship with it, water will support human life. Thus, the use of this tool would have to be very carefully explored. It should however receive attention, and there are some First Nations that could be very receptive to pilot studies aimed at preliminary research questions.

Related to this discussion is the issue of water privatization. Generally as a result of mounting infrastructure expenses that can no longer be addressed under current budgets, governments are turning to the private sector to assist with the provision of some

water services, particularly in the area of drinking water treatment and delivery. In other parts of the world, and a few places in Canada, public-private partnerships (P3) have arisen to address water and sewage treatment needs.

This is very controversial as ENGO's and labour organizations view this a corporatization of government responsibilities at a time when government should be fulfilling its role in safeguarding water as a public trust. The most well known example is the resistance mounted by Cochabamba residents in Bolivia in 2000. Other partnerships have succeeded to date, but they are carefully monitored and viewed with suspicion by many ENGOs.

P3s are being touted as a possible solution to many of the challenges facing First Nations lack of access to safe drinking water. However, the legal and financial logistics of structuring a P3 (for example, the impacts of this legal structure on First Nations water rights and the federal governments fiduciary obligations regarding First Nations lands and waters) are unknown and have not been explored in the case of water service management and delivery and thus would merit attention.

## 2.6 WATER EXPORT AND DIVERSION

According to Environment Canada, 'inter-basin transfers or diversions' broadly refers to large-scale or bulk removals of water by man-made diversions, such as canals, tanker ships or trucks, or pipelines. The water is not always exported out of the province or country, but it is transferred from its basin of origin. 'Water export' refers to taking water and shipping it to other

countries (assuming for profit), whether by tanker or pipeline, or by diverting rivers and building canals (presumably for the same purpose). However, it does not include small-scale water removal, such as water in small portable containers, water used in a product or bottled water.

Under the International Boundary Waters Treaty Act (IBWTA), Canada has protections in place to prohibit the bulk removal of water from boundary waters, such as the Great Lakes. Environment Canada explains that the prohibition is an environmental measure designed to preserve the integrity of boundary waters ecosystems. However, this bulk water removal ban does not apply to waters that are not on the boundary between Canada and the United States. In this case, each province has a ban on bulk water removal set out in their legislation, however, this can be amended, and most of these laws include some form of exception in the case of acceptable circumstances.

Some organizations are concerned that if bulk water is exported that the North American Free Trade Agreement (NAFTA), which defines water as a "service" and an "investment," would leave Canadian water vulnerable to foreign investors. Once Canada allows water to be diverted outside our borders for large-scale industrial purposes, Chapter 11 of NAFTA provides numerous protections for foreign investments, including requiring that foreign investors be given the same "national treatment" as Canadian companies.

First Nations rights have never been tested against any of these provisions. Some First Nations have indicated that in their view

their water rights include the right to export water in some quantity, particularly should the destination be another Indigenous nation in need. When or if an Indigenous government decides to test these provisions will certainly result in some controversy.



*Treaty rights are rights that have been affirmed or granted through a treaty-making process. These rights may be found in both the written text of the treaty as well as oral or written accounts of agreements made in addition to those contained within the written treaty document (e.g. as the Delgamuukw case illustrated). There are numerous written treaties, as well as extensive documentation and oral histories containing treaty understandings between First Nations and Britain. For example, in the 1700s, the British Crown created strategic alliances through Peace and Friendship treaties entered into with First Nations on the east coast of Canada. The 'numbered treaties' (1 through 11) are land cession treaties signed between 1871 and 1921 in Ontario, Manitoba, Saskatchewan, Alberta, the Northwest Territories and part of British Columbia. These treaties involved First Nations ceding or surrendering rights to the land, maintaining or affirming certain rights (including hunting, fishing, trapping, and harvesting rights), and receiving other new rights (such as the right to receive agricultural implements, medical treatment, yearly financial payments). Other treaties include Robinson-Superior Treaty (1850), the Robinson-Huron Treaty (1850), the Williams Treaties (1923), the Manitoulin Treaty (1836) and the Douglas Treaties (1850). First Nations in British Columbia are now in the process of negotiating modern-day treaties. In the Yukon and Northwest Territories, some First Nations have self-government and land claim agreements while others are in the negotiation process.*

# 3. OVERVIEW OF WATER CHALLENGES FACING FIRST NATIONS

This section presents an overview of the main water issues facing First Nations. Although the most publicly known water issue facing First Nations is their lack of access to safe drinking water, the complexity of First Nations legal, financial, social, economic and cultural systems indicates that water management by and for First Nations is a multi-layered problem. This brief overview will touch on the key nexus points that impact First Nations and their ability to effectively manage their waters, participate in water management processes of other governments, and ultimately ensure safe drinking water and healthy watersheds for their citizens.

## 3.1 A LOST OPPORTUNITY: ACHIEVING SUSTAINABLE WATER

It is important to frame the discussion about water in a different way than is usual; one that allows for a deeper understanding of the scope of the challenges faced by First Nations. Many of the constraints they face exist and are maintained as a result of deeply

held views about First Nation entitlements (or lack thereof). The most relevant of these views relates directly to the role and rights of First Nations to independently or jointly manage their waters. In general, federal and provincial governments have tended to deny or ignore First Nations assertions that they are entitled to engage in the sustainable management and development of their waters. This denial is largely based upon two legal and policy claims:

**Water Ownership:** There is an incorrect legal belief of provincial (and possibly federal) governments that the water is owned solely by the provincial governments, and that First Nations must secure approval from provincial governments for use of waters in a province (in the case of Alberta, even where those waters are located on First Nations reserve lands). The continued assertions of provinces denying First Nations water rights have not been opposed by the Canadian federal government. Further, First Nations have had difficulty managing their waters for a number of reasons, but on the legal front, it has been

due to the failure of the federal government to either create the necessary legal regime to support a comprehensive approach to sustainable development on reserve lands or to recognize and support the implementation of the inherent, aboriginal, and treaty rights that First Nations have to use and manage their waters. Given that most economic, social, and cultural development depends upon water in one way or another, this 'regulatory gap' has been particularly destructive to the success and sustainability of First Nations, particularly in the area of water management.

**Water Allocation:** Water allocation is the legal process by which the right to take and use a portion of water (this can be surface water or groundwater) is granted from a government to a water user. This most often happens through a licensing process. In theory, the water apportionment decision is based upon a clear understanding of the amount of water that flows in a given area, and how much can be reasonably used by humans without causing destruction (through pollution, over-use, etc.) to surrounding ecosystems and communities that rely upon the water directly. Regrettably however, in many cases, the science behind the decision-making is not sound or complete, and decisions are thus made based solely upon demand.

For First Nations, the provincial water allocation (and in some cases, over-allocation) process has been conducted with no reference whatsoever to First Nations needs and rights. It has appeared very much to be as if the provincial governments have an attitude that is unconcerned whether upstream

users take or pollute the water travelling downstream to First Nations. It could be argued that the zealous levels of water use by non-First Nation interests has resulted in a lack of clean water being available to First Nations to engage in sustainable economic pursuits (such as food production) that might be greatly beneficial to their people, and others in Canada.

The conclusion to be reached here is that these viewpoints have broad-reaching effects, well beyond the more narrow (albeit critical) concern regarding lack of access to safe drinking water. These attitudes have also denied economic, social, cultural and environmental opportunities to First Nations. While the rest of Canada has been able to meet its domestic, agricultural, and industrial needs using water (often in an unsustainable way) First Nations have not had a similar opportunity (let alone an opportunity to demonstrate more sustainable development paradigms).

The most significant opportunity lies in working with Indigenous peoples to craft solutions that can meet cultural, environmental and economic goals simultaneously: a sustainable economy in which water and humans are integrated to the benefit, rather than the detriment, of both. The programs and initiatives in Section 4.0 are aimed, to the extent possible and relevant, at achieving this kind of integration. However, even these broadly and expansive programs cannot by themselves achieve sustainability. First Nations themselves must redefine and describe the narrative of community sustainability that they seek for their Nations. The philanthropic sector can play an

important, if not pivotal role in creating the opportunity for the back-casting needed to create a reality from those narrative visions.

Addressing First Nations water challenges will require all players to consider solutions that acknowledge and are aimed at this deeply layered context.

### 3.2 CULTURAL CONNECTIONS TO WATER

Indigenous traditional worldviews uniformly speak of the spiritual and cultural connections that Indigenous peoples have had to water since time immemorial. Since colonization, the western land and legal systems (which can and often do separate land from water through granting rights to each independently of the other) have created a challenging disconnection from water in both western and indigenous modes of being. Indeed, those who hold western worldviews do not think of water as a living being with spiritual and cultural realities. Similarly, the idea of 'being in relationship with water' would be foreign to most Canadians.

Recently however, there has been a movement within Indigenous Nations (in Canada and internationally) to rebuild the connections that have been altered or lost through western influences, starting with the spiritual and cultural bonds they have had to water. In general, women tend to be leading these efforts in accordance with their traditional role as water-keepers (see [www.motherearthwaterwalk.com/](http://www.motherearthwaterwalk.com/) and [www.keepersofthewater.ca/](http://www.keepersofthewater.ca/)). Given the adoption of the United Nations Declaration on the Rights of Indigenous Peoples, this has further strengthened the opportunities for

*In Alberta, the government has attempted to define the water entitlement of each First Nation, and to subject each First Nation to requiring a provincial water license in order to be able to take and use that water. For example, Alberta has been asserting that each First Nation in that province (regardless of their need, size, or location) is entitled to the same amount of water as the Piikani First Nation, which agreed to 34,000 cfs/year, and no more. This is the only province to have so done and its effort in this regard has been vociferously opposed.*

Indigenous peoples to protect their lands and waters. However, what is needed is for a broader education aimed at, at minimum:

- Cultural strengthening and sharing regarding water;
- All aspects of water management (training and education from planning through to treatment and delivery of water, from source water protection through to watershed management);
- Water campaigning and advocacy;
- K-12 engagement in water protection and use awareness;
- Indigenous and western legal systems around water.

Education can take many forms, but the focus must be on indigenous needs and aspirations that simultaneously address cultural, economic and environmental aspects of the human relationship with water.

### 3.3 FIRST NATION DRINKING WATER

First Nations suffer from a lack of a recognized regulatory regime to govern the management of waters located on their reserve lands. Regarding off-reserve waters, First Nations have little say in the management of water beyond the very general role allowed a member of the non-First Nation public (through public hearings, for example).

Source water protection, is generally defined as protecting source water (including water from lakes, rivers and underground aquifers) from overuse and contamination.

The problem with source water protection is exacerbated by a lack of intergovernmental cooperation across First Nation borders. Ultimately, First Nation participation in provincial source water protection initiatives (where they exist) is extremely low because First Nations are not recognised as governments in those processes (and thus their unique rights are generally ignored or dismissed), and at a technical level, generally do not have the capacity to participate in discussions involving the complexity of source water protection matters. This results in off-reserve water decisions being made without First Nations involvement in upstream decisions that might impair First Nations water quality or quantity.

The final result of these issues is well known. The United Nations reported in 2009 that First Nations are 90 times more likely than the rest of Canadians to not have piped water. Last year Ecojustice co-authored Seeking Water Justice with the Forum for Leadership on Water. The report reveals a two tiered system of drinking water management where urban centres benefit from better standards, technology and personnel while rural and First Nations communities remain at risk due to inadequate infrastructure, patchwork provincial laws, and a lack of binding drinking water standards from the federal government. As of April 30, 2011, there were 122 First Nations communities with at least one Drinking Water Advisory (DWA) in place (some have more than one). Thus, one in four First Nations comes from a community that does not have safe water. Despite federal government

payments over the last 10 years in the range of \$1.8 billion, the number of DWAs is steadily increasing, many of them have been there for multiple years, and there are uncertain health effects. That said, the disproportionate and extremely high rate of H1N1 illnesses in First Nations communities during that outbreak in 2010 was attributed to the lack of sufficient water to implement proper hygiene technique.

### 3.4 DENIAL OF FIRST NATION WATER RIGHTS

The generally held view is that water is property, and that in Canada provinces own the water. This sentiment can be found in almost every provincial law setting out the regulatory regime for water rights and water management. These laws are based upon the jurisdiction provinces have over 'property and civil rights' under section 92 of the Canadian constitution (Constitution Act, 1867). The western prairie provinces (Manitoba, Alberta, Saskatchewan) have enacted their water laws as a result of the rights they received much later under the Natural Resources Transfer Agreements, 1930 (NRTA). The NRTA transferred all resources (lands, minerals, waters) previously 'owned' by the federal government to the prairie provinces when those provinces were created. The NRTA sets out that, among other things, the NRTA is subject to existing treaties with First Nations. At that time, almost all treaties with First Nations had been concluded.

The provinces often assert the view that because the treaties documents with First Nations do not specifically mention water, and

because the NRTA gave water to the provinces, that First Nations have no water rights. However, the NRTA transfer of lands and waters to the provinces is subject to existing treaties, which did not clearly resolve or characterize the water rights of First Nations. Thus, while the Constitution of Canada makes it generally clear who, between the federal government and the provinces, has 'ownership' and responsibility of waters, it remains unsettled the scope of First Nations authorities and rights when it comes to waters on their reserves, waters that flow through their reserves, and waters that are on their traditional territories (off-reserve but still subject to the exercise of treaty rights by First Nations in that area).

The Supreme Court of Canada states that waters are part of Aboriginal title lands (these are lands that have not yet been surrendered through treaty, such as those lands in B.C. where water rights have been in active debate for over 100 years). First Nations adamantly state that they did not ever give up their rights to water (see Appendix A for a list of potential Indigenous water rights) and that their water rights require characterization and fulfillment to be negotiated immediately. First Nations in unsettled areas are negotiating the modern sharing of their waters with the province or territory such that current treaties, such as modern land claims agreements, clearly set out negotiated arrangements regarding water management, sharing, and ownership of lands beside and under waters (such as the beds of lakes and rivers). In the absence of agreed sharing and management, some First Nations are proactively

taking waters from their lands for use in economic development ventures (such as water needed for a casino complex) without having first received permission from either a provincial or federal government. This is a very proactive assertion of Indigenous water rights.

First Nations are hesitant to adjudicate their rights in the S.C.C. due to its current conservative viewpoint, but some claims are proceeding, including:

- Stoney Nation: claims ownership lands, beds, water on reserve
- Beaver Lake First Nation: water quality as an incidental right to fishing
- Walpole Island First Nation: title to beds and water
- Peter Ballantyne Cree Nation hydro power rights
- Sagkeeng First Nation: aboriginal title including waters

The outcome of these cases remains to be seen, however, governments must address the matter, and should do so in partnership with First Nations governments.

#### 3.4.1 Undefined Nature of Water Rights

Aboriginal title and rights, inherent rights, and treaty rights to water, even where acknowledged by Canadian governments, have not been characterized. This means that the extent of availability of water for First Nation use is unknown, as is the extent of provincial or federal need for those waters. Until the amount of water that



each First Nation is entitled to as a result of their rights, the extent of the opportunity to share water is unknown. Recall the earlier discussion that indicated that in some areas of Canada water is already over-allocated without any apportionment having been given to First Nations.

#### 3.4.2 Competing Claims To Water By Multiple First Nations

In any given region, there may be multiple claims by different First Nations to the waters. This is often the case in the negotiation of modern day treaties, and First Nations have usually had to resolve these matters between themselves in order to finalize treaty negotiations. These First

Nations may have different, and competing values, ranging from conservation-oriented perspectives to development and full exploitation. Further, each First Nation may have a different strength of claim to water rights in an area, and this would have to be determined. A joint venture, or some other collaborative regional structure may be required which could significantly increase the complexity of a water project.

#### 3.4.3 Existence of an Historic Treaty

As noted above, historic treaties do not uniformly nor completely address the matter of water rights and entitlements. Some mention the protection of the right to navigation along First Nations

lands by the federal government; others mention waterways as boundaries of the ceded lands. Many ignore the matter completely, possibly presuming that water was included in the land negotiations, or that the issue was better left out of the negotiations at that time. The latter interpretation is certainly the viewpoint of many First Nations, however, this is contrary to provincial and federal assertions that water was included in the land cession. Interestingly, when the prairie provinces were created and land was transferred from the federal government, there was an extensive debate between the provinces and the federal government as to whether the transfer included all waters in the provinces. After eight years

of acrimonious discussion and a constitutional amendment the matter was finally settled and agreed that waters were transferred to the provinces. However, First Nations have never had the opportunity to engage in this kind of debate and to negotiate their water entitlements.

Modern treaties, such as self-government and land claims agreements in British Columbia and the Northwest Territories, have negotiated their water rights entitlements and authorities. In general, the First Nations maintain ownership of the waterbeds and banks, and the federal government retains ownership of the water itself (at least insofar as it requires this to effectively manage the water bodies). In some cases, the federal government does not have a permitting system, but in these areas usually permitting has been devolved to local or regional boards that manage the water (for example, this is the case in the unsettled areas in the NWT). However, each agreement has slightly different wording, and each enshrines a different regime for licensing, decision-making and extent of administration and control over water sources in the land claim area. In sum, every treaty will require some analysis to determine exactly the extent of water entitlement, if any, that has been negotiated.

### 3.5 REGULATORY GAP

The existence of a regulatory gap is well known to First Nations and government officials. It need not be extensively discussed here, except to note that most calls for reform (such as the recently proposed Bill S-11) could result

in over 600 different regulatory regimes and sets of drinking water quality standards being applied on First Nations reserves. This would make consistent enforcement almost impossible, would increase the lack of equity between First Nations and non-First Nations, and would further deny First Nations authorities to manage their water. It could be surmised that water quality standards might be set at what was currently being provided rather than what should be required under Canadian or provincial standards.

To add to the complexity, in some cases, there may be multiple regimes that apply in a given location, in particular if a First Nation has defined and is asserting its own laws (for example under the First Nations Land Management Act, or a land claim agreement). To truly engage and partner with First Nations on initiatives around water, assisting First Nations to define their water management regime and supporting the development of their capacity to implement such a regime is a critical step in increasing the effectiveness of local water management capacity.

### 3.6 HUMAN RIGHT TO WATER

Led primarily by the Council of Canadians in Canada, but also supported strongly by the United Nations, there is a call for the recognition of a human right to water. On July 28, 2010 the United Nations General Assembly adopted the resolution recognizing access to clean water, sanitation as human right. Despite all of the problems in Canada — or perhaps because of it — Canada has taken a position against legal recognition of the human right to water. Previously,

in March 2008, Canada played a pivotal role in the defeat of a UN Human Rights Council resolution that would have recognized access to water as a human right, and would have established an international body with a mandate to monitor States' compliance with this right. As of July of last year, however, the right to water and sanitation is now international law. Canada, no longer able to block recognition of the right, abstained from the last vote in the UN's General Assembly.

There is one sub-national government in Canada that has adopted a human right to water and this is the Government of the Northwest Territories (although lacking jurisdiction over water they are not able to legislate its implementation at this time). In 2007, the NWT Legislative Assembly declared that, "All peoples have a fundamental human right to water that must be recognized nationally and internationally, including the development of appropriate institutional mechanisms to ensure that these rights are implemented."

In general, this right is generally accepted as including the use of water to meet basic human needs (not for industrial, commercial, or agricultural scale activities) although this is not known for certain (especially given that there is a wide disparity in the amount of water that is used domestically individually in different parts of the world).

An outstanding question relates to a potential conflict between human rights to water and First Nations water and governance rights in Canada. This may not be an issue in other countries where Indigenous peoples may

not have rights that are protected in their nation's constitution, but in Canada, those protections do exist. The question, that has not been answered legally, is whether a human right to water could ever 'trump' First Nations treaty and Aboriginal rights (either to water, or other protected rights).

### 3.7 CAPACITY DEFICITS

#### 3.7.1 Human Resources Capacity

At many levels, First Nations are not generally equipped to engage in the research, development and implementation of an initiative such as is contemplated by this proposal. Within the governance, legal, technical, administrative, and political spheres, capacity building is necessary in order to ensure sound decision-making leading to long-term stability for the project.

Also, there is an uncertain contemporary role of women in water decision-making in First Nations. Many First Nations traditionally have women as the key decision-makers and protectors regarding water use. Currently, as a result of Indian Act legal structures that have disempowered women they are not generally involved. However, there is a resurgence of involvement in the past five to ten years, and depending upon the First Nation, the involvement of women as key decision-makers would be fundamental. The spiritual nature of their concern and relationship with waters would be a key element of their decision-making foundation.

#### 3.7.2 Lack of Financial Resources

The information regarding water-related resources to First Nations

has been well-documented by numerous others, most notably the Auditor General of Canada who once again, in Chapter Four of her Progress Report tendered in June 2011, lamented the unconscionable lack of attention to the legal foundation and financial support for First Nations drinking water:

- First Nations are provided only 80% of the operations and maintenance resources they require to maintain and operate water treatment plants;
- First Nations have a massive (but still currently confidential to ANAC) infrastructure deficit.

#### 3.7.3 Information Deficit

First Nations have limited resources to track the quantity and quality of water that resides on or under their lands, the federal government has been neglectful in this regard, and provinces have little incentive to engage in research or monitoring regarding First Nation uses, or environmental uses on First Nations lands. This means that it may be difficult to assess with exact state of First Nations waters (surface or groundwater), or where the information is available (for example, the detailed reasons for DWAs on a First Nation-by-First Nation basis) governments may be unwilling or unable to share the information. This could make the process of realizing First Nations water entitlements more difficult.

In general, First Nations do not have access to the technical information regarding the quality and quantity of waters to which they may have rights. Some testing is done by the federal government on the quality of drinking water

sources if the First Nations are of larger population, but there is no testing or quantification of water bodies in or under First Nation reserves.

### 3.8 PUBLIC AWARENESS AND UNDERSTANDING

#### 3.8.1 Public Awareness

Further, there is a general belief, at some level, that First Nations are environmental stewards of their lands and waters. However, there is limited awareness of the true state of water access and management on First Nations (although in some regions, such as Manitoba, this may be elevated as a result of excellence in journalistic reporting) and likely little or no awareness as to why these conditions exist and persist. Opportunity lies in changing this, and building support and awareness in the general public. Of all issues, access to drinking water is one that could unite the Indigenous and non-Indigenous public. Further, constructing Indigenous water rights implementation initiatives to operate in a sustainable way, based upon principles that demonstrate environmental and social justice for First Nations, could be beneficial.

#### 3.8.2 Government Awareness

Governments are aware of the challenges facing First nations regarding water management but appear loath to proactively reach out to construct improved management processes (even if those processes were of a voluntary or pilot nature at the outset). However, there may be an opportunity through certain jurisdictions (such as the NWT) and initiatives (such as the Council

of the Federation) to promote the exploration of alternative management and collaboration structures (such as a First Nation Water Commission).

It is likely that governments are unaware or ignore efforts that First Nations may be planning to engage in the development of their water resources. Because non-First Nations are restricted in water exploitation activities, governments are likely to oppose First Nations water development ventures. However, other activities have suffered from this concern (such as casinos) and these have been overcome through negotiation and reliance upon compelling fairness and equity arguments. Possible

water-related partnerships with the corporate sector, if properly structured, may provide some opportunity for meaningful poverty reduction for First Nations.

### 3.8.3 ENGO Role and Awareness

While many ENGOs are improving their connections to First Nations communities, leadership and youth (and vice versa), much work could be done to create forums where these relationships can move into more structured and mutually beneficial partnerships and collaborations towards water management.

## 3.9 SUMMARY

There are numerous issues that are contextually surrounding the use and management of water in Canada, as well as First Nations water. All of these issues might impact, in one way or another, any initiative being contemplated by First Nations or their supporters directed at sustainable water use and management. The implications of a politically, environmentally and legally dynamic environment must be fully understood if initiatives are to assist First Nations achieve water sustainability.



# 4. OPPORTUNITIES FOR PROGRAM AND PROJECT DEVELOPMENT

**T**his section sets out a number of possible initiatives or activities that may be able to address (or will work towards addressing) the gaps identified above.

## 4.1 ADDRESSING KNOWLEDGE GAPS THROUGH RESEARCH

Research that looks at both western and Indigenous knowledge to gain better understanding of the issues, and potential solutions to those issues, is fundamentally important. Most corporate, government, and foundation funders are not interested in pure research, even if ultimately applied in First Nations contexts. Most research has been conducted by universities in accordance with their research agendas or consultants in support of private interests (such as project proponent environmental assessments). First Nations often have no financial capacity whatsoever to explore and resolve critical questions affecting their waters, ecosystems and peoples. The following are suggested legal,

operational, governance and human health program initiatives:

### 4.1.1 Indigenous Water Laws Project

- Scoping Indigenous peoples inherent water rights in Canada and internationally
- Scoping the extent of water rights protected in the US under the Winters Doctrine (the reserved water rights doctrine) and how this doctrine may be used by First Nations in Canada
- Review all modern land claims agreements and compare and contrast water terms to determine the minimum water protections and rights
- Explore how the Public Trust Doctrine can be used in support of or to complement Indigenous water rights (and vice versa)
- Synergies and conflicts between the human right to water and Indigenous water rights

- The scope of the Crown's fiduciary obligation and how it might apply to decisions regarding First Nations water
  - UNDRIP and the application and implementation of indigenous water rights in Canada
  - Indigenous water rights in water use planning and watershed management
  - First Nations rights and strategies in transboundary water management
- #### 4.1.2 Water Rights Implementation Strategies
- Exploring the corporate sector role in supporting First Nation water rights
  - Strategies for implementing the human right to water at a community level
  - A study of water rights implementation methods by Indigenous peoples across Canada (and internationally)
  - Using Indigenous environmental rights to protect water sources
- #### 4.1.3 Effective Drinking Water Delivery
- Water service pricing and its effectiveness for First Nations water management
  - Traditional and current water use baseline analysis (home water audit)
  - Water loss from plant to pipe
- study
- Bottled water expenditures for First Nations
  - Landfill costs to First Nations of bottled water
  - Water infrastructure resilience in the face of climate change
  - Technical barriers to delivering comprehensive water quality
  - Innovative water and sewage treatment technology
- #### 4.1.4 Water and Human Health
- Gathering epidemiological data to demonstrate health/social impacts of poor water access
- #### 4.1.5 Water Governance Strategies and Tools
- Scoping innovative, Indigenous rights-based governance structures for collaborative water governance in Canada (First Nation Water Commission, First Nation Water Strategy, First Nation Water Trust)
  - Articulating Indigenous women's roles in contemporary water management
  - Using environmental flows as a tool to protect indigenous water rights and sources
- ## 4.2 DEVELOPING ADVOCACY AND LEADERSHIP CAPACITY
- The aim of these initiatives is to build strong capacity to clearly articulate, implement, persuade, and deliver safe drinking water, healthy water sources, and intact Indigenous water rights.
- #### 4.2.1 Water Management Community of Practice
- Creation of a collaborative network of Indigenous water managers and practitioners and others interested in improving the state of First Nations drinking water, particularly through innovations in delivery, technology, financing and monitoring
- #### 4.2.2 Indigenous Water Rights Experts Network
- Creation of a collaborative network of Indigenous water rights practitioners or theorists interested in advancing the implementation of Indigenous water rights in Canada
  - Collaborations with Indigenous Bar Association, Canadian Association of Law Teachers, and the Law Reform Commission of Canada
- #### 4.2.3 Water Leaders
- Indigenous-focused Internship program partnerships in educational or professional programs related to water and water planning and management (such as with the Canadian Institute of Planners)
  - Water fellowships for First Nations in foundations interested in water, environment, or Indigenous peoples issues or universities (law and journalism schools)

- Indigenous speakers tour (aimed at educating, persuading, and enlisting the support of Canadians to protect Indigenous waters and drinking water)

#### 4.2.4 Indigenous Journalists Training

- The promotion of specialized workshops and training for journalists (both Indigenous and non-Indigenous) aimed at increasing their ability and interest in effective and compelling reporting to Canadians about First Nation water issues and concerns

#### 4.2.5 Campaigning for Change

- Scoping and choosing effective water and Indigenous rights protection and implementation advocacy strategies
- Partnering in campaigns

#### 4.2.6 Water Funding Flow-through Structure

- Creation of a legal foundation or other corporate structure through which First Nations without a charitable number can access financial and technical support and resources for projects related to all elements of water and watershed management.

### 4.3 Tools and Information for Decision-Making by First Nations

The following tools and information should be developed for use by First Nations:



#### 4.3.1 Water Pathfinder

This is a funded position within a region that has the goal to assist and build First Nations water management knowledge and capacity through

- Developing and distributing water information packages (pamphlets, fact sheets, and posters), radio advertisements, and print articles
- Delivering presentations and workshops on water management (with links to health, ecosystem health and restoration, source water protection)
- Working with First Nations to develop and carry out water-related studies and field work to help protect their water sources
- Developing educational materials and curriculum-enhancing activities related to water for First Nation schools

#### 4.3.2 Water Webinars, How-To Fact Sheets, and Water Management Manuals

A number of web-accessible tools for use by First Nations at the community level of water management. These tools are directed at building very practical and applied capacity in water management and watershed planning:

- Best Practices in Community Water Management
- Integrating First Nation Water Rights into Land and Water Use Planning

- Polis' WaterSmart Toolkit adapted for First Nations providing a resource to support communities transition from supply-side management to long-term integrated water conservation planning
- Polis' The Soft Path for Water in a Nutshell adapted for First Nations
- Water Conservation Approaches, Strategies and Planning
- Water Pollution Prevention Planning
- Watershed Restoration
- Using the Precautionary Principle in Water Use Planning
- Developing and Implementing Water Policies (e.g. policy templates)
- Water Metering and Pricing
- Water Law and Rights
- Groundwater Use and Protection
- Wetlands Restoration

#### 4.3.3 Water Mapping Series

This series would be aimed at presenting in a visual map format the perspective of First Nations and water. To do this, accessible water information would be layered with information that is First Nation specific (such as poverty and unemployment rates, disease frequencies, governance structures, etc.) to help shed light on the correlation between water

management sustainability in First Nations reserves and treaty territories:

- Reserves, treaties, or land claims agreements layered with aquifers, watersheds, wetlands
- Drinking water 'hotspots' layered with reserve locations
- Source water 'hotspots' layered with reserve locations or traditional use areas
- First Nation groundwater sources of drinking water layered against industrial groundwater use
- DWAs layered on industry location and pollution sources (as reported in the National Pollutant Release Inventory)
- Health and disease clusters and water sources and types

#### 4.3.4 Resources for Youth

These resources (selected based upon the types of initiatives that are particularly relevant and compelling for youth are directed at building youth awareness, understanding, commitment and hope in the area of environmental (and in particular, water) management and protection:

- Graphic novel series on water issues wherein the characters explore and learn about how strong spiritual and cultural connections can aid in ecological restoration and protection and that by working to protect the earth and build community they can become active participants in

strengthening their cultural and spiritual connections

- K-12 curriculum developed that show youth strategies for improving water awareness and action in their communities

#### 4.4 IMPROVING WATER QUALITY IN HOMES

This program focus is on initiatives that result in direct improvements in drinking water source protection and access to safe drinking water by First Nations. The following are envisioned as pilot projects aimed at achieving this goal:

- Feasibility study on remote water treatment plant management
- Greywater, rainwater harvesting and composting in First Nations
- The development of watershed plans by multiple First Nations in a region
- The development of water quality restoration plans
- The development of water conservation strategies
- Actions towards point source pollution reduction
- Accessing home water test kits

#### 4.5 LOCAL COMMUNITY LEADERSHIP, LEARNING AND ENGAGEMENT

There is a need for programs directly implemented at the community level. These programs are intended to teach community members about water issues, restore and build connections between

people and the environment, and provide opportunities for all people in First Nations to participate directly in water management.

##### 4.5.1 Video Documenting Water Issues (Digital Story-telling)

Youth and/or adults video-document water issues in their First Nations, as a means to engage with water issues, explain the impact of these issues on their lives, and share their experiences with others. This has been shown as an effective strategy, in particular, for engaging youth in environmental exploration that leads to personal action:

- This could be followed by a workshop of several First Nation communities to view the videos to identify water conservation/quality practices that are working and those that are not working in each community.
- Include brainstorming solutions that would work for specific communities.
- Share video-documents and workshop results with First Nation leadership and/or appropriate western policy-makers/scientists.
- Possibly include fieldtrip for western policy-makers/scientists to First Nations communities to experience water issues first-hand.

##### 4.5.2 Community-Based Monitoring

Many First Nations wish to increase their capacity to effectively manage, protect, restore and use their environment. A key element of this

is the ability to understand and record the state of their water and changes in their water sources over time.

Community-based monitoring tools allow for the tracking and monitoring of both Indigenous Knowledge and Western Science water information. This information can be used to modify decisions and behavior. Through tool development and training support First Nations can restore and protect natural and human diversity and monitor the effects of human activities on their waters:

- Community monitors trained in basic water quality and quantity parameter measurements.
- Elder/youth Indigenous Knowledge monitoring partnerships.
- Monitoring-to-mapping projects that explain monitoring data in a visual map-based form.
- Articulation of Indigenous Knowledge water quality, quantity, seasonal rate of flow, ice cover and other indicators of waterway and ecosystem health.

##### 4.5.3 Gardening

Youth and adults can learn about water issues (impacts of flooding, pollution and contamination, healthy ecosystems need clean water, the role of water in food security) through gardening.

## 4.6 CREATING SUSTAINABLE ECONOMIC OPPORTUNITIES IN WATER

Many Canadians and their communities have benefitted from the industrial, agricultural, and manufacturing use of water in Canada, although few First Nations have realized such benefits. The long term management and use of water in a sustainable way can only be realized if economic sustainability is in some way tied to positive water outcomes.

### 4.6.1 Relevant Market-Based Tools

Assessing the ability of the market, and tools in relation thereto, to achieve poverty reduction goals through the use of water in a sustainable fashion is important for the stability, resilience, and vitality of First Nations. While many of these tools may be familiar, their use in First Nation economies and regarding water sustainability is not:

- Strengthening First Nations economies through examining the options for promoting sustainability and jobs, drawing on domestic and international experience, by using capital and project budgets, incentives, and stimulus packages, MBIs, and other possible policy instruments.
- Innovation and Water Sustainability: explore options for using environmental fiscal reform to enhance innovation towards water sustainability on First Nations.
- Developing New Measurements of Water Sustainability: identify and address key challenges and

options, also explore the use of water sustainability indices and measurements of growth to First Nations systems and communities.

- Market-Based Instruments (MBIs): assess the usefulness and relevance of MBIs, such as pricing and incentives, to better manage First Nation's water sources and to build a greener, stronger economy in First Nations.

### 4.6.2 Technology Clusters

With the proper targeted financial and policy support, First Nations could be leaders in water management, use, and delivery, however work would need to be done to properly define the

incentives and structures necessary to make the happen:

- Assessing the feasibility and the opportunity (likely through special incentive technology programs aimed at this) for First Nations to lead in water technology innovation for remote setting management and delivery of safe drinking water.
- Assessment of innovative technologies that function in northern or remote locations (such as membrane technology)

### 4.6.3 Corporate Roles in First Nation Water Management

There is a supportive, possibly mutually beneficial role that the



corporate private sector might play in aiding First Nations in achieving their water management needs and goals:

- Exploring corporate roles in protecting and implementing the human right to water for First Nations.
- Building partnerships to ensure full transparency of corporate water use and reporting where on or near First Nations water sources.
- Analysing the risks and opportunities (especially regarding indigenous rights to water) in engaging in public-private partnerships towards improved delivery of safe drinking water in Indigenous communities.

#### 4.7 LEVERAGING WATER AS A CULTURAL DRIVER

This program of activities would be directed at a multiplicity of formats

(workshops, gatherings, school-based learning, field trips) that would provide the opportunity for children and adults to learn about Indigenous cultures and the role they play in building effective water management.

##### 4.7.1 Indigenous Water Ethics Series

- Gatherings and workshops in existing Indigenous cultural centres, museums, and universities that allow for exploration of and learning about water ethics, relationships with water, and human role in protecting and using water.

##### 4.7.2 Elder's Traditional Water Storytelling Series

- Traditional stories and teachings about water from many Indigenous cultures. These stories from Elders or others can introduce water issues to all ages.

##### 4.7.3 Language Programs dealing with Water

- Partnerships with schools to introduce water curriculum in Indigenous languages.
- Children's books in Indigenous languages addressing key aspects of water relationships, interconnectedness, watersheds, and water conservation.

##### 4.7.4 Water Festivals

- Gatherings (such as pow wow's) can be partnered with to deliver workshops and festivals that highlight water issues and solutions in First Nations.
- Art programs (aimed at all ages) and exhibitions (murals, public art, shows) demonstrating Indigenous arts relating to and exploring water, interconnectedness between humans and ecosystems, environmental challenges, and traditional teachings.



# 5. APPENDIX A

## Possible First Nations Water Rights

*Aboriginal rights:* Element of traditions, customs, practices, that are integral to the distinctive culture of the First Nation

- navigation and travel
- irrigation
- environmental protection
- domestic
- governance
- commercial
- industrial
- electricity

*Aboriginal Title:* Exclusive use and occupation

- all activities and uses so long as not incompatible with the original bond between the land and First Nations

*Treaty rights:* Those rights granted or protected through treaty

- domestic
- irrigation
- adequate living
- environmental protection

*Incidental rights:* Related activities to protect water

- Environmental protection
- Right to control the water uses of others

*Riparian rights:* Rights to unimpeded quality and quantity of water that flows beside First Nation lands.

*Implied rights:* Necessary for purposes of the reserve, such as irrigation, domestic use.

