

Indigenous Watershed Initiatives and Co-Governance Arrangements: A British Columbia Systematic Review

Final Report



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1.0 INTRODUCTION

1.1 CONTEXT

Indigenous water/watershed plans are increasingly important to enable communities in developing protocols and policies that guide their communities' actions and decisions to protect their traditional values, laws, title and rights. Given the unique relationship that First Nations have with the environment, alternative approaches to governance, such as rooting co-governance arrangements in traditional values, laws and customs, are critical for collaborative and respectful water/watershed governance. The British Columbia (BC) *Water Act Modernization Process* (2009 – 2014) and subsequent development of the *Water Sustainability Act* (WSA) and associated regulations (2014 – early 2016) created a modern framework to sustainably manage BC's water. Some important provisions in the new Act will be aimed at protecting stream health and aquatic ecosystems, regulating groundwater use, considering water in land use decisions and enabling local bodies to govern water at a regional or watershed scale. The WSA potentially opened the door to collaborative governance (co-governance) of water with First Nations in BC and could create space for discussion on outstanding issues surrounding Aboriginal Title and Rights. Unfortunately, the BC Government has inadequately engaged and consulted First Nations so far and the WSA does not recognize Aboriginal Title and Rights protected under the *Canadian Constitution* (1982). The relationship with First Nations and the existence of Aboriginal Title and Rights underscore the complexity of water planning, management, and governance the Province will have to address if it is to successfully implement the *Water Sustainability Act*.

The WSA brings forward a conversation on the issue of water as an Aboriginal right, and even more so a conversation on the responsibilities First Nations have to fish and healthy aquatic ecosystems. Water co-governance is complex and it will require First Nations to be included in water decisions that affect their Aboriginal Title and Rights and Treaty Rights for the Province to advance the sustainable management of water under the WSA. To do so, First Nations require capacity to engage in meaningful conversations on water with the Province and British Columbians. Given the lack of responses from First Nations during the *Water Act Modernization Process*, the First Nations Fisheries Council of British Columbia (FNFC) was concerned about the capacity of First Nation communities to respond to the Act. Furthermore, as the WSA implementation progressed, it became clear to the FNFC that First Nations lacked the capacity to

participate in the planning, management, and governance of water. The FNFC suspected that many First Nation communities were unable to engage in the creation or implementation of the WSA because they lacked the personnel, structures, processes, and funding, i.e. capacity, to engage with in language understood by the provincial government.

In 2012, under *Theme 3: Safeguarding Habitat and Responding to Threat* of the 2007 BC First Nations Fisheries Action Plan, the FNFC created the *Water for Fish* initiative to build and maintain a network to build capacity and support the engagement of BC First Nations in water management, planning, and governance at multiple jurisdictional levels (i.e. with the Province, local governments, and regional bodies). This network also serves to inform the FNFC's work to advance the protection of water for fish and healthy aquatic ecosystems, as well as help FNFC ground truth issues and actions among BC First Nations that can then be communicated to governments and other organizations. To build this network effectively, there was a need for FNFC to understand the current capacity of First Nations to engage in water co-governance, planning and management. Anecdotal evidence suggests that water governance and management is a critical issue for BC First Nations however they have low capacity to engage effectively and no research project thus far had assessed the current capacity gaps.

A recent survey done by the Canadian Freshwater Alliance of watershed stewardship groups showed that 75% of respondents indicated – unprompted – that addressing First Nations jurisdiction and water rights is an area of the WSA that is important to them. Initiatives from the POLIS Water Sustainability Project and Fraser Basin Council initiated in 2014 and 2015 are seeking to find provincial recommendations and structures that could foster watershed co-governance. While some First Nations are advancing water co-governance at a local watershed scales such as the Okanagan Nation Alliance, Lower Similkameen Indian Band, Cowichan Tribes and groups along the Lower Fraser, missing from these initiatives is a mechanism for BC First Nations to engage in water co-governance at multiple scales.

This research project recognizes First Nations unceded rights and title. It is important to note that this project, including the Water Planning and Governance Workshop in April 2016, was not considered consultation with BC First Nations and the documents developed subsequently cannot be used to reflect such processes.

1.2 PROJECT PURPOSE

The Centre for Indigenous Environmental Resources (CIER; www.yourcier.org) and the FNFC (<http://www.fnfisheriescouncil.ca/>) partnered to undertake a systematic review of indigenous watershed initiatives and co-governance arrangements to identify capacity gaps and contribute to shaping the future of water/watershed planning and a new watershed governance regime in BC. This project has served to inform existing and future co-governance discussions by contributing towards understanding the current needs as well as opportunities for BC First Nations to advance a co-governance discussion with the Province and local governments. The BC waterscape is a complex system with over 200 First Nations and multiple stakeholders and other water users throughout BC. First Nations across BC are at different stages of watershed planning and governance discussions and while some First Nations may be interested in starting to talk with provincial or local governments and other stakeholders, others may not be ready. This initiative helped in identifying First Nations that are well placed and interested in pursuing watershed planning and/or participating in co-governance discussions to share experiences, continue or start building relationships and/or further explore possible solutions or models for co-governance arrangements in BC.

1.3 FUNDERS AND SUPPORT

This project was generously funded by the Real Estate Foundation of BC, Tides Canada Foundation - Dragonfly Strategic Grantmaking Fund, the Vancouver Foundation Tula Community Fund, and by the FNFC as part of a grant from The Gordon and Betty Moore Foundation. CIER and FNFC also received letters of support from the POLIS Project on Ecological Governance (POLIS) at the University of Victoria, Canadian Freshwater Alliance and Fraser Basin Council. These organizations will be involved during the communication phase.

1.4 WORKPLAN

Throughout the project it was imperative for the FNFC and CIER to follow an ethical protocol to ensure a layer of confidentiality for First Nations participating in the survey. There were three main overlapping phases to implement the activities of this initiative: (1) Scoping and data collection; (2) Data analysis; and, (3) Communication. The results of the Data Analysis Phase were shared and verified at the FNFC

Water Planning and Governance Workshop on April 26th and 27th, 2016. Further details on the process, results and outcomes of these activities are discussed in Section 2, Project Activities.

1.5 EXPECTED OUTCOMES AND DELIVERABLES

The **main expected outcomes** from this project were to:

1. Characterize First Nations developing indigenous-led water plans in BC;
2. Identify and qualify capacity for First Nations water planning and water plans identified under the WSA;
3. Grow an existing network of First Nations involved in water planning initiatives;
4. Understand existing co-governance arrangements related to water, build new relationships with First Nation communities and watershed users, and support First Nations in water planning;
5. Understand how traditional values, laws and customs have been incorporated into initiatives;
6. Identify and characterize conditions for enabling water co-governance arrangements, and;
7. Identify future pilot projects for exploring water co-governance arrangements at different scales.

The **key project deliverables** are a resource database of the documents gathered during the literature review and where available, appropriate information on the current status of the initiative, links to electronic copies of the available documents and a short description of the initiative. This final report was also prepared.

2.0 PROJECT ACTIVITIES AND RESULTS

The following provides an explanation of the process used and the results from the literature review, community survey and one-on-one phone interviews. Each of the activities and subsequent analysis was guided by a set of questions related to water initiatives; traditional values, laws and customs; governance; and, First Nations capacities and needs. The project results were shared, verified and confirmed with First Nation representatives at the FNFC Water Planning and Governance Workshop on April 26th and 27th, 2016, in Richmond, BC.

2.1 LITERATURE REVIEW

2.1.1 Process

The Project Team undertook a desktop literature review of existing First Nations' water and water-related initiatives across BC. A suite of terms were used to search for and determine what water and water-related initiatives have been completed or are currently ongoing including: water plan; watershed plan; preserving culture and water; marine plan; land use plans; fisheries plans; forestry plans; land resource management plans (LMRP's); and, strategic engagement agreements (SEA's). Types of documents reviewed included academic journals and publications from provincial and municipal governments, First Nations, NGOs and the private sector. The Project Team also contacted key individuals within provincial and federal departments and project funders to locate additional resources.

2.1.2 Results

Through the literature review a total of 86 documents were identified and categorized into the following themes: land use planning (22); marine use planning (10); strategic engagement/decision-making agreements/strategies (9); water planning (8); cultural and heritage planning (3); forestry planning (1); and, other non-First Nations water-related resources (e.g., shared-decision-making, water governance, co-governance, water rights, sustainable resource management planning, cumulative effects) (33). A list of the documents can be found in Appendix I.

"The Coquitlam River watershed continues to be about people and fish. Through the formation of a Coquitlam River Watershed body, a healthy watershed is possible. The Watershed is calling us to order."

The City of Coquitlam and Kwikwetlem First Nation, 2010

The majority of the documents are accessible online. Planning documents pertaining to water, land use, marine use and culture and heritage are equally developed solely by First Nations or in partnership with governments alone or governments and other First Nations. For example, given the nature of the Strategic Engagement Agreements/Strategies, they are generally developed by the Province of BC and a particular First Nation(s). The 'other' documents were developed by various government agencies, organizations and academic scholars. The majority of the documents were developed between 2010 and the present day and about half a dozen of them are still in draft stage.

Regardless of the type of planning document, they are generally viewed as roadmaps for protecting the environment and its resources to ensure healthy lands and waters for years to come. There are common characteristics or principles that are frequently considered in developing a plan. Collaboration with community members, governments and/or other users is extremely important. Through consultation and engagement, plans capture the vision, values, mission and supporting resource management objectives and priorities. Some of the plans have been developed over several distinct phases (e.g., identifying the values, vision, mission and priorities before moving into an agreement to formalize the governance structure and terms of reference). Other planning principles that were incorporated include guidelines to protect environmentally and culturally sensitive areas, general land use or zoning designations, actions for capacity building, a clear decision-making process, future recommendations, and government-to-government collaborations.

The plans provide the opportunity for First Nations to exert their rightful ownership and control over the lands and resources within their territory. The plans are also used to inform government and other resource users as to how First Nations will manage their lands and resources. One of the plans indicated that it represents the first steps towards longer term reconciliation of their interests including the establishment of a shared decision-making process with respects to land use matters.

Several planning documents include reference to traditional laws, values and customs. While these are often weaved throughout the plans, the values and teachings are often reflected in the vision and principles of the plan. For example, this

“Our Elders taught us that our land is sacred. Through ṽGv’íl.ás and áxvái, we are regaining control of our lands and resources. Our vision is to maintain our traditions and natural resources for future generations by practising sustainable harvesting methods. To do this is to be Heiltsuk.”

— Ross Wilson (Former Chief), Heiltsuk Tribal Council,
Heiltsuk Land Use Plan, 2005

could include values and teachings about honouring the creator, respect, balance, working together, sharing, protocols, and stewardship. Some of the documents include a separate section on culture that discusses the direction, strategies, and actions to ensure Indigenous culture and customs are preserved within the traditional territory. References to traditional laws, values and customs include exerting governance over their entire traditional territory and the values that are important for their way of life;

ensuring there is access to traditional foods and other cultural uses; protection of spiritual areas, trails and cabins for traditional practices; and, the repatriation of traditional areas for trapping and angling.

Most of the documents did not include information on best practices and lessons learned. However, there were a few that discussed success factors and challenges for developing guiding principles to operationalize management plans. For example, community engagement and consultation, establishing allies, building relationships with communities and local governments and connecting to other land use planning processes are importance factors for success. However, there could also be challenges with developing a plan such as ongoing operational issues and ensuring that it minimizes impacts to local ecosystems. Yet, a bigger challenge will likely be the Province's assertion of jurisdiction over First Nations unceded territories and legislative authority, and the need to protect and reconcile Aboriginal Title and Rights and Treaty Rights as they relate to fisheries and the health and protection of aquatic resources. Guiding principles for operationalizing management plans could include making the plan public, accountability, being inclusive and respectful, building relationships, gathering support to help implement the plan, and adaptability.

2.2 COMMUNITY SURVEY

2.2.1 Process

The community survey was developed to identify First Nations' capacities to be involved in future water and water-related plans/initiatives and engage in different governance arrangements. The 36 survey questions were organized into four main sections: You and Your First Nation; Water and Water-Related Governance and Management Initiatives; Strength of Relationships Between First Nations (And With Others); and, Key Capacity Challenges and Opportunities. For example, specific questions focused on past and current indigenous watershed initiatives; First Nations' internal capacity to participate in watershed planning and co-governance processes; the biggest perceived threats to water in their region and the biggest needs; and, the strengths and weaknesses of current relationships and connections between First Nations and other watershed users and stakeholders (see Appendix II). The Project Team circulated the draft survey to several key contacts in BC for their input to ensure it was culturally

appropriate and relevant to the BC water landscape and revised several times before the survey was launched.

The survey was emailed to First Nation representatives, mainly targeting First Nation Chiefs/Councillors, Lands/Natural Resources Managers and Fisheries Managers, from mid-December to mid-February 2016. Outreach was also conducted over the phone in an attempt to inform all 203 BC First Nations. The results from the survey were shared and verified at the FNFC Water Governance and Planning Workshop in April 2016. In recognition of First Nations' participation in the survey, all completed submissions were entered into a draw to receive a \$1000 grant towards an ongoing or new environmental initiative. The winner of this grant was the Treaty, Lands and Natural Resources Department of Tsleil-Waututh Nation.

2.2.2 Results

The survey was circulated to 200 First Nation communities and 27 First Nations' organizations and 63 submissions were received. Of the 63, there were 50 complete submissions by First Nation communities (eight were incomplete; and, two First Nations submitted more than one survey) and five by First Nations' organizations. The participants who completed the survey were from across BC. The following table illustrates the representation of the participants according to regional boundaries used by the FNFC for fisheries-related operations and processes.

Table 1: Representation of Participants Who Completed the Survey (55 of 63)

Regional Area	Number of Survey Participants
Northern Transboundary	1
Haida Gwaii	0
Upper Fraser	2
Upper Skeena	2
North Coast	6
Central Coast	1
Interior	14
Transboundary Columbia	7
Fraser Valley	5
Lower Mainland	7
South Island and Mainland Inlets	5
North Island and Mainland Inlets	3
West Coast Vancouver Island	2

The following provides a summary of the survey results organized into the four main sections described in Section 2.1.1.

A. You and Your First Nation

Over 50% of the participants indicated they were in a Lands and Resources, Natural Resources or Environmental position as a Director, Coordinator, Manager or Assistant. Eleven participants were Fisheries Coordinators, Managers, Technicians or Directors; four were either biologists or geomorphologists; seven were in a Chief or Councillor position; and, seven were categorized into 'Other' (i.e., service coordinator, general manager, joint resources coordinator, executive director, governance advisor to the traditional council, title and rights coordinator, major projects coordinator).

Approximately 80% of the positions were full-time and the majority of participants have been in their position, regardless of the nature of the position, for 1 to 5 years (24 participants) or less than one year (18 participants). While there was an equal distribution of participants who work directly on water protection or management projects/initiatives or work on water as a result of other projects/initiatives, about 70% of the participants spend less than 25% of their time on water projects/initiatives (e.g., water planning, water referrals, communicating with your community on water issues). This suggests that even though there are full-time staff working in various environmental positions (e.g., lands and resources, natural resources, fisheries, Chief and Council), they spend less than a quarter of their time working on water projects/initiatives.

The majority of participants indicated that they have other individuals in their organization/community or outside consultants working on water issues with them such as other internal staff (i.e., Referrals Coordinators, Environmental Planners and Coordinators, Fisheries Technicians, GIS Technicians, Public Works staff, and Health staff; Chief and Council; and, external biologists, consultants, organizations and watershed networks.

B. Water and Water-Related Governance and Management Initiatives

First Nations have planned, managed and governed water for thousands of years. However, water plans that are communicated and recognized by local/provincial/federal governments are relatively new. The

extent to which First Nations have been engaged in planning for water or water management to date, historically driven by engineering and science, varies from participation in the development of water use plans or joint planning initiatives with regional districts to very little or no planning at all. Several First Nations have developed water and water-related governance management initiatives such as:

- Water/land use/environment/natural resource plans;
- Water by-laws, declarations and strategic frameworks;
- Water quality/environmental monitoring;
- Local watershed planning;
- Vision strategy document for water governance;
- On-reserve water management (i.e., installing infrastructure, maintaining water supply);
- Taking legal and political action to protect water systems;
- Being part of a watershed committees or river group that focuses on water projects;
- Tracking water referrals and working with the Provincial government on current water licenses;
- Direct (involved in making changes) or indirect (tracking or submitting comments) involvement in the WSA;
- Comprehensive community plan;
- Community settlement agreement, and;
- Tribal Council Resolutions and Band Council Resolutions for protection of areas throughout the traditional territory.

Several First Nations are at different stages of developing water or water-related governance and management initiatives such as: a water use plan; Memorandum of Understanding; water framework; water governance schedule; plan to respond to water related referrals; strategic land management use plan; land use vision plan; and, declaration. In regards to communication or negotiations, some First Nations are in the early stages of communicating/meeting with the provincial government or local municipalities while others are engaging in government-to-government discussions with the Province.

Of the respondents that indicated they have developed or are in the process of developing a written document to protect water in their own territory, the majority of which mentioned how the written document includes or reflects traditional values, laws and customs. Participants explained that the process for incorporating the traditional values, laws and customs includes: engaging members through

community meetings/cultural events/family meetings/advisory committees; conducting interviews, cultural research and video documentary; working with Elders, knowledge keepers and hereditary leaders; using traditional language; and, speaking to and incorporating community vision, oral histories and opinions regarding water and water use.

Participants were asked to reflect on who is involved and how in the development of strategies/plans/vision statements/declarations/guiding internal protocols related to water. About one third of the participants shared their perspectives which are illustrated in Table 2. It emphasizes the importance of including Elders, Chief and Council, youth and community members into the process. It also illustrates the use of contractors/consultants, stewardship organizations and other agencies (e.g., government, fisheries experts) to support in the development of the water document and speaks to the lack of internal capacity for First Nations to undertake this work alone. In particular, there is definitely a need for assistance on writing materials/reports, engaging with other stakeholders, and providing technical advice/support.

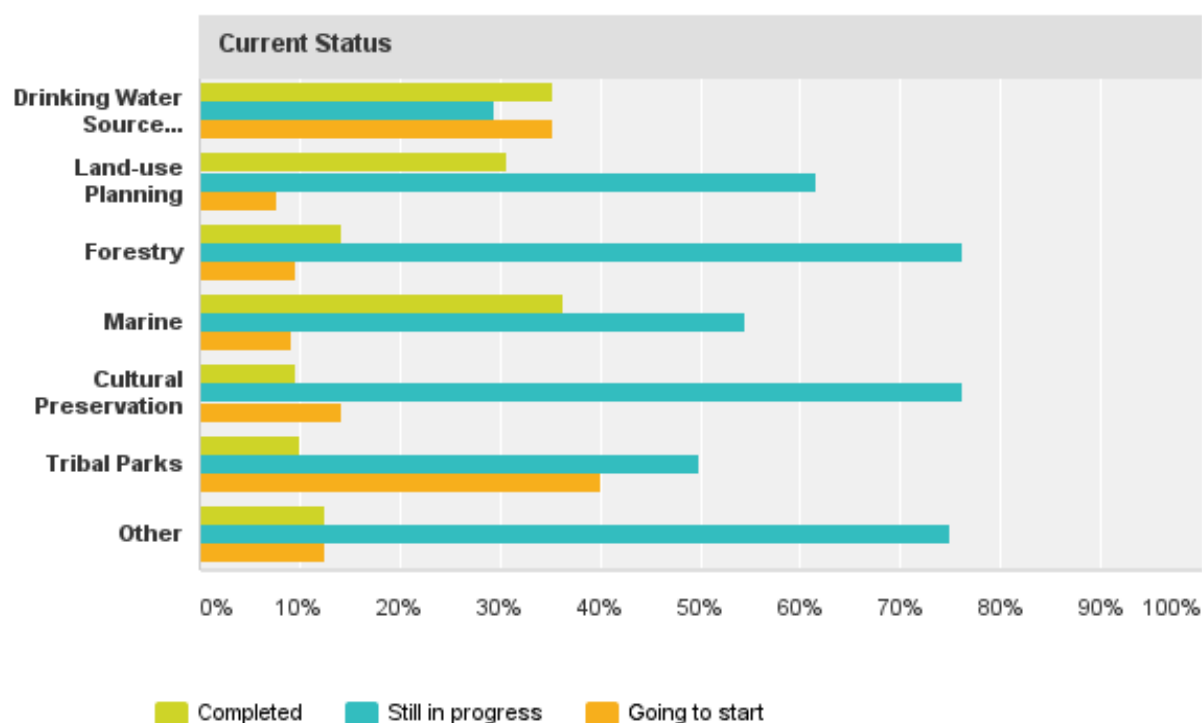
Table 2: Who is Involved and How in Development of Strategy/Plan/Vision Statement/Declaration/Guiding Internal Protocol

	How they were involved?					
	Providing input into process	Attending community meetings	Assisting with community outreach	Writing materials / reports	Engaging with other stakeholders	Providing technical advice/support
Elders Group	82%	12%	0%	0%	0%	6%
Elected Council Committee or Members	60%	30%	0%	0%	10%	0%
Youth Group	62%	38%	0%	0%	0%	0%
Community Members	60%	35%	0%	0%	0%	5%
Contractor/Consultant	31%	0%	6%	38%	0%	25%
Stewardship Organization	29%	0%	7%	0%	21%	43%
Other (e.g., Federal/ Provincial gov't, fisheries experts)	25%	0%	0%	13%	13%	50%

In addition to the water and water-related governance and management initiatives already discussed, approximately half of the survey respondents indicated that they have other types of plans pertaining to

freshwater protection. The following figure illustrates the types and current state of these other plans, which refer to watershed monitoring, cultural activities and presentations related to water and economic development plans. While the majority of the participants indicated that these plans are “still in progress” with most related to land-use planning, forestry and cultural preservation, there is certainly a burgeoning focus on drinking water source protection and tribal park plans.

Figure 1: Types and Current State of Other Plans



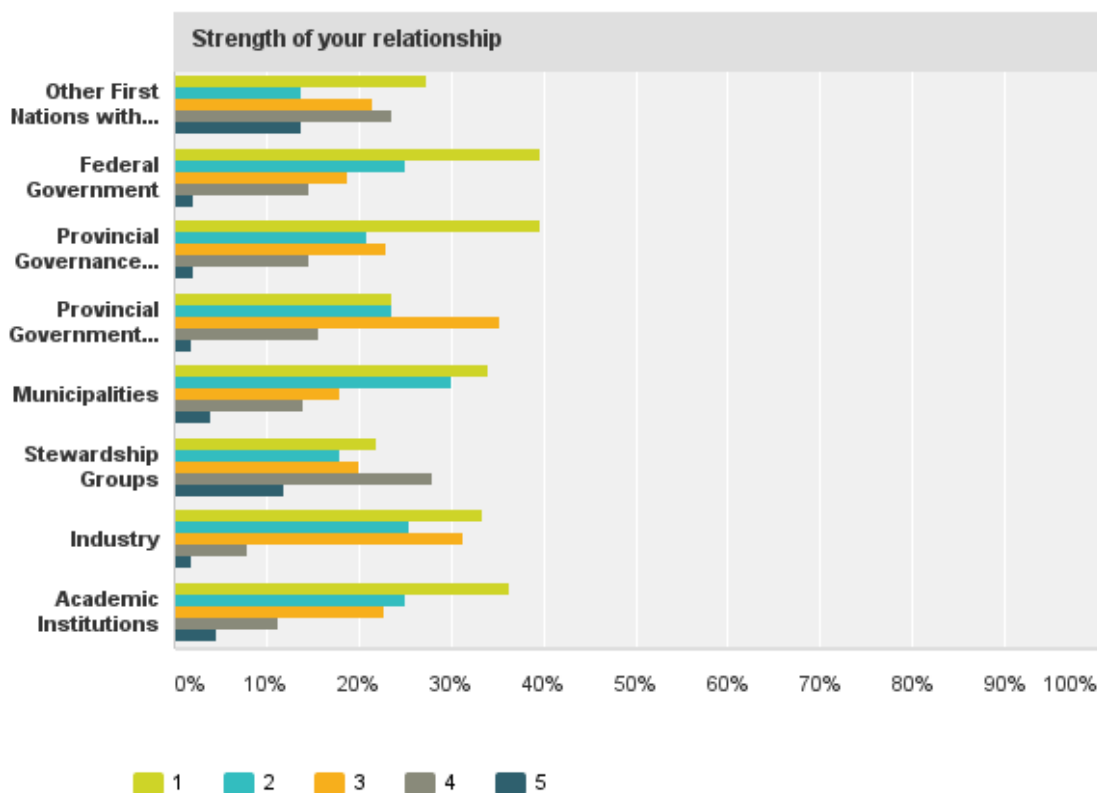
It is clear from the majority of First Nations who participated in the survey that they are aware of the federal and provincial government agencies with legislative or regulatory jurisdiction or authority for some aspect of water governance or management on their traditional territory. The following is a list of governmental agencies/organizations in order of the frequency (# of times they were mentioned): BC Ministry of Forests Lands and Natural Resources (27); Department of Fisheries and Oceans of Canada (21); BC Ministry of the Environment (12); Environment Canada (8); Indigenous and Northern Affairs Canada (6); Provincial Government (5); Municipalities (4); Federal Government (3); Regional Districts (3); Navigable Waters (2); BC Oil and Gas Commission (2); and, BC Ministry of Energy and Mines (2). In

addition, the following were agencies or organizations mentioned once: Nicola Watershed Fisheries Stewardship, Canadian Columbia River Inter-Tribal River Fisheries Commission, BC Parks, Transport Canada, Coast Guard, Oil and Gas, Port Authority, Tribe, BC First Nations Health Authority, Canadian Wildlife Service, and BC Hydro.

C. Strength of Relationships Between First Nations (And With Others)

Building positive relationships are an important part of improving the co-governance and management of shared waters. This section asked participants about the relationships that exist within their First Nation, between First Nations and between First Nations and other stakeholders. Figure 2 illustrates the strength of their relationship regarding watershed issues (1 = weak to 5 = strong) with other First Nations, agencies, organizations, etc. A weak relationship was defined as just receiving information about a project/initiative/plan/etc., and a strong relationship as meaningful collaboration with open and consistent communication and mutually beneficial and respectful. As the figure illustrates, the weakest relationships are with the Federal and Provincial Government, followed by academic institutions, municipalities and industry. That being said there are stronger relationships between First Nations and Provincial “government staff” versus Provincial “governance leadership” which could speak to the connections that First Nations are trying to build with local provincial staff within their traditional territories regarding watershed issues. The strength of relationships among First Nations and between First Nations and stewardship organizations are comparable which may reflect the similar interests that First Nations and the organizations have in watershed issues.

Figure 2: Strength of Relationships Regarding Watershed Issues



First Nations were also asked if they are currently engaged in a dispute (legal or not) regarding water or fisheries habitat protection of which about 38% of respondents indicated they were. The nature of these disputes included:

- Water or water resources:** Challenging water licenses given by the Province; disputing liquefied natural gas (LNG) process project because of potential effects on the water quality and fish habitat; conversations with BC Hydro over the destruction of riparian vegetation from a transmission line; disputes resulting from river bank stabilization; and, pulling out of funding agreement for water because of conflict between district and First Nation;
- Fisheries:** unauthorized fish kills; ongoing issues with DFO regarding fish; impacts from local forestry company on fisheries; the approval of a gas pipeline project for which the regulatory process fails to recognize the significance of watersheds for fisheries; access to bulk water and fishery issues; withdrawals of water from creek by band member possibly harming fish and fish habitat; disputes related to marine fisheries habitat, and;

- **Other:** increased emissions monitoring; underlying authority over land and resource uses which the government continues not to recognize.

D. Key Capacity Challenges and Opportunities

The majority of First Nation participants shared the three biggest threats facing their watershed. Table 3 provides a summary of these threats and the frequency they were mentioned. Collectively the top four threats were industry (hydro, LNG, logging/forestry, mining, resource extraction, oil and gas, storm water systems, dam, fracking); development (construction, urban growth, transportation routes, marine and road traffic); and, climate change. While water itself is not a threat, several participants talked about water shortages, security, usage, withdrawals, over permitting/licensing, water quality and irrigation over-use. The high frequency of threats from industry and water issues coincide with the disputes mentioned above regarding water or fisheries habitat within the watersheds.

Table 3: Threats to the Watershed

Threats to the Watershed (terms used)	Frequency
Industry (hydro, LNG, logging/forestry, mining, resource extraction, oil and gas, storm water systems, dam, fracking)	38
Water shortages, security, usage, withdrawals, over permitting, quality, irrigation over-use	17
Development (construction, urban growth, transportation routes, marine and road traffic)	17
Climate Change	15
Cumulative impacts/effects, environmental impacts	7
Fisheries (commercial fisheries/over fishing, fish habitat decline)	6
Agricultural activities, ranging operations	4
Lack of knowledge (baseline data, understanding of amount of water in the territory, proactive planning tools)	4
Bureaucracy, crown and proponent incursions, non-compliant activities, unresolved title	4
Recreational activities	1
Invasive species	1

In regards to the challenges/barriers First Nations face in moving towards watershed co-governance and freshwater protection, participants shared a suite of them which are illustrated in the following table. Capacity gaps are an ongoing concern for First Nations to participate or engage in water management or governance issues. It is not surprising that government relationships are the second highest challenge/barrier given that capacity is required in order to establish and maintain those relationships.

Table 4: Challenges/Barriers Facing First Nations

Challenges/Barriers Facing First Nations [terms used]	Frequency
Capacity/Resources (funding, training, staffing, educated human resources, technical expertise, time)	45
Government relationships (lack of contacts, local governments, access to provincial reps, provincial support, reluctance, lack of recognition of rights, poor/weak relationships, lack of consultation, overlapping jurisdictions, federal buy-in, local government cooperation)	22
Awareness, lack of information or access to watershed resources	6
Regulations/standards (government policy and laws, irrigation regulations, lack of data requirement standards, lack of regulatory enforcement, lack of implementation of the SCC Tsilqhot'in decision, entrenched management system)	6
Internal (need a champion, lack of internal organized governance, community participation, lack of land use plan in the territory)	5
Industry (limited to no engagement with industry, uncertainly about industry, no incentives for industry to contribute)	4
Lack of a structured process, multiple agencies all working apart	2
Communication	2
Cumulative impacts of roads, logging and mining	1

Some participants (36) provided an estimate on their community's annual budget to directly participate or engage in water co-governance and management issues. The majority indicated the annual budget was under \$30,000 [less than \$10,000 (12); between \$10,000 and \$30,000 (13); between \$30,000 and \$50,000 (1); and, more than \$50,000 (8)]. The participants were provided a series of statements and asked to check all that applied to them to describe the current financial, human and technical capacities to engage in water co-governance and management planning or initiatives. Participants were also afforded the opportunity to provide other comments on each of these capacity areas. The following three tables (5, 6 and 7) provide a summary of the responses to the three capacity areas with commentary on the other comments provided.

Table 5: Financial Capacities

Financial Capacities [number of checked responses from 46 respondents]
We have the budget to develop strategies, plans or visions to protect water in our community (e.g., hire a community project coordinator, talk to the community about projects, provide honoraria). [9]
We dedicate funds to engage with other governments or stakeholders outside of our community on strategies, plans, visions to protect water in our territory (e.g., attend meetings and workshops). [16]
We can hire experts for advice or support from outside agencies/organizations on water-related projects. [13]
Other comments on financial capacities. [25]

The general consensus from participants who provided ‘Other’ comments, which is reflective on the number of responses provided above, is that First Nations do not have the financial capacity to engage in water governance or management planning/initiatives. ‘Other’ comments included participants having only small funds to deal with water systems, emergency type situations, minimal community engagement or short term funding to complete a first phase of water-related planning. One participant indicated that “we can’t be proactive when we don’t have the people, time, technology or money” (Survey respondent, January 29, 2016).

Table 6: Human Resource Capacities

Human Resource Capacities [number of checked responses from 49 respondents]
Within our First Nation organization, we have at least one staff position (or elected leadership) who have responsibilities related to water or water management or water governance. [33]
We have people in our community we could hire to develop community driven strategies, plans or visions to protect water. [15]
We are able to attract employees within the community to meet our organization’s needs. [14]
We are able to attract employees from outside the community to meet our organization’s needs. [14]
We have contact information for municipal staff working on water initiatives within our watershed. [15]
We have contact information for provincial staff working on water initiatives within our watershed. [18]
Other comments on human resource capacities. [12]

While approximately 68% of those who responded have at least one staff position (or elected leadership) who have responsibilities related to water, water management or water governance, there is very limited financial support to develop strategies, plans or visions to protect water in First Nation communities. Based on the responses, there are difficulties to attract employees within and outside the community to meet the needs of the First Nation. The response rate to municipal and provincial contacts is in line with the ‘government relationships’ challenge/barrier First Nations face in moving towards watershed co-governance and freshwater protection. Other comments on human resource capacities included the ongoing pressure on First Nations’ staff to deal with water issues in addition to fisheries or land and resource matters; and, the lack of internal technical expertise and relying on external capacity.

Table 7: Technical Capacities

Technical Capacities [number of checked responses from 47 respondents]
We have staff with technical training to support the development of strategies, plans or visions to protect water. [27]
We have a network of strong experts from outside agencies/organizations for advice on water-related projects. [28]
We have equipment to support the development of strategies, plans, or visions to protect water in our territory (e.g., computers, GPS, hand-held devices for water quality data collection). [22]
We have reliable internet access. [31]
We have access to a database about the health of the watershed (e.g., database on water quality monitoring). [13]
We have the ability to input data into this database about community based monitoring. [13]
Other comments on technical capacities. [14]

It is interesting to note that nearly 60% of the participants indicated they have staff with technical training to support the development of strategies, plans or visions to protect water. However, based on who was involved in the development of such plans in the past, there is a definitely a need for assistance on technical advice/support from external consultants for example. That being said, First Nations appear to have a network of strong experts they can approach for advice on water-related projects but still lack financial support to hire them to undertake the work. While some First Nations have equipment to support the development of strategies, plans or visions to protect water, there is limited access to or the ability to input data into a community-based monitoring database. However, one First Nations organization indicated they are currently developing their own data management system and piloting an application to allow staff to access, use and share the data.

In regards to what First Nations need to start developing a water strategy/plan/vision statement/declaration/guiding internal protocol document, there is strong consensus among the participants the following are important (in parenthesis: number of respondents who mentioned each resource):

- Financial capacity (30);
- Human resource capacity (21);
- Technical capacity (19);
- Templates for plans/strategies (14);
- Chief and Council support/endorsement/approval (11);

- Increased awareness and community engagement (staff awareness; needs, issues and priorities of community; buy-in from community; meaningful and inclusive process; field visits) (10);
- Documents (internal protocol; well-defined mandate; common vision/collaborative direction; ratified policy (5);
- External (buy in from government and industry; partnerships with other stakeholders; engagement with public and industry; partners with capacity and time; government support of finalized plan) (5);
- Data (historical trends of water quality/quantity; database of watershed info) (2); and,
- Established right to access fresh water for community needs (1).

If First Nations had enough financial, technical and human resource capacities, the majority of participants (49) indicated that they would be interested to engage in the following activities (in parenthesis: number of times activity was ranked 10, i.e. very important):

1. Internal watershed planning (27);
2. Shared decision-making arrangement with Province regarding watershed (24);
3. Education/community engagement (23);
4. Community based monitoring/data collection (23);
5. Participation in collaborative initiatives for freshwater protection (19); and,
6. Peer-to-peer learning with other First Nations (14).

While there is certainly an interest to engage in these activities, there needs to be an increase in the level of First Nations understanding of the impacts of the WSA to First Nations' rights, especially in terms of groundwater licensing, environmental flows and watershed governance. This confirms that the BC Government's process to engage and consult with BC First Nations in the development of the WSA¹ was inadequate.

Participants were asked specifically about the FNFC *Water for Fish* initiative. Firstly, of the 49 participants who responded to the question, approximately half indicated that they know about FNFC's *Water for Fish* initiative and those who indicated they didn't are interested to learn more about it. It is

¹ Government of British Columbia. Water Sustainability Act – Public Submissions. 2014.
<http://engage.gov.bc.ca/watersustainabilityact/what-weve-heard/>

important to note that a few of the participants commented that they are pleased with how the existing FNFC *Water for Fish* network operates. Participants were also asked about their interest in an informal network for First Nations to engage in water issues. Table 8 summarizes the responses from approximately 40 participants on what First Nations would want from an informal network to engage in water issues, some of the key factors that would determine its usefulness and how could it be designed to meet First Nations' needs.

Table 8: Components of a BC First Nations Water Network

	What do First Nations want from a Network?	What are some key factors to determine its usefulness?	How would/ could it be designed to meet First Nations' needs?
Information/materials/tools/templates (e.g., list of key provincial contacts, summary of WSA, templates for water declarations and plans, information on watershed rights)	11	5	3
Sharing experiences, connections and knowledge	21	1	1
Support and guidance to undertake specific water related initiatives (e.g., analysis of water table, policy analysis, communication strategy, collecting baseline data, support on upcoming referrals)	5	5	1
Networking and collaboration (e.g., facilitated meetings, training sessions, workshops, undertaking collaborative initiatives, accessibility of workshops, frequency, emails, webinars, peer-to-peer learning)	11	7	11
Structure (e.g., purpose, goals, outcomes, relevance, up-to-date, accessibility, committees, moderated, coordinator, interactive, secure)	2	19	17
Involvement/commitment of First Nations in the Network	0	4	2
Open to external expertise who can provide input (e.g., scientific community; provincial, federal and municipal government; local, sub-regional and regional representation)	1	0	3

It is clear from the participants who participated in these three questions that First Nations want a network that provides the opportunity to share experiences, connections and knowledge about, among other things, lessons learned, best practices, resources, and established processes and relationships. First Nations indicated that they need information/materials/tools/templates to engage in watershed governance and management. Participants suggested that a water network could provide various

resources, for example, a list of key provincial contacts, summaries related to the WSA, templates for water declarations and plans, and information on water/watershed rights. Several participants talked about needing a network that provides different opportunities to network and collaborate, from webinars and conference calls to in-person facilitated meetings and workshops.

For participants who responded, the structure is one of the key factors of a network. It is important that such a network have a purpose, set of goals and outcomes, and be relevant, accessible, interactive and secure. It was suggested that the network be moderated, have a coordinator, and different committees to address particular issues. In terms of designing a network, the structure and networking opportunities were most important to the participants. Networking and collaboration opportunities should take into account the frequency at which network participants would connect virtually or in-person and the accessibility of the participants to attend workshops, meeting or training sessions. While several ideas were provided for the design of the network structure, several participants emphasized the importance of prior consultation with First Nations in the development of a network to ensure it meets their interests and needs for sustainable participation and commitment.

2.3 INTERVIEWS

2.3.1 Process

A suite of one-on-one follow-up phone interviews were conducted to provide the opportunity for survey respondents to: 1) share their views on traditional values, laws and customs and how they are and/or could be the foundation for future watershed planning and co-governance arrangements; 2) discuss in more detail the current relationships and connections (internal and external) between First Nations with other watershed users and stakeholders; and, 3) understand First Nations' perspectives on the conditions required to enable co-governance of water (see Appendix III).

2.3.2 Results

A total of eight interviews were completed with seven different First Nations' representatives from across BC. All except for one of the interviewees were in full-time positions as Director, Environmental Coordinator/Steward, Operations Manager, Councillor or Chief Treaty Negotiator. Interviewees were

asked a series of questions about their engagement in planning for water or water management to date; traditional values, laws and customs; current relationships and connections between First Nations (and with others); and, their perspectives on the conditions required to enable co-governance.

A. Engagement in Planning for Water or Water Management

On reserve, participants are engaged in planning for water or water management in different ways and includes managing and maintaining their own water and sewage treatment plants (on reserve); monitoring for fish habitat and industrial emissions; engaging with proponents on their water development plans and permits for water use in their projects; water protection by-laws; land use plans that include water management; developing environmental policies to help with nation-to-nation negotiations; and, dealing with water management issues (i.e., negotiating an allocation with the provincial government) through the treaty process. Two participants referenced BC's new WSA, one of which has been involved in the consultation process for the development of the Act and the other discussed concerns with the gaps and differences in water management through the Act but explained that engaging through their Strategic Engagement Agreement provides "an avenue into meaningful water management planning" (Interviewee E, personal communication, February 9, 2016) and an opportunity to share information through the Province's data and special management tools. First Nations have also been involved in developing Water Strategy Frameworks to support watershed planning and governance; Freshwater Use Plans for territorial water management while maintaining traditional use and treaty rights; conducting a stream study, applying for and receiving water licenses for hydropower projects; completing a Treaty Related Measures water study within their territory for treaty negotiations and management purposes; and, hiring experts to review studies, provide recommendations and draft proposals for water allocations in treaty negotiations. One of the participants indicated that they are actively involved in other initiatives such as the BC-NWT Bilateral Water Management Agreement for the management of transboundary water as part of the Mackenzie River Basin Transboundary Waters Master Agreement.

B. Traditional Values, Laws and Customs

Several of the First Nations we interviewed indicated that they have traditional values, laws and customs to govern and manage their water resources. The protocols have been part of the decision-making and

“Our elders have always told us that water is life. Water provides us with sustenance, health, mobility and a spiritual and cultural connection to the land and all our relations. The health of the water directly impacts the health and well-being of our people. Threaten the health of the water and you interfere with our ability to practice our constitutionally-protected treaty rights and threaten our very identity.”

– Interviewee D, personal communication, February 5 2016

referral process, referred to when reviewing development applications/proposals within their territory and “translated into English” to work with the provincial government. The following quote illustrates the importance of traditional values, laws and customs:

A few of the participants indicated that they have not used traditional values, laws and customs to govern or manage water resources in their traditional territory, but they are working on a process and have plans to use them in the future. Others have indicated they would need to discuss what these values, laws and customs are and how to use them with their membership. While traditional values, laws and customs are not explicitly written into formal documents, traditional values and treaty rights are recognized or will be recognized in the development of water related documents (e.g., water strategy, freshwater use plan, land and resource use plan) and through various activities (e.g., cultural camps). One participant indicated that the bylaws were created in collaboration with the local municipalities so they didn’t include traditional laws.

C. Relationships and Connections between First Nations (and with others)

Participants expressed different characteristics of good relationships including good communication, sharing information, trust, and developing understanding of water issues and perspectives. Participants that were interviewed indicated that they are collaborating with different people inside and outside of the community on water licensing/permitting, planning and management. Internally, participants are collaborating with community and Band/Elected Council. Externally, participants are

“Reconciliation is re- empowering and assists in decision making process and that is necessary.”

~Interviewee E, personal communication, February 9 2016

collaborating with other First Nations and tribal associations/organizations (e.g., ONA, FNFC), environmental non-governmental organizations (e.g., POLIS, CIER, Waterlution), government (e.g., INAC, provincial government, DFO, Environment Canada), corporations, universities, and consultants. In regards to future collaborative opportunities, one participant indicated that they need approval from Chief and Council to participate and another expressed that they would be interested in collaboration with other First Nations, organizations or local government.

D. First Nations Perspectives on the Conditions Required to Enable Co-Governance

Participants believe the key conditions required to enable co-governance arrangements between First Nations or between First Nations and other stakeholders include:

- Information meetings to share how First Nations take care of the land, water and air;
- Understanding indigenous governance systems;
- Identifying consultation requirements under the WSA;
- Understanding the impact of the WSA on the reserves;
- Early and meaningful engagement, open dialogue and shared decision-making;
- A process for acknowledgement and true reconciliation;
- Strength, capacity and good staff enabling opportunities for engagement;
- Equitable representation;
- Limited influence from industry;
- Capacity and funding;
- Willingness to negotiate agreements, and;
- Understanding of the traditional stories and laws that governed the stewardship of water and uncover any traditional agreements between Nations.

A few examples of how traditional values, laws and customs could be part of future planning or co-governance arrangements include working with local First Nations at the outset of starting water management initiatives and through policy, constitutions and treaty agreements. First Nations need different resources (i.e., human, technical, financial) to engage in co-governance arrangements with other First Nations or to start developing a water strategy/plan/vision statement/declaration/guiding internal protocol document. Participants indicated that these resources include the following:

- **Human:** involvement of community members, training (e.g., GIS, environmental stewardship practices), community liaisons, support from other agencies and First Nations (e.g., plan templates, sharing of resource experts);
- **Financial:** funding; and,
- **Technical:** equipment (e.g., GIS, GPS, real-time data and monitoring, access to web portals for data management).

2.4 SOCIAL NETWORK ANALYSIS

2.4.1 Process

The Project Team contracted [Limnology Research Corp.](#) to conduct the social network analysis (SNA) of BC First Nations and the perceived level of collaboration on water issues. The goal of the SNA was to develop baseline network maps that represent the people and their connections to each other and provide a preliminary look at the ties between First Nations and between First Nations and other levels of government and NGOs. The results will help identify how to support First Nations in watershed co-governance, management and planning. The following SNA results, provided by Limnology Research Corp.,² were shared during a webinar on April 15, 2016 and at the FNFC Water Planning and Governance Workshop on April 26, 2016.

2.4.2 Results

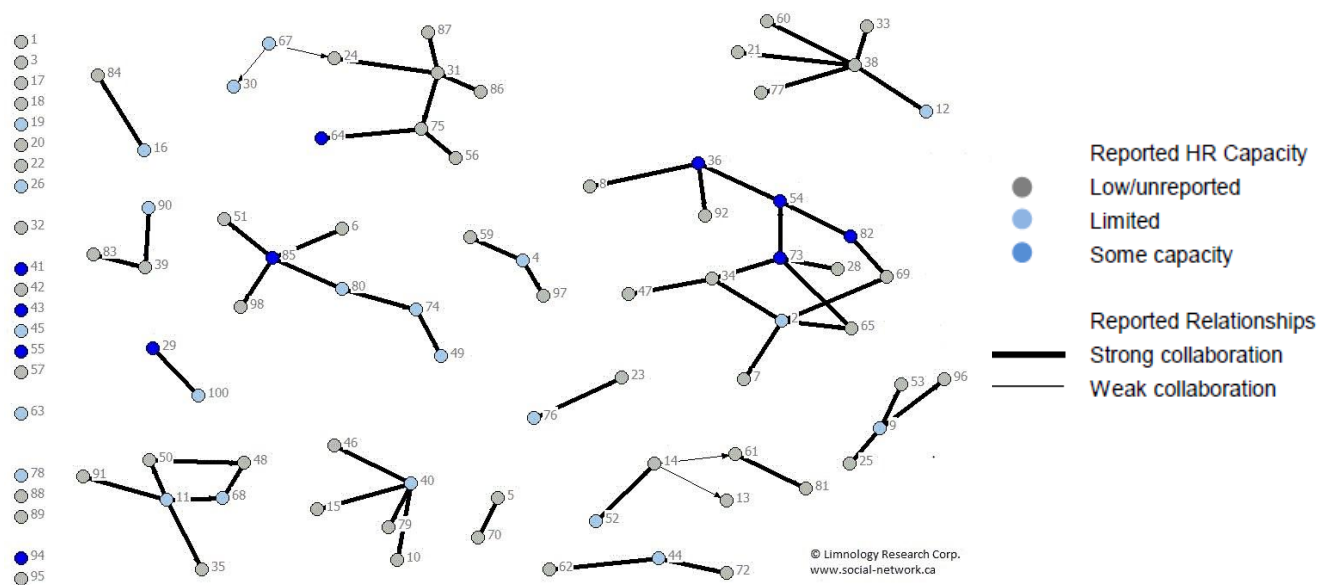
In order to develop the social network maps, the responses from several survey questions were analyzed (i.e., questions related to First Nations capacity and collaboration with other First Nations in shared decision-making for freshwater protection). The level of capacity (low/unreported, limited, some) for the development of the social network maps was determined by the amount of information survey respondents provided about capacity and the current level of internal human capacity and specifically dedicated to water management and governance. Given the survey was completed around the time that the WSA came into force (February 29, 2016), it is important to note that the survey results reported in this study is not reflective of First Nations capacity to manage or address new water

² Limnology Research Corp. 2016. *Social Network Analysis*. Kelowna, British Columbia: Limnology Research Corp. Indigenous Watershed Initiatives and Co-Governance Arrangements: A British Columbia Systematic Review 26

governance or management issues related to the new Act and other emerging needs. Further research could to be conducted to determine those needs.

The social network maps generated are consistent with the qualitative data. As Figure 3 illustrates, the current collaborations between BC First Nations are generally low, with some noted exceptions. First Nations are generally operating in isolation with regards to water planning and governance. A high number of survey respondents (21 individuals or 33%) indicated no collaborative relationships with other First Nations which are illustrated as isolates. The reported low capacity is quite common across First Nations. As the figure depicts, there are a few First Nations that are reported as having some capacity who are also part of the largest sub-group, which suggests that First Nations with some capacity are better prepared to connect with other First Nations.


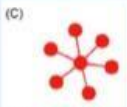
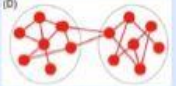
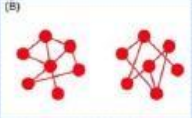

Figure 3: Water Networks among First Nations in BC



Water Networks Among First Nations in BC

In comparing this limited snapshot of the First Nations water network to other network types (Figure 4), it would be characterized as fragmented, decentralized and consisting of several isolated sub-groups. Working towards a cohesive and polycentric network can lead to improved information flow and knowledge sharing, capacity to capitalize on new opportunities, value-creating interactions, opportunities for innovation and community member engagement through communities of practice (Limnology Research Corp., 2016). Bridging organizational silos and building relationships through existing organizations could support the First Nations water network resiliency and foster improved community and collaboration amongst its members.

Figure 4: Other Collaborative Water Networks

Bodin & Crona (2009)	Pahl-Wostle (2012)	Study Results
 High cohesiveness	Polycentric	
 Highly centralized	Centralized	
 Distinguished groups	Fragmented centralized	
 Isolated sub-groups		 FNs Collaboration in British Columbia N = 64, Density = 0.006

However, through the analysis it was also discovered that NGOs and government (municipal, provincial and federal levels) do not play a significant role in improving the level of collaboration between First Nations in BC. This is based on the network density which is based on the number of actual ties or connections divided by the number of possible ties or connections (See Appendix 4). The more ties or

connections the increased network density. For the most part, First Nations who reported a higher degree of internal capacity have a higher likelihood to collaborate with other levels of government and NGOs. Closer relationships may provide several benefits including improved access to government funding opportunities and better communication and opportunities to address water management and governance issues (Limnology Research Corp., 2016). Overall, the social network maps provide a first glance at the First Nations water network.

3.0 KEY FINDINGS AND NEXT STEPS

3.1 KEY FINDINGS

Firstly, the development of the resource database is an important outcome of the literature review, providing invaluable information on other initiatives for First Nations and other water users or groups across the province to draw upon as they move forward with water/watershed initiatives. Providing a resource database with links to publically available documents could be useful for other indigenous communities across Canada involved in water/watershed initiatives.

Secondly, the results from the surveys and interviews helped confirm there are capacity gaps (human, technical, financial) and it is therefore often difficult for First Nations to participate in water planning, governance and management. As discussed in section 2.2.2, the following are a few of the survey results describing capacity barriers experienced by First Nations to engage in water governance, planning and management issues:

- Annual budget to directly participate or engage in water co-governance and management issues is frequently under \$30,000 (half of which are less than \$10,000);
- Strong consensus that First Nations do not have the financial capacity to engage in water governance or management planning/initiatives;
- Ongoing pressure on First Nations' staff to deal with water issues in addition to fisheries or land and resource matters; and,
- Lack of internal technical expertise means First Nations are relying on external capacity which is costly.

If capacity was available, First Nations would be interested to engage in water planning/management activities and/or water governance arrangements, including internal water/watershed planning, shared decision-making arrangements with the Province, community-based monitoring and education and community engagement on water/watershed planning, governance and management. Based on conversations with First Nations at the FNFC Water Planning and Governance Workshop in April 2016, internal capacity building of First Nations is required before effective co-governance can take place with government and other non-indigenous stakeholders.

Thirdly, the SNA benchmarks the level of collaboration with regards to water between First Nations and between First Nations and other levels of government and NGOs. As the study only represents approximately 25% of BC First Nations, it provides a useful starting point for a larger conversation on how First Nations may improve their water network by collaborating and sharing information. This can be accomplished informally but also formally through the continued development of the FNFC First Nations Water Network.

3.2 NEXT STEPS

The following is a suite of recommendations (short and medium term) for related work regarding indigenous water/watershed plans and co-governance arrangements in BC. These recommendations are based on the results from the data collection (i.e., surveys and interviews), the FNFC Water Planning and Governance Workshop in April 2016 and the SNA which all highlight the widespread lack of capacity of BC First Nations to engage in meaningful conversations on water and collaborate with the Province and other non-First Nations stakeholders, especially since the WSA came into force on February 29, 2016.

Short-term (1-2 years)

- Continue to engage in on-going communication with First Nations across BC to capture a more complete picture of specific capacity needs (human, technological, financial) and interests in emerging water/watershed related planning and governance issues; including exploring different approaches to making connections between Elders and youth; and expanding the FNFC First Nations

Water Network activities to facilitate focused peer-to-peer learning on articulating traditional water laws.

- Support interested First Nations' communities to develop regulatory options based in indigenous water laws to inform the development of regulations as part of implementation of the WSA.
- Convene organizations working in the First Nations water/watershed governance space in BC to determine roles, niches, and gaps in order to work towards shared goals and potentially enhance collaboration.
- Identify conditions necessary for First Nations' communities to engage effectively in water planning, governance and co-governance in their territories.
- Scope, resource and implement a sustained pilot program to support interested First Nations communities to develop water governance, planning and management strategies in their territories which is required before effective co-governance can take place with non-indigenous governments and other stakeholders in the future.
- Conduct research and develop recommendations on sustainable funding and delivery mechanisms for First Nations' communities in BC to support key water/watershed governance, planning and management activities in their territories.
- Connect interested First Nations identified through the SNA to funders and/or collaborators for further discussion on the development of water/watershed or water-related planning, co-governance and/or management initiatives.
- Disseminate needs assessment results to First Nations and assist communities in using the results to leverage support for indigenous water/watershed planning initiatives and governance arrangements.
- Communicate needs assessment results to the provincial government, ENGOs, grassroots water groups across BC, and other interested stakeholders.

Medium-term (3-5 years)

- Continue to implement a sustained pilot program to support interested First Nations communities to develop freshwater governance, planning and management strategies in their territories and identify best practices to apply to other communities.

- Re-assess readiness of First Nations across BC to engage in co-governance arrangements in their territories.
- Support First Nations' communities to develop and implement freshwater planning and governance rooted in indigenous water laws, including applying these to the regulatory development phase as part of implementation of the WSA.
- Pilot sustainable water management funding mechanisms in First Nation communities.
- Enhance the utility of the social network maps and create other networking visuals.

APPENDIX ONE

LIST OF DOCUMENTS

A. Water Plans

Coquitlam River Watershed Strategy Community Engagement and Visioning Phase II. The City of Coquitlam and Kwikwetlem First Nation. 2009.

http://www.coquitlamriverwatershed.ca/sites/default/files/CRWS_Phase_II_Community_Engagement%26Visioning_Summary_Report_Nov_2009.pdf

Coquitlam River Watershed Strategy Public Assemblies on Phase III: Governance Strategy and Direction Setting. The City of Coquitlam and Kwikwetlem First Nation. 2010.

http://www.coquitlamriverwatershed.ca/sites/default/files/CRWS_Phase_III_governance_strategy_and_development_summary_July_2010_0.PDF

Draft Champagne and Aishihik First Nations (CAFN) Water Strategy. Champagne and Aishihik First Nations. 2013.

http://cafn.ca/wp-content/uploads/2015/04/Final_CAFN_Water_Strategy.pdf

Fraser Salmon and Watersheds Program – Living Rivers Project Coquitlam River Stakeholder Engagement Phase I: The Story of the Coquitlam River Watershed Past, Present and Future. The City of Coquitlam and Kwikwetlem First Nation. 2008.

http://www.coquitlamriverwatershed.ca/sites/default/files/CRWS_Phase_I_Background_and_Research_2008_0.pdf

Lower Coquitlam River Watershed Action Plan July 2012 – April 2015 Coquitlam River Strategies for Action Progress Report # 1. The City of Coquitlam and Kwikwetlem First Nation. 2015.

http://www.coquitlamriverwatershed.ca/sites/default/files/CITYDOCS-%231960497-v1-Lower_Coquitlam_River_Watershed_Plan_Progress_Report_1_FINAL_for_web_April_2015.PDF

Nisqually Watershed Stewardship Plan (Path to a Sustainable Watershed). Nisqually River Council (Includes participation from Nisqually Indian Tribe in USA). 2012.

http://www.stewardshippartners.org/wp-content/uploads/2012/12/Nisqually_Stewardship_Plan.pdf

Syilx Nation Siwłkʷ (Water) Declaration. Okanagan Nation Alliance. 2014.

http://www.syilx.org/wordpress/wp-content/uploads/2012/11/Okanagan-Nation-Water-Declaration_Final_CEC_Adopted_July_31_2014.pdf

Syilx Water Strategy. Okanagan Nation Alliance. In Progress.

<http://www.syilx.org/operations/natural-resourcesland-use/water/>

B. Land Use Plans

Gitga'at First Nation Strategic Land Use Planning Agreement. Gitga'at First Nation and Province of BC. <https://docs.neb-one.gc.ca/ll->

eng/llisapi.dll/fetch/2000/90464/90552/384192/620327/624910/697575/778105/D71-8-7 - Gitga at First Nation - 7 - Gitga at- BC Strategic Land Use Planning Agreement July 23%2C 2006 - A2K5F7.pdf?nodeid=778118&vernum=-2

General Protocol Agreement on Land Use Planning and Interim Measures. Gitga'at First Nation, Haida Nation, Haisla Nation, Heiltsuk Nation, Kitasoo/Xaixais First Nation, Metlakatla First Nation, Old Massett Village Council, Skidegate Band Council, and the Province of BC. 2001. <http://www.coastforestconservationinitiative.com/pdf/finalprotocol.pdf>

Haisla Nation Land Use Plan. Haisla Nation. 2005 draft. Not available online.

Haida Gwaii Strategic Land Use Agreement. Haida Gwaii and Province of BC. 2007. <http://www.haidanation.ca/Pages/Agreements/pdfs/Haida%20Gwaii%20Strategic%20Land%20Use%20Agreement.pdf>

Haisla Nation Land Code. Haisla Nation. 2013 – Coming into effect in April 2016.

Heiltsuk Land Use Plan. Heiltsuk First Nation. 2005. <http://www.firstnations.de/media/04-1-land-use-plan.pdf>

Heiltsuk Strategic Land Use Planning Agreement. Heiltsuk First Nation and Province of BC. 2001. https://www.for.gov.bc.ca/tasb/slrp/lrmp/nanaimo/central_north_coast/docs/Heiltsuk_FN_Signed_SLUPA.pdf

Hupacasath First Nation Land Use Plan Phase 2. Hupacasath First Nation. Phase 1 (2003), Phase 2 (2006). <http://hupacasath.ca/wp-content/uploads/2015/02/LUP-Phase2-2006.pdf>

Kitselas Land Use Plan. Kitselas First Nation. Started in 2010 but is revised as needed. http://www.kitselas.com/images/uploads/docs/Kitselas_Land_Use_Plan.pdf

Kitasoo/Xaixais First Nation Strategic Land Use Planning Agreement. Kitasoo/Xaixais First Nation and Province of BC. 2006. https://www.for.gov.bc.ca/tasb/slrp/lrmp/nanaimo/central_north_coast/docs/Kitasoo_Xaixais_FN_Signed_SLUPA.pdf

Land and Resource Protocol Agreement. Gitga'at First Nation, Haisla Nation, Heiltsuk Nation, Kitasoo/Xaixais First Nation, Metlakatla First Nation, Wuikinuxv First Nation, and the Province of BC. 2006. https://www.for.gov.bc.ca/tasb/slrp/lrmp/nanaimo/central_north_coast/docs/Turning_Point_Protocol_Agreement_Signed.pdf

Land and Water Use Plan for Tla'amin Traditional Territory. Sliammon Natural Resources Committee. 2005. <http://www.sliammontreaty.com/wp-content/uploads/2013/01/Land-nd-Water-Use-Plan.pdf>

Lil'wat Land Use Plan: Phase I, The Vision and Plan for the Land and Resources of Lil'wat Nation Traditional Territory. Lil'wat Nation. 2006.
https://www.for.gov.bc.ca/tasb/slrp/lrmp/surrey/s2s/docs/S2SLRMP_G2G_Agreements/S2SG2_G_Lilwat_BC_Agreement.pdf

Metlakatla First Nation Strategic Land and Resource Use Plan. Metlakatla First Nation. 2004 - first draft.
https://www.for.gov.bc.ca/tasb/slrp/lrmp/nanaimo/central_north_coast/docs/Metlakatla_FN_Signed_SLUPA.pdf

North Coast Land and Resource Management Plan Final Recommendations. BC Ministry of Sustainable Resource Management, Tsimshian Tribes of Laxkw'alaams, Gixaala First Nation, Kitsumkalum First Nation, Haisla First Nation, Metlakatla, and Nisga'a Lisims Government. 2004.
https://www.for.gov.bc.ca/tasb/slrp/lrmp/nanaimo/ncoast/docs/NCLRMP_Final_Recommendations_feb_2_2005.pdf

Sea to Sky Land and Resource Management Plan. Province of BC. 2008.
https://www.for.gov.bc.ca/tasb/slrp/lrmp/surrey/s2s/docs/S2S_LRMP_Final/S2SLRMP_Final_April2008.pdf

Strategic Land Use Planning Agreement. Haisla Nation and Province of BC. 2006.
https://www.for.gov.bc.ca/tasb/slrp/lrmp/nanaimo/central_north_coast/docs/Haisla_FN_SLUP_A_Signed.pdf

Strategic Land Use Planning Agreement. Wuikinuxv First Nation and Province of BC. 2006.
http://coastalfirstnations.ca/sites/default/files/imce/Wuikinuxv_FN_SLUPA.pdf

Territory land use plan for Hupacasath First Nations. Hupacasath First Nation. Phase 1 (2003). Not available online.

Tla'amin Land Use Plan. 2010. <http://sliammonfirstnation.com/wp-content/uploads/2014/11/Tlaamin-Land-Use-Plan-March-2010.pdf>

Wóoshtin wudidáa Atlin Taku Land Use Plan. Taku River Tlingit First Nation and Province of BC. 2011. <https://www.for.gov.bc.ca/tasb/slrp/pdf/srmp/ATLIN-TAKU-LUP.pdf>

Wuikinuxv Land and Marine Use Plan. Wuikinuxv First Nation. 2003.
http://www.coastalfirstnations.ca/sites/default/files/imce/Wuikinuxv_FN_SLUPA.pdf

C. Cultural and Heritage Plans

Dasiqox Tribal Park: Nexwagwez'an – There for us. Yunesit'in and Xeni Gwet'in of the Tsilhqot'in Nation. 2014. <http://www.dasiqox.org/>

Kwikwetlem First Nation Heritage Policy. Last updated 2013. Not available online.

Stó:lō Heritage Policy. Approved by Stó:lō Nation Lalems ye Stó:lō Si:ya:m (LYSS). 2013. http://www.srrmcentre.com/media_pdf/StoloHeritagePolicyManual.pdf

D. Strategic Engagement Agreements/Strategies & Shared Decision-Making Strategies

Kaska Dena Council Strategic Engagement Agreement - Daylu Dena Council; Dease River First Nation; Kwadacha First Nation. Kaska Dena Council and Province of British Columbia. 2015. <http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations-negotiations/first-nations-a-z-listing/kaska-dena-council>

Ktunaxa Nation Strategic Engagement Agreement - Akisq'nuk First Nation; Lower Kootenay Indian Band; St. Mary's Indian Band; Tobacco Plains Indian Band. Ktunaxa Nation and Province of British Columbia. 2013. <http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations-negotiations/first-nations-a-z-listing/ktunaxa-nation>

Nanwakolas Council Strategic Engagement Agreement and Amendment - Da'naxda'xw Awaetlala First Nation; Gwa'sala-'Nakwaxda'xw First Nation Kwiakah First Nation; K'omoks First Nation; Mamalllkulla-Qwe'qwa'sot'em First Nation; Tlowitsis First Nation; Wei Wai Kum (Campbell River) First Nation. Nanwakolas Council and the Province of British Columbia. 2010 and amended in 2014. <http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations-negotiations/first-nations-a-z-listing/nanwakolas-council>

Stó:lō First Nations Strategic Engagement Agreement and Amendments - Aitchelitz Band Chawathil First Nation; Cheam First Nation; Leq'á:mel First Nation; Scowlitz First Nation; Shxw'ow'hamel First Nation; Shxwhá:y Village; Skawahlook First Nation; Skowkale First Nation Soowahlie First Nation; Squiala First Nation; Sumas First Nation Ts'elxwéyeqw Tribe; Tzeachten First Nation; Yakwekwioose First Nation. Stó:lō First Nation and the Province of British Columbia. 2014 and amended in 2014/2015. <http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations-negotiations/first-nations-a-z-listing/st-lo-nation1>

Tahltan Central Council Shared Decision Making Agreement - Iskut Band Council; Tahltan Band Council. Tahltan Central Council and the Province of BC. 2013.

<http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations-negotiations/first-nations-a-z-listing/tahltan-central-council>

Taku River Tlingit First Nation Strategic Engagement Agreement (also known as the Wooshtinyan Too.Aat Land and Resource Management and Shared Decision Making Agreement). Taku River Tlingit First Nation and the Province of BC. 2011 and amended in 2015.
<http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations-negotiations/first-nations-a-z-listing/taku-river-tlingit-first-nations-atlin-first-nation>

Tsilhqot'in National Government Strategic Engagement Agreement and Amendment (also known as the Tsilhqot'in National Government SEA Respecting Lands & Resource Management) - Esdilagh First Nation (Alexandria Indian Band); Stone Indian Band (Yunesit'in); Tl'etinqox-t'in Government Office (Anaham) Toosey Indian Band; Tsi Del Del (Alexis Creek Indian Band).

Tsilhqot'in National Government and the Province of BC. 2013/2014.
<http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations-negotiations/first-nations-a-z-listing/tsilhqot-in-national-government>

Tsilhqot'in Stewardship Agreement (TSA). Tsilhqot'in National Government, Tsilhqotin Nation, and the Province of BC. 2014 – 2017 Agreement Renewal. Not available online.

E. Marine Use Plans

Draft Wei Wai Kum Marine Plan. Wei Wai Kum First Nation. 2014.
<http://www.nanwakolas.com/wei-wai-kum-first-nation>

Draft Da'naxda'xw/Awaetlala First Nation Marine Plan. Da'naxda'xw/Awaetlala First Nation. 2012. Not available online.

Gwaii Haanas Marine Agreement. Federal Government and Council of the Haida Nation. 2010.
<http://www.pc.gc.ca/eng/pn-np/bc/gwaiihaanas/plan/~media/pn-np/bc/gwaiihaanas/pdfs/plans/GHMarineAgreement2010.ashx>

Ha-ma-yas Plan. Nanwakolas Council. Not available online.

Kitasoo/Xaixais Integrated Marine Use Plan. Kitasoo/Xaixais First Nation. 2011 draft.
<https://docs.neb-one.gc.ca/II-eng/IIisapi.dll/fetch/2000/90464/90552/384192/620327/624910/702100/776935/D111-2-01 - Kitasoo Xaixais Integrated Resource Authority - itasoo MUP JRP evidence 19dec2011 - A2K3T1.pdf?nodeid=776936&vernum=-2>

K'omoks First Nation Marine Use Plan. K'omoks First Nation. 2012.

<http://www.nanwakolas.com/sites/default/files/K'omoksMarinePlanAdditionsSept2014.pdf>

Kwiakah First Nation Marine Plan. Kwiakah First Nation. 2012. Not available online.

Mamalilikulla-Qwe'Qwa'Sot'Em First Nation Marine Use Plan. Mamalilikulla-Qwe'Qwa'Sot'Em First Nation and Nanwakolas Council. 2012, with additions in 2013.

<http://www.nanwakolas.com/sites/default/files/M-Q%20Marine%20Plan%20Additions%20June%202013.pdf>

North Vancouver Island Marine Use Plan. Province of BC and Nanwakolas Council. 2015.

http://mappocean.org/wp-content/uploads/2015/11/MarinePlan_NorthVancouverIsland_28072015_corrected.pdf

Tlowitsis Nation Marine Plan. Tlowitsis Nation. 2012. <http://www.nanwakolas.com/tlowitsis-nation-marine-planning>

F. Forestry Plans

First Nations Perspectives: Relating to Forest Practices Standards in Clayoquot Sound.

Clayoquot Sound Scientific Panel. 1995.

https://www.for.gov.bc.ca/tasb/slrp/lrmp/nanaimo/clayoquot_sound/archive/reports/clay3.txt

G. Other Non- First Nations Related Documents

Aboriginal Title and Provincial Regulation: The Impact of Tsilhqot'in Nation v B.C. POLIS Project on Ecological Governance (POLIS) and Centre for Global Studies. The University of Victoria.

2014. https://www.youtube.com/watch?v=zJyblpM7hEw&list=PLXT-k-8BkDUcF00_xuPapB86Tjl4cvQRg

A Blueprint for Watershed Governance in British Columbia. Oliver Brandes & Jon O'Riordan (POLIS). 2014. <http://www.poliswaterproject.org/blueprint>

"All of the water that is in our reserves and that is in our territory is ours": colonial and Indigenous water governance in unceded Indigenous territories in British Columbia (UBC Masters Thesis). Rosie Simms. 2014.

http://circle.ubc.ca/bitstream/handle/2429/51475/ubc_2015_february_simms_beatrice.pdf?sequence=1

A new direction for strategic land use planning in B.C. Integrated land management bureau. Ministry of Agriculture and Lands of British Columbia. 2006.

<https://www.for.gov.bc.ca/tasb/slrp/policies-guides/new%20direction%20synopsis.pdf>

Water Strategy. BC Assembly of First Nations. 2013.

<http://www.afn.ca/uploads/files/water/firstnationswaterstrategy.pdf>

BC First Nations: Land Use Planning Effective Practices. Ecotrust Canada. 2009.

<http://www.newrelationshiptrust.ca/downloads/land-use-planning-report.pdf>

BC Floodplain map inventory report. BC Real Estate Association. 2015. Not available online.

Collaborative approaches to governance for water and Indigenous peoples: A case study from British Columbia, Canada. Sue Von der Porten & Rob de Loë. Volume 50: 149-160. 2013.

<http://www.sciencedirect.com/science/article/pii/S0016718513001838>

Collaborative Watershed Governance - Keys to Success and Current Examples in BC. Theresa Fresco (Fraser Basin Council). 2015 (May).

[http://www.fraserbasin.bc.ca/Library/Water_BCWF/Collaborative Watershed Governance Keys to Success and Case Studies-May1-2015.pdf](http://www.fraserbasin.bc.ca/Library/Water_BCWF/Collaborative_Watershed_Governance_Keys_to_Success_and_Case_Studies-May1-2015.pdf)

Decision-Makers' Brief: A Blueprint for Watershed Governance in British Columbia. Oliver Brandes & Jon O'Riordan (POLIS). 2014. <http://poliswaterproject.org/publication/760>

First Nations Consultation Guidelines: Sustainable Resource Management Planning. Ministry of Sustainable Resource Management of British Columbia. 2004.

<https://www.for.gov.bc.ca/tasb/slrp/policies-guides/fnconsultation%20guidelines-final-web.pdf>

First Nations On-Reserve Source Water Protection Plan. Aboriginal Affairs and Northern Development of Canada. 2014. <http://www.aadnc-aandc.gc.ca/eng/1398369474357/1398369572276>

First Nation Water Rights in BC- A historical summary of the rights of the Lower Nicola First Nation. Ministry of Environment, Lands and Parks Water Management Branch of British Columbia. 2009. <https://www.for.gov.bc.ca/hfd/library/documents/bib88480-1.pdf>

Getting it Right: A Communications Toolkit for Strengthening BC's New Water Sustainability Act. Canadian Freshwater Alliance. 2015. http://www.freshwateralliance.ca/getting_it_right

Governance Took-kit for First Nations: Water Chapter. BC Assembly of First Nations. No date. <http://www.bcafn.ca/documents/GR2S33.31.pdf> Not available online.

Governing Transboundary Waters: Canada, the United States, and Indigenous Communities. Emma Norman. 2014 (Nov).

Haisla Nation Governance toolkit best practices. National Centre for First Nations Governance. 2009. http://fngovernance.org/toolkit/best_practice/haisla_first_nation

Indigenous water governance: Insights from the hydrosocial relations of the Koyukon Athabaskan village of Ruby, Alaska. Nicole J. Wilson. Volume 57: 1-11. 2014.

<http://www.sciencedirect.com/science/article/pii/S0016718514001742>

Interview with Nadia Joe: Co-governance of Water. Water Canada Magazine. 2014.

<http://watercanada.net/2014/interview-nadia-joe/>

Implementing First Nation Land Use Plans: Challenges and Results. Donovan & Company Barristers and Solicitors. 2008. [http://www.aboriginal-](http://www.aboriginal-law.com/~aborig/uploads/documents/PDFs/events%20and%20pubs/Implementing%20First%20Nation%20Land%20Use%20Plans.pdf)

[law.com/~aborig/uploads/documents/PDFs/events%20and%20pubs/Implementing%20First%20Nation%20Land%20Use%20Plans.pdf](http://www.aboriginal-law.com/~aborig/uploads/documents/PDFs/events%20and%20pubs/Implementing%20First%20Nation%20Land%20Use%20Plans.pdf)

Lessons Learned in Conservation Planning and Multi-Stakeholder Collaboration: The Muskwa-Kechika Management Area. Julian Griggs & David Luff. 2009.

http://www.unbc.ca/assets/bc_protected_area_research_forum/conferences/griggs_and_luff_muskwa_kechika.pdf

Living Water Smart: British Columbia's Water Plan. Province of British Columbia. 2008.

<http://www2.gov.bc.ca/gov/content/environment/air-land-water/water>

National First Nations Water Strategy. Assembly of First Nations. 2012.

<http://www.afn.ca/uploads/files/water/firstnationswaterstrategy.pdf>

Practicing Shared Water Governance in Canada: A Primer. Linda Nowlan (West Coast Environmental Law) and Karen Bakker (Program of Water Governance, University of British Columbia). 2010. [http://watergovernance.ca/wp-](http://watergovernance.ca/wp-content/uploads/2010/08/PractisingSharedWaterGovernancePrimer_final1.pdf)

[content/uploads/2010/08/PractisingSharedWaterGovernancePrimer_final1.pdf](http://watergovernance.ca/wp-content/uploads/2010/08/PractisingSharedWaterGovernancePrimer_final1.pdf)

Presentation on Co-governance. Jessica Clogg (WCEL). 2012.

<http://bvcentre.ca/files/Conferences/proceedings/20121115%201100%20Clogg.mp3>

Regional Cumulative Effects Management in British Columbia: A Legal Discussion Paper. Jessica Clogg (WCEL). Forthcoming Paper (still under peer review). Not available online.

Roadmaps that guide us in resource management EBM Factsheet 2; Land Use Plans. Turning Point Initiative Coastal First Nations. 2009.

http://coastalfirstnations.ca/sites/default/files/imce/Fact_Sheet_2.pdf

Step-by-Step: Final Report for the Shared Decision-Making in BC Project. SFU - Julian Griggs and Jenna Dunsby. 2015. [https://www.sfu.ca/dialogue/watch-read-discover/shared-decision-](https://www.sfu.ca/dialogue/watch-read-discover/shared-decision-making-in-bc.html#&panel1-2)

[making-in-bc.html#&panel1-2](https://www.sfu.ca/dialogue/watch-read-discover/shared-decision-making-in-bc.html#&panel1-2)

The Blue Paper: Water Co-governance in Canada. FLOW (Forum for Leadership on Water). 2014. <http://www.flowcanada.org/document/374>

First Nations Engagement in Water Management and Governance. First Nations Fisheries Council. 2015. <http://fnfcwater.org/2015/02/23/not-just-fish-out-of-water/>. Not available online.

The Cowichan Watershed Board: An Evolution of Collaborative Watershed Governance. Rodger Hunder (Cowichan Watershed Board) & Oliver Brandes (POLIS). No date. http://poliswaterproject.org/sites/default/files/CWBCaseStudy_WebFINAL_0.pdf

Towards Watershed Governance in British Columbia and Beyond; A forum for water practitioners, watershed groups, First Nations, and other decision-makers. POLIS and Edited by Jesse Baltutis, Laura Brandes, Oliver M. Brandes, Michele-Lee Moore, Natasha Overduin, and Ryan Plummer. 2014. http://poliswaterproject.org/sites/default/files/watersheds2014/Watersheds2014Proceedings_FINAL.pdf

Water governance and Indigenous governance: Towards a synthesis. Sue van der Porten. 2013. <http://www.indigenouspolicy.org/index.php/ipj/article/view/148>

Webinar: Aboriginal Co-Governance of Water and Watersheds. Oliver Brandes (POLIS). 2014 (Dec). <http://poliswaterproject.org/webinar/803>

APPENDIX TWO

SURVEY SCRIPT

NOTE: This research project recognizes First Nations unceded rights and title. THIS SURVEY DOES NOT CONSTITUTE CONSULTATION.

The British Columbia Government has recently enacted the *Water Sustainability Act*. The introduction of this act poses challenges for First Nations but may also offer opportunities. For example, the Government of British Columbia has yet to address outstanding issues on Aboriginal Rights to water, concerns from First Nations with regard to the adequacy of consultation during the development of the *Water Sustainability Act*, and concerns over the level of consultation that will occur during implementation. At the same time, the new act also offers possible opportunities to improve the governance and management of freshwater.

A partnership between the Centre for Indigenous Environmental Resources and the First Nations Fisheries Council has been established to work on a research project that helps understand these opportunities and challenges. This project includes:

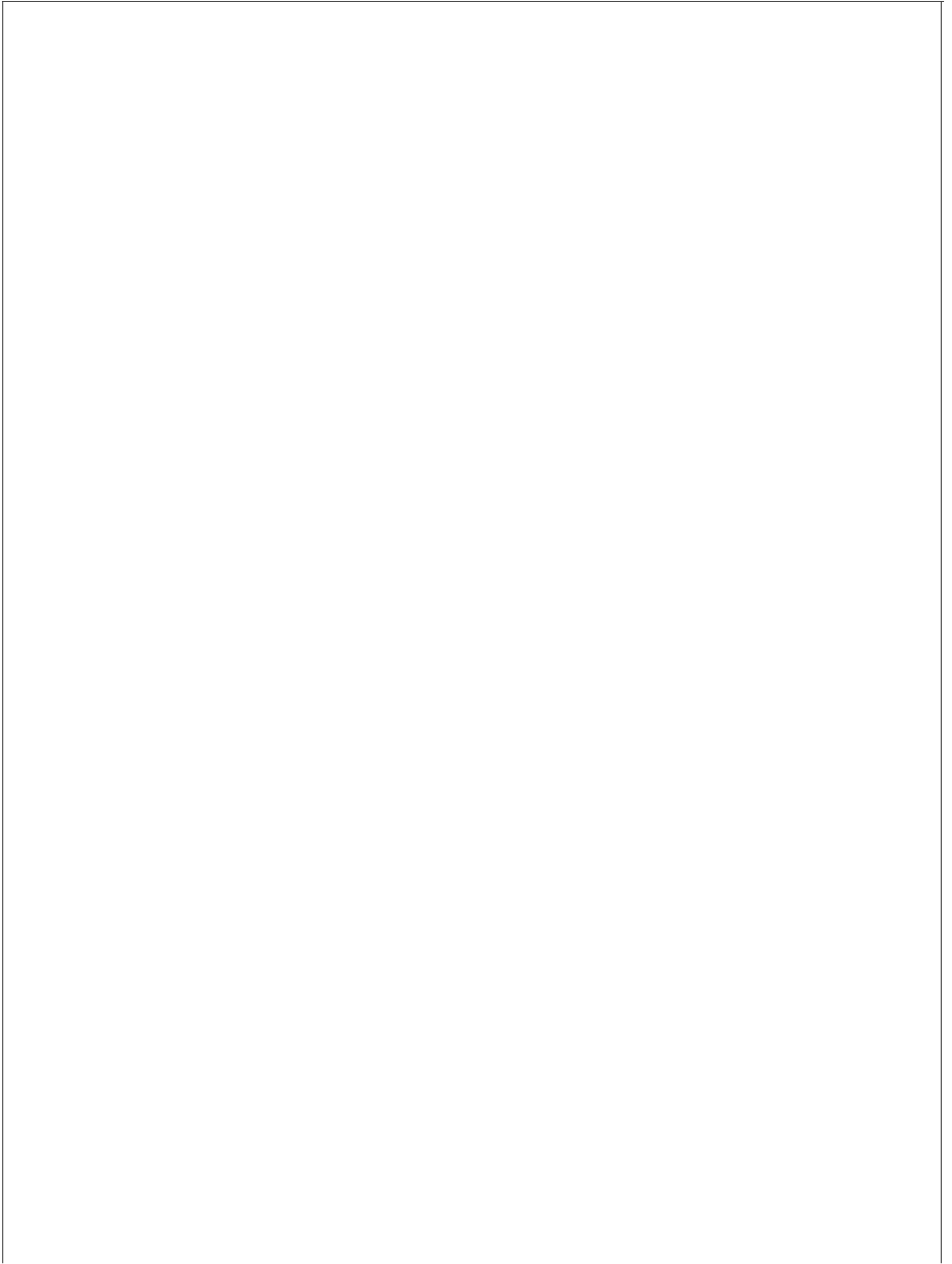
- (1) Understanding the current capacities of First Nations to develop Indigenous water plans (i.e. water strategies guided by Indigenous laws, values, and culture) and water plans recognized under the *Water Sustainability Act*.
- (2) Identifying characteristics of indigenous water planning, and water plans that could be recognized under the *Water Sustainability Act*.
- (3) Identifying types of governance arrangements, determine capacity needs, and possible conditions for First Nations to be engaged locally, regionally, and provincially.

Your perspectives and knowledge are valuable to this research and we want to hear from you! As a representative from a BC First Nation, your answers to this survey will help identify your capacities to be involved in future water and water-related plans/initiatives and engage in different governance arrangements. A report on the results will be prepared and circulated to all First Nation respondents and shared at a First Nations Fisheries Council workshop in April 2016. In recognition of your participation in completing the survey, your name will be entered into a draw (to be held in February) for your First Nation to receive a \$1000 grant towards an ongoing or new environmental initiative.

The survey will take approximately 20 -30 minutes to complete and is divided into four sections: (1) you and your First Nation; (2) water and water-related governance and management initiatives; (3) strength of relationships between First Nations (and with others); and, (4) key capacity challenges and opportunities.

CONFIDENTIALITY: All information provided in this survey will be compiled and summarized without attribution. Individual survey responses and names will remain confidential and will not be shared beyond the project team. Thank you for completing the following survey!

Funding for this initiative was generously provided by the Real Estate Foundation of BC, Tides Canada Foundation - Dragonfly Strategic Grantmaking Fund and the Vancouver Foundation.



Section 1: You and Your First Nation

* 1. Please provide the following contact information.

First and Last Name

First Nation

Email Address

* 2. What is your position/title within the organization?

* 3. What is the nature of your position? Choose all that apply.

☐

Full-time

☐

Part-time

☐

Permanent

☐

Short-term Contract (1 year or less)

☐

Long-term Contract(s) (More than 1 year)

* 4. How long have you had this position?

* 5. Which of the following applies to your position?

☐

I work directly on water protection or management projects/initiatives (e.g., water planning, water referrals, communicating with your community on water issues such as through social media or communities, talking to other governments or stakeholders about water).

☐

I work on water as a result of other projects/initiatives.

* 6. What percentage of your time is spent on water projects/initiatives (e.g., water planning, water referrals, communicating with your community on water issues such as through social media or communities, talking to other governments or stakeholders about water)?

* 7. Do you have other individuals in your organization, community or outside consultants working on water issues with you?

☐ Yes

☐ No

If yes, how many other individuals in your organization and what is their title?

* 8. What watershed(s) does your First Nation focus its efforts on?

* 9. Does your First Nation have a website?

☐ Yes

☐ No

If yes, does the website have a section on water or watershed planning? If so, please provide a link.

Section 2: Water and Water-Related Governance and Management Initiatives

- * 10. To what extent has your First Nation engaged in planning for water or water management to date?
Please briefly describe.

- * 11. Are you in the process of developing or do you have a written document (e.g., strategy, plan, vision statement, declaration, guiding internal protocol) to protect water in your own territory, which has been created by your community?

☐ Yes

☐ No

If yes, please briefly describe the document.

- * 12. Will or does this written document include traditional values, laws and customs?

☐ Yes

☐ No

If yes, how did the process used to develop it incorporate traditional values, laws and customs (e.g., through community planning meeting, input from an elder or cultural research)?

13. If you are comfortable with the following, please identify who was involved in the development of the strategy/plan/vision statement/declaration/guiding internal protocol, how they were involved and to what degree.

	How were they involved?	Degree to which they were involved (1 = low; 10 = high)
Elders Group	<input type="text"/>	<input type="text"/>
Elected Council Committee or Members	<input type="text"/>	<input type="text"/>
Youth Group	<input type="text"/>	<input type="text"/>
Community Members	<input type="text"/>	<input type="text"/>
Contractor/Consultant	<input type="text"/>	<input type="text"/>
Stewardship Organizations	<input type="text"/>	<input type="text"/>
Other	<input type="text"/>	<input type="text"/>

If you chose other, please provide a brief description.

* 14. Does your First Nation have other types of plans pertaining to freshwater protection (future, initiated, near completion, completed)?

- ☐ Yes
- ☐ No

15. If you answered yes to Question 14, which of the following types of plans pertaining to freshwater protection (future, initiated, near completion, completed does your First Nation have and what is the status?

	Current Status
Drinking Water Source Protection Plan	<input type="text"/>
Land-use Planning	<input type="text"/>
Forestry	<input type="text"/>
Marine	<input type="text"/>
Cultural Preservation	<input type="text"/>
Tribal Parks	<input type="text"/>
Other	<input type="text"/>

If you chose other, please provide a brief description.

* 16. Do you know which federal and provincial government agencies have some legislative or regulatory jurisdiction or authority for some aspect of water governance or management?

- ☐ Yes
- ☐ No

17. If you answered yes to Question 16, please list all the government agencies/departments that you are aware of with some legislative or regulatory jurisdiction or authority for some respect of water governance or management.

Section 3: Strength of Relationships between First Nations (and with others)

Building positive relationships are an important part of improving the management of shared waters. This section explores relationships that exist within your First Nation, between First Nations and between First Nations and other stakeholders.

18. How would you rate the strength of your relationship regarding watershed issues with the following (where 1 = weak; 2 = mild/modest; 3 = moderate; 4 = moderately strong; 5 = strong)? A weak relationship would be just receiving information about a project/initiative/plan etc. and a strong relationship would have meaningful collaboration with open and consistent communication and is mutually beneficial and respectful:

Strength of your relationship

Other First Nations
within your shared
watershed

Federal Government

Provincial Governance
Leadership

Provincial Government
Staff

Municipalities

Stewardship Groups

Industry

Academic Institutions

19. What other First Nations do you collaborate with or participate in shared decision-making initiatives for freshwater protection? Please list.

* 20. Is your First Nation engaged in any of the following collaborative or shared decision-making initiatives that impact freshwater protection? Check all that apply.

- ☐ Strategic Engagement Agreement
- ☐ Reconciliation Protocol, if yes, which level of government i.e., provincial or municipal or regional district
- ☐ Participation on a watershed council/board/roundtable
- ☐ Past collaborative initiatives regarding watershed protection and health and if so with...
- ☐ None of the above

* 21. Is your community currently engaged in a dispute (legal or not) regarding water or fisheries habitat protection?

- ☐ Yes
- ☐ No
- ☐ I don't know

If possible, please briefly describe this dispute.

Section 4: Key Capacity Challenges and Opportunities

* 22. What are the 3 biggest threats facing your watershed?

* 23. What are the 3 biggest challenges/barriers facing your community in moving towards watershed governance?

* 24. How much do you estimate your community spends annually on directly participating or engaging in water management or governance issues?

- ☐ Less than \$10,000
- ☐ Between \$10,000 and \$30,000
- ☐ Between \$30,000 and \$50,000
- ☐ More than \$50,000
- ☐ I don't know

* 25. What are your **current financial capacities** to engage in water governance and management? Please check the statements below that apply to your community.

- ☐ We have a budget to develop strategies, plans or visions to protect water in our community (e.g., hire a community project coordinator, talk to the community about projects, provide honoraria).
- ☐ We dedicate funds to engage with other governments or stakeholders outside of our community on strategies, plans, visions to protect water in our territory (e.g., attend meetings and workshops).
- ☐ We can hire experts for advice or support from outside agencies/organizations on water-related projects.
- ☐ Other comments on financial capacities:

* 26. What are your **current human resource capacities** to engage in water governance and management?

Please check the statements below that apply to your community.

- ☐ Within our First Nation organization, we have at least one staff position (or elected leadership) who have responsibilities related to water or water management or water governance.
- ☐ We have people in our community we could hire to develop community driven strategies, plans or visions to protect water.
- ☐ We are able to attract employees **within** the community to meet our organization's needs.
- ☐ We are able to attract employees **from outside** the community to meet our organization's needs.
- ☐ We have contact information for **municipal staff** working on water initiatives within our watershed.
- ☐ We have contact information for **provincial staff** working on water initiatives within our watershed.
- ☐ Other comments on human resource capacities:

* 27. What are your **current technical capacities** to engage in water governance and management? Please check the statements below that apply to your community.

- ☐ We have staff with technical training to support the development of strategies, plans or visions to protect water.
- ☐ We have a network of strong experts from outside agencies/organizations for advice on water-related projects.
- ☐ We have equipment to support the development of strategies, plans, or visions to protect water in our territory (e.g., computers, GPS, hand-held devices for water quality data collection).
- ☐ We have reliable internet access. If clicked, ask for type and speed if available.
- ☐ We have access to a database about the health of the watershed (e.g., database on water quality monitoring.)
- ☐ We have the ability to input data into this database about community based monitoring.
- ☐ Other comments on technical capacities:

* 28. In your opinion, what are the top 3 things your First Nation would need to start developing a water strategy/plan/vision statement/declaration/guiding internal protocol document (e.g., a template for such a plan, Council approval of a budget, technical resources and staff expertise, etc.)?

* 29. Assuming you had enough financial, technical, human resources capacities, rate your interest in your current position to do each of the following where 1 = not interested at all and 10 = very interested.

Your Level of Interest

Education/community
engagement

Peer to peer learning with
other First Nations

Community based
monitoring/data collection

Internal watershed planning

Participation in collaborative
initiatives for freshwater
protection (e.g.,
roundtable/council/technical
working group) with other
actors in your watershed
(provincial, municipality,
industry, stewardship etc.)

Shared Decision-Making
Agreement with Province
regarding watershed (i.e.,
Strategic Engagement
Agreement, Reconciliation
Protocol).

* 30. On a scale of 1 to 10 (where 1 means no understanding and 10 means a clear understanding), how would you rate your level of understanding of the impact of the Water Sustainability Act on your community in the following areas:

Your Level of Understanding

Groundwater

Watershed governance

Environmental flows

Licensing and allocation

* 31. Do you know about First Nation's Fisheries Council's Water for Fish initiative?

☐ Yes

☐ No

If not, are you interested to learn more about it?

* 32. Are you interested in an informal network for First Nations to engage in water issues?

☐ Yes

☐ No

If you answered 'yes' to Question 32, please answer Questions 33, 34 and 35. If you answered 'no', please proceed to Question 36.

33. What would you want from such a network?

34. What might be some of the key factors that would determine its usefulness?

35. How would/could the network be designed to meet your needs?

36. Is there anything else you would like to share with us?

APPENDIX THREE

INTERVIEW SCRIPT

Indigenous Watershed Initiatives and Governance Arrangements

Interview Questions

Section 1: You and Your First Nation

1. Name:
First Nation:
Email:
Phone number:
2. What is your position/title within the organization?
3. What is the nature of your position and how long have you had this position? Eg., full-time, part-time, permanent.

Section 2: Traditional Values, Laws and Customs

I would like to start this interview with a few questions about the water planning your First Nation is currently involved in and your traditional values, laws and customs related to the governance and management of water within your traditional territory.

4. To what extent has your First Nation engaged in planning for water or water management to date? Please briefly describe.
5. Are there traditional values, laws and customs used to govern and manage water resources in your traditional territory? If so, can you please describe? How are these tools used to influence the decision making process about water and the management of water resources in your traditional territory?
6. Are the traditional values, laws and customs part of any written documents (e.g., strategy, plan, vision statement, declaration, guiding internal protocol) to protect water in your own territory, which has been **created by your community**? If yes, how did the process used to develop it incorporate traditional values, laws and customs (e.g., through community planning meeting, input from an elder or cultural research)?

Section 3: Current Relationships and Connections between First Nations (and with others)

We are currently working on developing a social network diagram that will describe the collaborative relationships in water management in British Columbia.

NOTE: ALL NAMES PROVIDED ARE CONFIDENTIAL AND WILL NOT BE INCLUDED IN ANY REPORTING OR PUBLIC DOCUMENTATION WHATSOEVER. ALL DATA COLLECTED IS CONFIDENTIAL AND PROTECTED.

7. Please list the people inside and outside of your organization that you collaborate with, that can influence the governance or management of water and note what organization they belong to (Band, Provincial Government, Federal Government, Local government, non-government organization, International, other).

People that I collaborate with (over the past five years) on water management or policy issues:

Name (First/Last)	Organization	Informal collaboration (i.e. coffee meetings) (Y/N)	Formal Collaboration (ie. Business meetings, telephone calls) (Y/N)

8. How would you describe your relationship or connection with the people that can influence the governance or management of water? How did this relationship come about?
9. Aside from the response you shared in question #7, is your First Nation interested in engaging with other First Nations or stakeholders in any additional opportunities for collaborative or shared decision-making initiatives that impact freshwater protection? E.g., Strategic Engagement Agreement, Reconciliation Protocol, participation on a watershed council/board/roundtable, or past or current collaborative initiatives regarding watershed protection.

Section 4: A First Nations' perspectives on the conditions required to enable co-governance

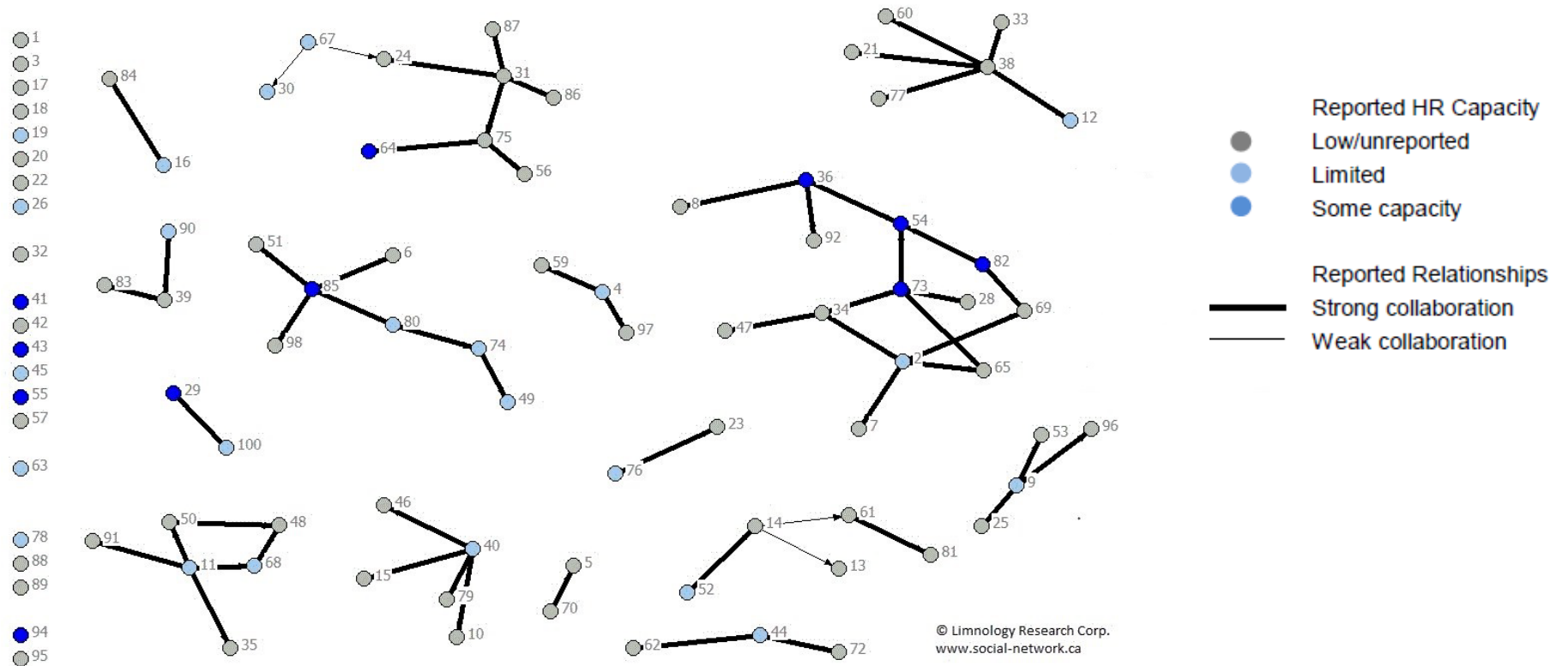
10. What do you believe are the key conditions required to enable co-governance arrangements between First Nations or between First Nations and other stakeholders?
11. How do you think traditional values, laws and customs could be part of future planning or co-governance arrangements?
12. In your opinion, what tools, technology, or resources does your First Nation need to engage in co-governance arrangements with other First Nations or start developing a water strategy/plan/vision statement/declaration/guiding internal protocol document (e.g., a template for such a plan, Council approval of a budget, technical resources and staff expertise, improved relationships, etc.)?
13. Would you be interested in receiving a copy of the Final Report? (Y/N)
Email: _____

Thank you for your participation in this interview!

APPENDIX FOUR

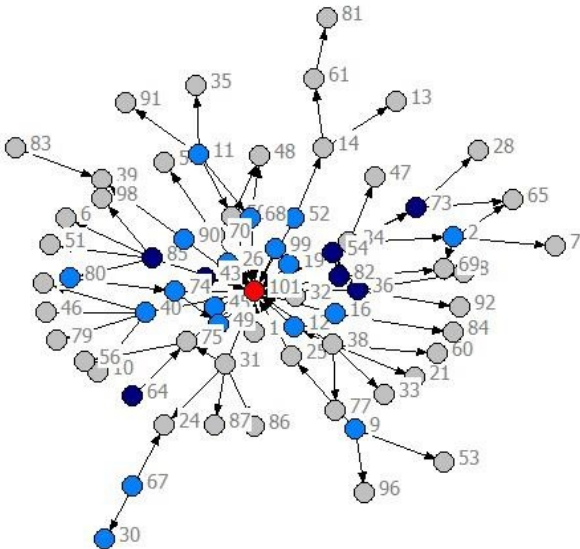
SNA MAPS

Water Networks among First Nations in BC

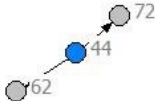
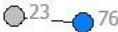
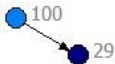
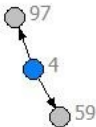


Relationships between First Nations and Federal Government

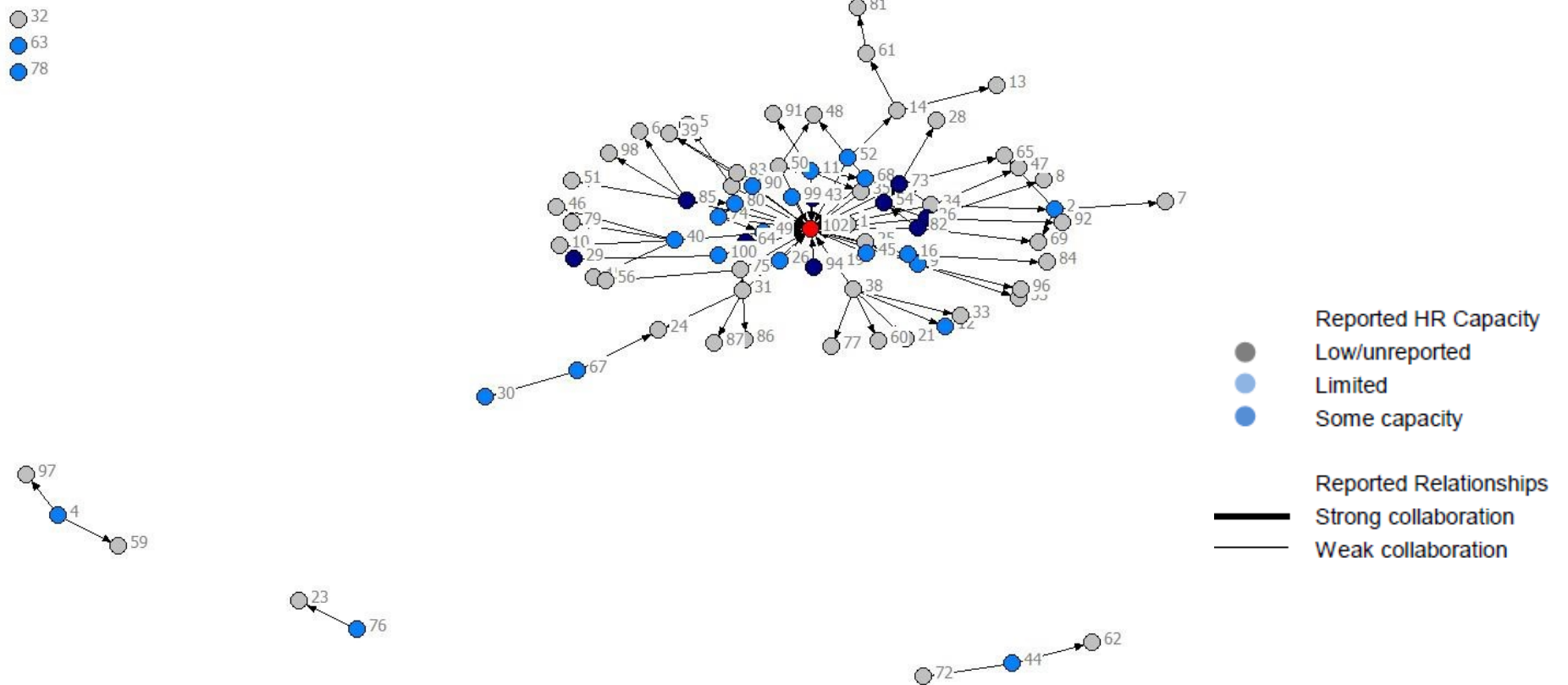
63
78
94



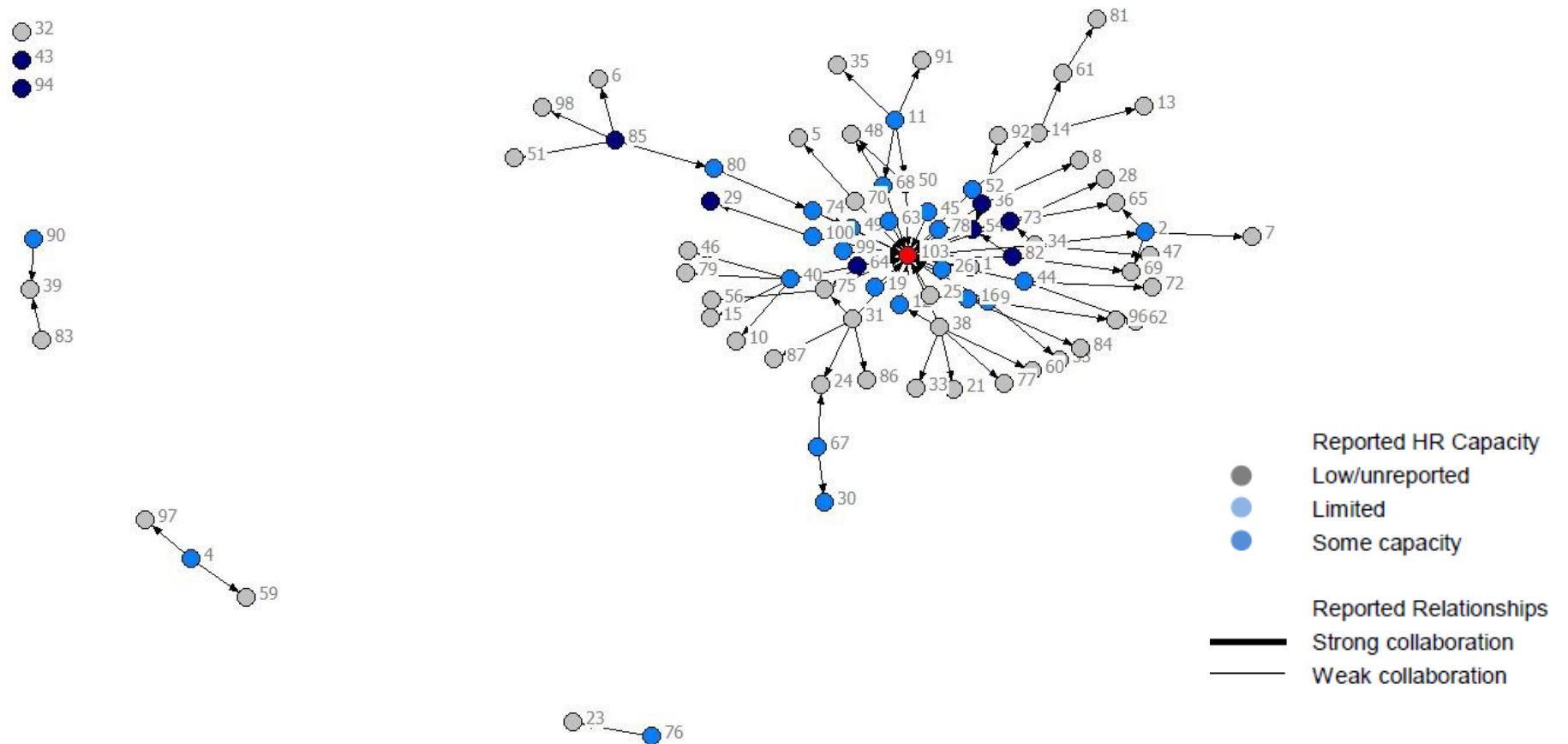
- Reported HR Capacity
- Low/unreported
 - Limited
 - Some capacity
- Reported Relationships
- Strong collaboration
 - Weak collaboration



Relationships between First Nations and Provincial Government



Relationships between First Nations and Municipal Government



Relationships between First Nations and NGOs

