

# **First Nation Involvement in Source Water Protection in Manitoba**

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## **ABSTRACT**

First Nation involvement in source water protection (SWP) planning has been limited in Manitoba and elsewhere. The purpose of this research was to consider how First Nation communities could be further engaged in SWP planning. Qualitative data was obtained from key participant interviews and a case study examined the collaboration between the East Interlake Conservation District (CD) and Peguis and Fisher River First Nations. The data revealed that eight of the 18 CDs in Manitoba had some involvement of First Nations in watershed planning, however, that involvement was limited in scope. This study identified four main barriers to First Nation involvement: 1) the *Conservation Districts Act*; 2) limited funding; 3) insufficient training for First Nation watershed planners; and 4) lack of public awareness/support for watershed protection. Amending the *Conservation Districts Act*, allocating federal funds, improving partnerships, and expanding water education could enhance the potential of First Nation collaboration in watershed planning.

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# **Chapter 1: Introduction**

## **1.0 BACKGROUND**

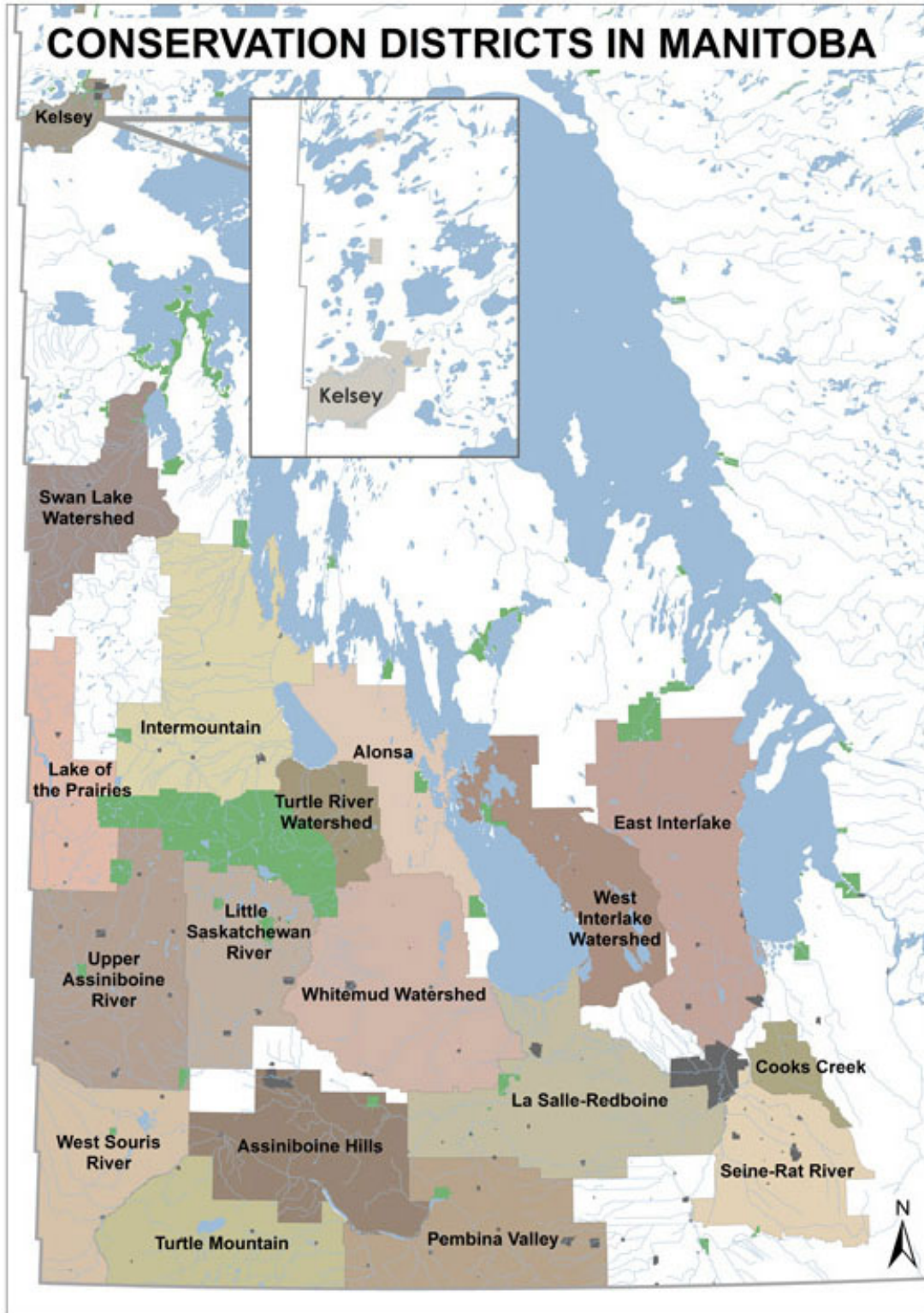
Source waters are defined as the lakes, rivers, and aquifers that provide fresh water for drinking, sanitation, and other services (CCME 2004). Source water protection (SWP) involves maintaining both the quality and quantity of water in these lakes, rivers, and aquifers. As an essential first step in the multi-barrier approach to safe drinking water, SWP, followed by effective water treatment and distribution, could reduce the chance of water contamination and harm to people and the environment (CCME 2004). There are many documented threats to source waters in Canada: pollution, over-use, climate change, fragmented water policy, lack of funding for protection programs, and potential bulk water exportation (Morris et al. 2007; Pollution Probe 2008). Effective water governance could help to reduce or mitigate these threats to source water (Brandes 2009; Pollution Probe 2008; Simms and de Loë 2009).

Effective SWP requires collaboration between various government and non-government stakeholders. Water resources in Canada are mainly the responsibility of provincial and territorial governments and many approaches to managing source waters have been tested (de Loë and Kreutzwiser 2007; Robins 2007). Through a process of decentralized governance, the provinces and territories have been shifting the implementation responsibilities for water management to local or regional levels of government over time (Robins 2007).

On provincial lands in Manitoba, the provincial department of Conservation and Water Stewardship has the lead responsibility for source water protection, while rural municipalities can voluntarily participate in water management within the Conservation Districts program (CDFC 2009). At the time of this study, there were 18 Conservation Districts (CDs) in mainly the southern agricultural regions of Manitoba (Figure 1). A Board of Directors, made up of representatives from the member municipalities, governs each CD and they can apply for designation as Water Planning Authorities (WPAs). All WPAs have to develop an Integrated Watershed Management Plan (IWMP) that is submitted to the minister of water stewardship for approval (Robins 2007). The IWMPs are meant to guide the CD's activities for the conservation and protection of watersheds (CDFC 2009).

There are many First Nations that possess reserve lands and have rights regarding First Nation traditional territories in close proximity to CDs, but First Nation lands fall under federal jurisdiction and thus are excluded from the application of CDs. Barg and Osborne (2006) described the level of First Nation participation in CD programs as limited and most CD boundaries as based on municipal rather than watershed boundaries. The Manitoba Conservation Districts Association established a mandate in 2009 to include all interests within the watershed and to encourage First Nation participation in CD planning. Watersheds in Manitoba are defined as the “area of land where the water within drains to a common point” and they are considered the best unit to manage water (MCWS-2). The watersheds of the southern agricultural region of Manitoba are illustrated in Figure 2.





**Figure 1. Conservation Districts (CDs) in Manitoba (reprinted with permission: MCWS-1).**



**Figure 2. Watersheds of the southern agricultural region of Manitoba (reprinted with permission: MCWS-2).**

First Nation communities in Canada face many challenges with respect to water management and protection in their communities and traditional territories. These challenges are complex and involve many issues, such as the denial of First Nation water rights by federal and provincial governments (Phare 2011) and over-use of water by upstream industries (hydro, forestry, and mining) or other non-First Nation communities (Lavalley 2006). Since reserve lands and waters are under federal jurisdiction, it remained unclear how (and if) First Nations could be involved in provincial watershed planning programs (Phare 2011; von der Porten and de Loë 2010). Other documented barriers to First Nation involvement include the lack of funding and technical capacity required to participate in water management programs (Phare 2011; von der Porten and de Loë 2010). There have been some opportunities for First Nation communities to voice their concerns on water management issues through consultation or public hearings, but they typically have a limited ability to share in provincial water governance (Lavalley 2006; von der Porten and de Loë 2010) either through CDs or any other mechanism.

## **1.1 RESEARCH PURPOSE AND OBJECTIVES**

There has been wide agreement that the future success of water management in Canada will depend on more inclusive and equitable water governance (Brandes 2009; Phare 2009; Pollution Probe 2008; Simms and de Loë 2009). The purpose of this research was to consider how First Nation communities could be further engaged in source water protection (SWP) planning in Manitoba.

The objectives for this research were:

- 1) To determine the extent of involvement and collaboration between Conservation Districts (CDs) and First Nation communities in source water protection (SWP) planning in Manitoba;
- 2) To identify the barriers to First Nation involvement in SWP planning;
- 3) To explore the ways that capacity can be built in both CDs and First Nation communities to enable more collaboration on SWP; and
- 4) To provide recommendations for CDs and First Nations in future SWP planning initiatives.

## **1.2 APPROACH**

A qualitative approach was used for this research, within a case study research strategy, focusing on First Nation involvement in SWP planning in Manitoba. A document review was conducted that explored the following topics: source water protection in Canada, watershed planning in Manitoba, and First Nation involvement in watershed planning. After receiving ethics approval, a survey was conducted with all 18 CD managers to determine the extent of First Nation involvement in provincial watershed planning programs. Interviews were held with CD managers who had some involvement of First Nations in their water protection activities, as well as several representatives from the provincial and federal governments, as outlined in Chapter 3. In addition to collecting basic data on First Nation involvement in water management, these initial interviews allowed a suitable case study watershed to be identified, based on the level of CD and First Nation collaboration. The case study selected involved the East Interlake Conservation District and two First Nation communities from the Fisher River watershed

– Peguis First Nation and Fisher River Cree Nation. Potential First Nation participants from these two communities were identified as active in watershed planning, and interviews were conducted with two participants to learn about their involvement and collaboration.

### **1.3 ORGANIZATION**

This thesis is divided into six chapters. Following this introduction, Chapter Two considers the related literature on source water protection (SWP) in Manitoba and First Nation collaboration in watershed planning. Chapter Three outlines the research methods including the case selection, data collection, and analysis. The research data are described in Chapter Four. Based on the results of key participant interviews, perspectives on how to enhance First Nation collaboration in SWP are discussed in Chapter Five. The conclusions and recommendations of this study are presented in Chapter Six. The ethics course certificate and interview schedules are listed in the Appendices.

## **Chapter 2: An Overview of First Nation Involvement in Source Water Protection**

### **2.0 INTRODUCTION**

Water resource planning in Canada has shifted towards a shared process of decision-making, involving different levels of government and other stakeholders (Nowlan and Bakker 2010). This evolution from centralized, top-down government control of water resources to more local, grassroots management is said to improve accountability, democracy, and social equity, through increased public participation in decision-making (Robins 2007). Enhanced collaboration between federal, provincial and municipal governments as well as other stakeholders is considered essential to improving water resource planning in Canada (Pollution Probe 2008). To participate effectively in watershed planning, municipal water managers and First Nations require resources and support from the provincial and federal governments (Morris et al. 2007).

Water legislation in Canada has been described as a “patchwork of federal and provincial guidelines that results in inefficient fragmentation, jurisdictional turf wars, and a ‘pass the buck’ mentality” (Brooks 2008). The *Canada Water Act* (1985) is the main federal law that enables the federal government to take action to protect water quality and collaborate with provincial governments for water resource management (Government of Canada 1985). The federal government has jurisdiction over water when it comes to fisheries, navigation, trans-boundary issues, and water on federal lands, including First Nation reserves, national parks, Nunavut, and the Northwest Territories (Environment Canada-1). The provincial governments and the Yukon Territory have the main

responsibility for water in Canada: they regulate water flow, development, supply, and control pollution (Environment Canada-1). Even when the federal government has the main jurisdiction over water, there are areas of shared responsibility with the provinces and territories through the federal *Fisheries Act* (1985) and the *Canadian Environmental Protection Act* (1999), agriculture, health, and interprovincial water management (Zubrycki et al. 2011). Due to the overlapping jurisdictions in Canadian water legislation, the different levels of government are sometimes in conflict and hesitant to intervene in water management issues (Zubrycki et al. 2011).

The Canadian government outlined its Federal Water Policy in 1987, which involved five strategies: 1) realistic water pricing, 2) support for water research, 3) encouragement of integrated water resource planning, 4) effective federal water legislation, and 5) promotion of public water awareness and participation in water management (Environment Canada 1987). The Federal Water Policy, statement 15, specifically addresses First Nation water rights, pledging that the federal government will: “determine, in consultation with native people, how they will participate in resource management programs affecting water resources of interest to them, and encourage greater native participation in water allocation and management decisions involving in-stream and traditional uses”(Environment Canada 1987: 26). The goals of this policy remain relevant today, but implementation has been a challenge and action so far is considered insufficient (Saunders and Wenig 2007). The federal government has been described as “retreating” from freshwater management (de Loë and Kreutzwiser 2007), and gaps in federal water policy are often filled by provincial government legislation. Many experts believe that federal water policies should be updated after a thorough

review process (Brooks 2008; Morris et al. 2007; Muldoon and McClenaghan 2007; Zubrycki et al. 2011).

Some water experts have stated that if the federal government does not make water protection a national priority, it could have negative effects on our environment, health, and economy (Morris et al. 2007). This was clear in relation to the state of drinking water on First Nations in Canada. A report by Ecojustice (2011) gave the federal government a grade of “F” for their poor record of protecting drinking water in First Nation communities. Federal water protection is not likely to improve under the present government due to recent budget cuts to Environment Canada staff and water program funding (Nelson: June 1, 2013); however, the Canadian government has recently agreed to recognize the human right to water and sanitation under international law (Amnesty International: June 12, 2012). This pledge by the federal government could result in action to improve water quality and availability to First Nation people. The *Safe Drinking Water for First Nations Act* (Bill S-8) has recently been revised and passed, which will allow new regulations to be created that will protect water in First Nation communities (PC 2012).

## **2.1 SOURCE WATER PROTECTION IN CANADA**

Source water protection (SWP) is referred to as “the critical first barrier in a multi-barrier approach to protecting water against depletion and degradation” (CCME 2004; Nowlan 2007). Following SWP, the next steps in the multi-barrier approach involve the treatment of drinking water and safe distribution – clean water from source to tap (Figure 2; CCME 2004). This approach emphasizes that water quality is monitored



and managed at the source, after treatment, and at the tap (Figure 2; CCME 2004). The multi-barrier approach also requires effective legislation/policies, public awareness, as well as appropriate standards and technologies (Figure 2; CCME 2004).

Source water protection involves preventing or limiting surface water (lake/river/stream) contamination as well as preventing land contamination to groundwater recharge areas above aquifers (Ivey et al. 2006). Protecting source waters from contamination is often shown to be cheaper than remediation after contamination (de Loë et al. 2002) and some chemicals cannot be effectively removed by standard treatment systems (CCME 2006). Planning for SWP requires the delineation or mapping of watershed/aquifer boundaries, an assessment of land and water uses, the identification of potential or existing contaminant sources, the ranking of vulnerabilities, followed by efforts to minimize or control source water pollution (CCME 2004).

Source water protection planning is most effectively conducted at the local watershed or aquifer level (CCME 2004). Watershed boundaries include all of the drainage land for a particular water body (i.e. river). A key benefit of planning at the watershed scale is that it allows for an integrated assessment of all of the physical forces acting on a water body, including the upstream and downstream impacts (MCWS-2). However, water protection planning in many regions of Canada, including Manitoba, is often based on political boundaries rather than watershed boundaries (Nowlan and Bakker 2010).

The inclusion of all watershed stakeholders is necessary for effective SWP planning (CCME 2004). It is important that SWP committees reflect a balance of the

competing interests in the watershed, while focusing on common goals like healthy ecosystems and clean drinking water. Since partnership building and coordination take time and effort, SWP planning is a long-term commitment. Part of the SWP planning process involves overcoming scientific or socio-economic challenges through the sharing of knowledge and resources among stakeholders. Collaboration and communication between different levels of government can help SWP committees meet these challenges (CCME 2004).

Capacity for SWP refers to the ability of groups to actively and effectively participate in SWP planning (Ivey et al. 2006). To develop their capacity for SWP, municipal governments require financial, technical, institutional, and social/political support (de Loë et al. 2002; Ivey et al. 2006; Timmer et al. 2007). In general, larger communities have been shown to have greater capacity for SWP than smaller ones (de Loë et al. 2002). Financial support for SWP could come from government grants or non-government organizations (NGOs), which is key for small communities like First Nations that have a no tax base (Phare 2011). Technical support could involve skills training for watershed planners and the sharing of watershed data (de Loë et al. 2005). The technical capacity of smaller communities can be enhanced through collaboration with provincial or private experts (Timmer et al. 2007). Institutional capacity involves having the appropriate legislation, policies, and by-laws necessary to support SWP (Ivey et al. 2006). There are few laws in Canada that are specific to SWP and some provinces only have guidelines for water management, rather than binding legislation (Ivey et al. 2006). Social and political support is also a critical component of capacity for SWP; the public needs to be aware of local water issues and be willing to participate in the water planning

process, while good leadership is required at all levels of government (de Loë and Kreutzwiser 2003).

Many Canadian provinces have strengthened and revised their source water planning approach in the last decade by creating regulations on drinking water protection, following the water contamination tragedies in Walkerton, Ontario (2000) and North Battleford, Saskatchewan (2001). The recommendations made by Justice O'Connor in the Walkerton Inquiry stressed the importance of SWP to prevent future tragedies (Nowlan 2007). Seven provinces have created SWP planning regimes with laws to support these plans: British Columbia, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Prince Edward Island, and Quebec (Ecojustice 2011). Some provinces have made partial progress towards SWP: Alberta has created water management plans, but not specifically for SWP; Manitoba is developing its SWP planning framework, but watershed plans are not legally binding; and Saskatchewan has developed SWP plans, but they are not legally binding (Ecojustice 2011).

The Yukon Territory has developed a water management framework and Water Adaptation Project in collaboration with First Nations to deal with potential climate change effects on water (Government of Yukon 2011). The Northwest Territories (NWT) has developed a water stewardship strategy and plan in partnership with First Nations (GNWT and INAC 2010 and 2011). Water management in Nunavut is still under federal jurisdiction and they have no SWP plan (Ecojustice 2011).

## 2.2 SOURCE WATER PROTECTION IN MANITOBA

The provincial Conservation and Water Stewardship branch is the agency responsible for water management in Manitoba, while the *Drinking Water Safety Act* (2002) and *Water Protection Act* (2005) serve to protect water. The *Water Protection Act* applies specifically to SWP and part 3 describes what watershed plans are, how the plans should be prepared, who is responsible for planning, and that the Minister's approval of the plans is required. The responsibility for watershed planning can be designated to the water planning authority, which could be a Conservation District (CD) board or other entity (Government of Manitoba 2005).

The CD Program is an incentive-based program under the authority of the *Conservation Districts Act* (1976), to support provincial-municipal partnerships for land and water conservation (CDFC 2009). The *CD Act* does not mention First Nations or 'Indian lands' (Government of Manitoba). The Conservation Districts Commission (CDC) provides oversight and guidance to the CD program, while appointed board members govern each CD (Government of Manitoba). At the time of this study, there were 18 CDs in the southern, agricultural areas of Manitoba. Each Conservation District is comprised of neighboring rural municipalities and while some follow watershed boundaries (i.e. the Whitemud CD), most are still based on municipal boundaries (Barg and Osborne 2006). According to the CD 'framework for the future', there has been a recent effort to realign CD boundaries to reflect natural watershed boundaries (CDFC 2009).

Integrated watershed management plans (IWMPs) are being developed by each Conservation District to coordinate long-term land and water management (CDFC 2009). To create these plans, local residents and interest groups within each CD collaborate with provincial and municipal government representatives to identify watershed issues and priorities. According to Manitoba Water Stewardship, these IWMPs should meet the following conditions: the process is inclusive to all stakeholders, it strives for a balance between ecological, social, and economic needs, and it integrates activities on both land and water (MCWS-2). In the latest (2010-2011) annual report by Manitoba Water Stewardship (MCWS-3), only ten IWMPs were complete. The provincial and municipal governments share funding for CD activities (75% provincial and 25% municipal), but CD boards are responsible for spending decisions and progress on watershed plans. The province also provides technical assistance (skills and knowledge) to help build CD capacity for IWMP development (CDFC 2009).

The extent of First Nation collaboration in IWMP development in Manitoba was unclear before contact was made with all of the CD managers during the initial stages of the study. First Nation representatives were sometimes listed as partners in watershed planning or invited to planning meetings, but their actual level of involvement was not often mentioned or documented.

### **2.3 CHALLENGES TO FIRST NATION INVOLVEMENT**

The federal government has had the main authority and responsibility for First Nation lands and waters through the *Indian Act* since 1876 (OAGC 2009). Under the *Indian Act*, First Nation Chiefs and councils can pass bylaws and create community plans

for their reserves, but these bylaws require the approval of the Minister of Indian Affairs (OAGC 2009). The *Indian Act* has long been considered an instrument of oppression and restriction to First Nations due to its provisions to control First Nations' money, resources, and governance, as well as cultural practices and identity (Coates 2008). Since 1999, it has been possible for First Nation communities to opt out of the land-related sections of the *Indian Act* and create their own land codes through the *First Nations Land Management (FNLM) Act*. However, access to the FNLM Regime and the Reserve Land and Environment Management Program (RLEMP) that began in 2005, has been limited (OAGC 2009). The RLEMP was intended to transfer the responsibility of land use planning and environmental management from the federal government to First Nations, but so far, progress has been slow due to insufficient program funding and the lack of trained First Nation land managers (OAGC 2009). According to the Auditor General (OAGC 2009), more than half of First Nation reserves still have their lands managed under the provisions of the *Indian Act*. Only three First Nations in Manitoba: Opaskwayak Cree Nation, Chemawawin, and Swan Lake are currently operating under the FNLM Regime (AANDC-4).

The federal and provincial governments in Canada have often excluded First Nation communities from water governance processes (Phare 2009; Walkem 2007). Judicial analysis has determined that federal and provincial governments have a duty to consult indigenous people on issues affecting them and their territories (Isaac 2004: 214), First Nations have been given more opportunities to participate in decision-making that could affect their Aboriginal and treaty rights. When it comes to indigenous water rights, the Canadian government has yet to clarify the extent of these rights (Phare 2009). The

*Winter's* (1908) doctrine in the United States, acknowledged 'implied' rights to water in the case of Indian reservations, and this concept should apply on First Nation reserves in Canada (Phare 2009). Indigenous water rights cases in Canada have so far been settled out of court (i.e. Piikani Nation, Alberta: Phare 2009). This lack of recognition and respect for First Nation governments and their unique water rights is likely one of the main reasons why First Nation communities have not participated more fully in water governance (Phare 2009; von der Porten de Loë 2010).

Provincial legislation in Manitoba is conflicted as to whether First Nation communities are excluded – due to the *Conservation Districts Act*, or included – according to the *Water Protection Act*. Besides prohibitive legislation, there could be a variety of other reasons why First Nations have a limited involvement in provincial watershed planning: the negative perception of being just another stakeholder, rather than a rights-holder and nation, in a process dominated by municipalities (von der Porten and de Loë 2010); the fact that First Nation communities are often small and remote making participation more difficult; and First Nations lack the capacity to participate effectively (von der Porten and de Loë 2010). Lack of capacity was identified as a challenge to First Nation involvement, since water management is a complex endeavor requiring time, funding, special knowledge, and skills (Phare 2011). Source water protection is one of many important issues that First Nation communities deal with.

Differing worldviews could also make collaboration on water governance a challenge: First Nations view water as sacred, alive, and having spirit, while the western view considers water as inert and part of the environment (Blackstock 2001). Typically,

water resource management in Canada is based on a human-centered view where water is treated as a resource to be controlled, exploited, and used (Walkem 2007). To transform this limited view of water and decision-making regarding water, Walkem recommended that Canadian society learn from indigenous peoples how to respect water, to take into account the water requirements of whole ecosystems, and to consider the long-term view many generations into the future (2007).

Watershed planning involves an environmental assessment of the potential risks to source water quality and quantity. Reports by the Centre for Indigenous Environmental Resources (CIER 2009) and Foth (2011) examined the barriers to First Nation involvement in environmental assessment. Both reports described similar barriers to meaningful First Nation involvement in environmental assessment: lack of financial support, lack of information and training, language barriers, accessibility problems, inadequate consultation, time constraints, lack of trust, and power imbalances. Besides these barriers to involvement in water governance that were specific to First Nations, other barriers could include: the belief that the outcome of decision-making was already determined, lack of knowledge and awareness of the proceedings, lack of funding for participants, overly technical information, control of the proceedings by one or more groups, consultation fatigue, and busy lifestyles (Diduck and Sinclair 2002).

First Nation participants at a water workshop in Ontario identified key challenges for improving access to clean drinking water in their communities, which could also apply to First Nation involvement in watershed planning: 1) lack of capacity, 2) the need for a common voice, 3) the need for community-based water strategies, 4) inadequate



consultation, 5) unclear jurisdiction, 6) the need for mutual respect during collaboration, and 7) problems of scale (von der Porten and de Loë 2010). During this workshop, First Nation participants also identified five potential solutions to these water challenges: 1) increased participation and recognition of First Nation governments, 2) better incorporation of indigenous knowledge in water governance, 3) acknowledgement of First Nation water rights, 4) more collaboration among First Nation communities, and 5) more opportunities for sharing knowledge.

Poor drinking water quality on First Nation reserves has been a problem for a long time (Morris et al. 2007; von der Porten and de Loë 2010). Until recently, there had been no regulations for drinking water in First Nation communities (Swain et al. 2006), but Bill S-8 – *Safe Drinking Water for First Nations Act* – will allow laws to be created or borrowed from the provinces to provide new protection for First Nation drinking water (PC 2012). However, experts have stated that regulations alone, without additional resources (financial support and water infrastructure) and capacity building (training) will not solve this problem of poor drinking water on reserves (Swain et al. 2006). First Nation governments are justifiably concerned about the potential implications of this bill because, as one regional Chief stated, they still lack the capacity to provide safe drinking water in their communities, and the new regulations could blame them for this failure (Chiefs of Ontario 2012). Recent revisions after consultation with First Nations claim to have created the possibility for a more equitable regulatory regime that respects indigenous rights while ensuring safe drinking water (AANDC-1).

## 2.4 SUMMARY

Source water protection is an important part of watershed planning. For watershed planning to be effective, all governments and stakeholders in the watershed should be involved in the decision-making process. The CD Program in Manitoba was not originally designed to include First Nation governments, but there are many First Nations within or near CD watersheds. If CD plans or projects will have an effect on First Nation lands or waters, First Nation governments have a right to be part of the decision-making process. First Nations could be valuable partners in watershed management due to their long occupancy and intimate knowledge of local lands and waters.

Building First Nation capacity for source water protection will require financial, technical, institutional, and social/political support from both the federal and provincial governments. However, as outlined above and summarized in Table 1 below, there are many documented barriers to First Nation involvement in watershed planning. Provincial governments could make First Nation collaboration in watershed planning a priority by amending the existing legislation (the *Conservation Districts Act*) to allow First Nation involvement. Collaboration between First Nations and provincial CDs could make watershed management in Manitoba more equitable and effective in the long-term.

**Table 1. Potential barriers to First Nation involvement in watershed planning.**

| <b>BARRIERS</b>      | <b>DETAILS ON POTENTIAL BARRIERS</b>  | <b>REFERENCES</b>  |
|----------------------|---|--|
| Institutional        | Appropriate legislation and enforcement was required to protect source water, but both were limited in First Nation reserves. | Swain et al. 2006  |
|                      | Existing provincial legislation excluded First Nations from involvement in provincial watershed planning programs.            | <i>Conservation Districts Act</i> (1976)                         |
|                      | Existing legislation/policies denied First Nation authority and control over their lands and waters.                          | Phare 2009; Walkem 2007  |
| Financial            | Watershed planning was expensive and especially difficult for smaller communities like First Nations.                         | CCME 2004  |
|                      | Funding is limited for watershed planning - provincial funds were not shared with First Nations.                              | CDFC 2009  |
| Technical            | Watershed planning required special skills and knowledge or access to experts with experience.                                | de Loë et al. 2005; Timmer et al. 2007.                          |
|                      | Training for First Nation land and water managers was limited.  | OAGC 2009.   |
| Social/<br>Political | Public awareness and education was required to get support for source water protection.                                       | Environment Canada 1987; CCME 2004; de Loë and Kreutzwiser 2003. |
|                      | Political will and good leadership was required at all levels of government to promote collaboration.                         | de Loë and Kreutzwiser 2003.                                     |
|                      | Views on the value and importance of water were conflicting.  | Blackstock 2001; Walkem 2007.                                    |
| Procedural           | Time constraints: Conservation District and First Nation representatives had limited time for collaboration.                  | In general: CIER 2009; Foth 2011. Specific: CDFC 2009.           |
|                      | Lack of interest due to consultation fatigue or the belief that outcomes were pre-determined.                                 | Diduck and Sinclair 2002.  |

## **Chapter 3: Methods**

### **3.0 INTRODUCTION**

A qualitative research design was used to examine the collaboration between Conservation Districts (CDs) and First Nation communities in Source Water Protection (SWP) in Manitoba. The research began with a literature review and a survey of all 18 Conservation District managers to determine the extent of First Nation involvement in provincial watershed planning programs. Following the survey, six interviews were conducted with CD managers that had been involving First Nations in watershed planning activities, as well as three provincial water managers/planners, and four federal environmental specialists. A case study was chosen from the CDs that had First Nation involvement and interviews were conducted with two First Nation participants. The qualitative research design was chosen due to its flexibility, allowing participants to freely share perspectives, narratives, or stories during the interviews. Each method used is described below.

### **3.1 LITERATURE REVIEW**

A comprehensive review of recent literature was conducted on SWP in Canada, watershed management in Manitoba, First Nation involvement in water management, and First Nation perspectives on water. The purpose of this review was to gain an understanding of the main components of SWP, the process of watershed management in Manitoba, and the challenges to First Nation involvement in watershed planning. Government agency files and records, library documents, and NGO (non-governmental

organization) records were searched for this review. Much of this literature was reviewed in Chapter Two of this proposal, but the search for documents continued throughout the research process, which is evident in the data presented below.

### **3.2 PHASE ONE - DATA COLLECTION**

During phase one, CD managers throughout Manitoba were interviewed. These research participants were identified by searching the Manitoba Conservation District Association (MCDA) website for a list of Conservation Districts (CDs) and contact numbers for CD managers. All of the 18 CD managers were contacted by phone or email and asked if their CDs had been collaborating with any nearby First Nation communities in their watershed planning activities. If preliminary contact indicated that the CDs had some involvement of First Nations, an interview was requested with the CD manager to discuss how such involvement was being undertaken. Six CD managers were individually interviewed. A small group interview was also carried out with one watershed manager and two watershed planners from the provincial government. These provincial participants were found by searching the Manitoba Conservation and Water Stewardship (MCWS) website. The Manitoba branch of Aboriginal Affairs and Northern Development Canada (AANDC) was contacted in order to find interview participants within the federal government. Four federal environmental specialists were interviewed together in a small focus group. One indigenous environmental planner was individually interviewed.

Phase one interviews with key participants were mainly conducted in person during spring and summer of 2013. A semi-structured interview schedule was used to

allow for focused, yet flexible questioning (Dunn 2005). The interview schedules, as outlined in Appendices 2-5, had a list of primary and secondary questions about First Nation involvement in watershed planning in Manitoba. Interview questions varied slightly, depending on the informant's position: CD manager, provincial manager/planner, federal environmental specialist, or indigenous environmental planner as revealed in each appendix. Participant confidentiality was a requirement of the ethics approval obtained; so participant names were removed from the results, with only their general affiliation indicated along with specific quotes. The interviews lasted up to an hour and they were recorded electronically.

### **3.3 PHASE TWO - CASE STUDY**

For phase two of the research, a case study strategy of inquiry was employed involving First Nation communities that were currently collaborating with a Conservation District (CD) in watershed planning. This case study was done to help supplement and verify the findings of phase one, while providing a greater depth of understanding. According to Yin (2009), case studies are an effective strategy of inquiry for research that asks “how” or “why” questions, were focused on a contemporary, real-life process, and the researcher could not control events. Case studies allow the researcher to explore a “bounded system” in context with greater detail (Creswell 1998a). As there was limited time and funding to conduct master's level research, the case study was restricted to two First Nation communities that were involved in watershed planning with one Conservation District in Manitoba. The following criteria were used to select the case study communities: 1) interest in watershed management, 2) collaboration with a

Conservation District in watershed management planning, and 3) willingness to participate in the research. Potential case study communities were identified during the phase one interview process.

Contact was made with councilors from both First Nation communities in phase two of the study. In-person interviews were requested with First Nation councilors and other key representatives from each First Nation to discuss their community's involvement in watershed planning. Two semi-structured interviews were conducted with First Nation participants – one in May 2013 and another in December 2013. The interviews lasted up to an hour and were recorded electronically. To maintain participant confidentiality, participant names were removed from the results, with only their general affiliation indicated along with specific quotes. The interview schedule is outlined in Appendix 5.

### **3.4 DATA ANALYSIS**

Data from the phase one and two interviews was transcribed with a word processor, and then coded with a qualitative data-analysis software program (Nvivo 10). Themes from the interview data were identified as a way of interpreting the data (Cope 2005; Ryan and Bernard 2003). Data from the document review was compared with the interview data. An initial framework for identifying First Nation participation barriers was developed using themes in the literature, and the research data was compared to that. The results were verified with each study participant by confirming that they were accurately represented in key quotes from their interviews.

## **Chapter 4: First Nation Involvement in Manitoba's Conservation Districts Program**

### **4.0 INCLUSION OF FIRST NATIONS WITHIN CD BOUNDARIES**

Conservation District (CD) managers were surveyed to determine the level of First Nation involvement in watershed planning during the spring of 2013. Out of the 18 CDs in Manitoba, the data revealed that eight CDs had some involvement of First Nations in watershed planning activities (Table 2). Out of those eight CDs, six willing CD managers were interviewed in greater depth to get further details on how the CD was collaborating with local First Nations in watershed planning. The CD managers that were interviewed were from the Alonsa, Assiniboine Hills, East Interlake, Pembina Valley, Swan Lake Watershed, and West Souris River CDs. The remaining three CDs - Kelsey, Seine Rat River, and Upper Assiniboine River - had indicated that they had just begun working with local First Nation communities or had only limited collaboration with them in watershed planning activities and thus, more in-depth interviews were not conducted.



**Table 2. Collaboration between Manitoba Conservation Districts (CDs) & First Nations (FNs).**

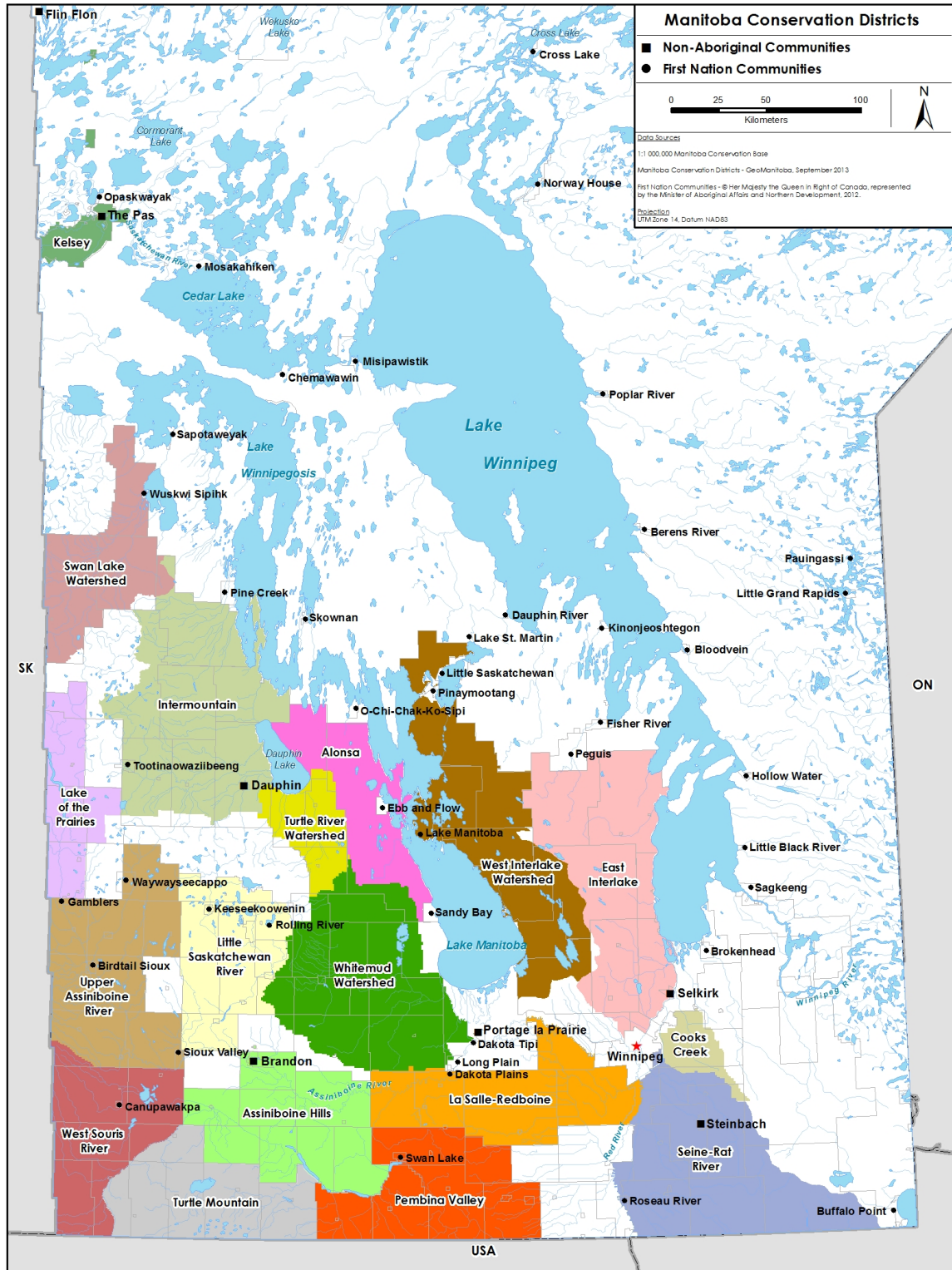
| <b>CONSERVATION DISTRICT (CD) AND DATE ESTABLISHED</b> | <b>INVOLVEMENT OF FIRST NATIONS</b> | <b>DETAILS ON FIRST NATION (FN) INVOLVEMENT IN WATERSHED PLANNING</b>                                    |
|--|-------------------------------------|--|
| Alonsa<br>(1978)                                       | Yes.                                | Mainly collaborated on cultural sites with Ebb and Flow FN. Some involvement with 2 other FNs.           |
| Assiniboine Hills<br>(2008)                            | Yes.                                | They have worked with Swan Lake FN for 2 years.  |
| Cooks Creek<br>(1979)                                  | No, but...                          | They have a representative from Peguis FN on their PMT.  |
| East Interlake<br>(2005)                               | Yes.                                | Have worked with Fisher River Cree Nation & Peguis FN for about 5 years.                                 |
| Intermountain<br>(1997)                                | No, but...                          | FN representative attended a board meeting about watershed planning, but no FN input on watershed plans. |
| Kelsey<br>(1999)                                       | Yes.                                | Involved Opaskwayak Cree Nation in SWP plan. FN representatives are also on the PMT for their IWMP.      |
| Lake of the Prairies<br>(2001)                         | No.                                 | Said that no FN reserves were within their watershed, which was true.                                    |
| La Salle-Redboine<br>(2002)                            | No.                                 | Said that no FN reserves were within their CD boundaries, but one was close.                             |
| Little Saskatchewan River<br>(1999)                    | No, but...                          | Tried to involve 2 FNs in watershed plans, but the CD lacked the capacity to effectively engage FNs.     |
| Pembina Valley<br>(1989)                               | Yes.                                | Consulted with Swan Lake FN on IWMP.   |

**Table 2. Continued.**

| <b>CONSERVATION DISTRICT (CD) AND DATE ESTABLISHED</b> | <b>INVOLVEMENT OF FIRST NATIONS</b> | <b>DETAILS ON FIRST NATION (FN) INVOLVEMENT IN WATERSHED PLANNING</b>   |
|--|-------------------------------------|---|
| Seine-Rat River<br>(2002)                              | Yes.                                | Limited involvement with Roseau River FN on present Rat River IWMP.   |
| Swan Lake Watershed<br>(2007)                          | Yes.                                | Working with Wuskwi Sipihk FN on IWMP.  |
| Turtle Mountain<br>(1978)                              | No.                                 | No FN reserves within CD boundaries.  |
| Turtle River Watershed<br>(1975)                       | No.                                 | No FN reserves within CD boundaries.  |
| Upper Assiniboine River<br>(1996)                      | No, but...                          | Tried to work with schools in 2 FNs, but the project did not get funding.   |
| West Interlake Watershed<br>(2008)                     | No.                                 | Wants to make contact with local First Nations, but they have not yet done so.  |
| West Souris River<br>(1995)                            | Yes.                                | Consulted with Canupawakpa FN on IWMP.  |
| Whitemud Watershed<br>(1972)                           | No.                                 | Invited FNs to be involved in their IWMP, but had no response. Said lack of engagement was due to FNs being outside of CD boundaries. |

There are over 30 First Nation communities found in close proximity to the 18 Conservation Districts (CDs) that have been established in the southern agricultural regions of Manitoba (Figure 3). Some First Nations were clearly within CD boundaries, while others were near CD borders. Many CD boundaries are still based on municipal boundaries, rather than watershed boundaries, which made it difficult to determine whether nearby First Nations were actually within the CD watersheds. By comparing the provincial watersheds map (Figure 1) to the composite map that was developed in this study (Figure 3), it was possible to see if First Nations were within CD watersheds.

First Nation reserves are illustrated in the composite map developed for this research (Figure 3), but other First Nation lands including traditional territories are not identified. The First Nation groups indigenous to southern Manitoba include the Ojibway (Anishinabe), Cree, Ojibway-Cree, and Dakota Sioux (Manitoba Aboriginal and Northern Affairs). Although some CDs had no First Nation reserves within their borders or watershed boundaries, this does not necessarily indicate the lack of First Nation lands or their traditional territories. The CD program was designed for agricultural regions in Manitoba, so areas unsuitable for agriculture (like the boreal forest in the north and east of Lake Winnipeg) are excluded, as well as federal Crown lands like National Parks (Riding Mountain) and most First Nations.



**Figure 3. Composite map showing Manitoba’s Conservation Districts and First Nation communities, with data from September 2013 and 2012, respectively.**

## **4.1 THE TYPES OF INVOLVEMENT IDENTIFIED BY CD MANAGERS**

Eight of the 18 CD managers indicated that there was some level of First Nation involvement in their watershed planning activities (Table 2). The following section 4.1.1 describes some of the involvement and collaboration identified by CD managers.

Conservation Districts that indicated they had little or no involvement of First Nations in their watershed planning are discussed in section 4.1.2. The two First Nation case study communities are described in section 4.2. The detailed findings of the phase one and two interviews are presented in section 4.3.

### **4.1.1 CDs with Some First Nation Involvement**

#### **Alonsa Conservation District**

The Alonsa Conservation District (CD) created interpretive sites at several indigenous cultural locations within the district beginning in the early 1990s. The district began a relationship with the nearby Ebb and Flow First Nation after the “Thunderbird Nest” restoration project, which was in 1991 or ‘92. The First Nation appreciated the project and helped to clarify the site’s interpretation and significance. Since that first cultural project, the district has worked on other First Nation cultural projects including “Medicine Rock” and “Ceremonial Site”. These projects helped the district initiate contact with the First Nation communities within their watershed, of which there are three: Crane River (O-Chi-Chak-Ko-Sipi), Ebb and Flow, and Sandy Bay (Participant ACDM).

There has also been some collaboration between Alonsa CD and the Ebb and Flow First Nation after the flood of 2011 – the CD shared GIS (Geographic Information System) maps of the area with the First Nation to mitigate flooding. First Nation representatives have also attended watershed-planning meetings that began in 2009, but mainly the focus of involvement has been on the identification of culturally significant sites. Crane River First Nation has been involved in the district’s Integrated Watershed Management Plan (IWMP), specifically in relation to the topic of fisheries management, since commercial fishing is important to the First Nation community and the CD has been operating a fish hatchery for many years. Sandy Bay First Nation has been involved with the district to a small degree on water management issues – mainly in relation to emergency coordination for flooding in the area (Participant ACDM).

#### **Assiniboine Hills Conservation District**

The Assiniboine Hills CD has been working with the Swan Lake First Nation on their IWMP through having First Nation representatives on the Project Management Team (PMT) since 2008. Swan Lake First Nation has a bison and elk ranch on reserve land along the Epinette Creek near Spruce Woods Provincial Park. Beginning in January 2013, the CD collaborated with the First Nation on a project to build an off-site watering system, paddock, and fencing for the livestock. In this case, the First Nation contributed to the project funding and the CD was able to get a provincial grant to fund the rest of the project. The CD advised the First Nation on the project design, who to contact for help on the design, and the type of off-site watering system to use. The First Nation manages the project with guidance from the CD. This project was conducted to prevent water contamination in the creek and downstream Assiniboine River, as well as to protect

groundwater in the Assiniboine Delta Aquifer. The aquifer is an important source of local drinking water, so the collaboration between the CD and First Nation has the potential to benefit everyone in the area (Participant AHCDM).

### **East Interlake Conservation District**

The East Interlake CD began working with Peguis First Nation in 2007 on educational water festivals. School groups would go to these water festivals to learn about watersheds and a representative from Peguis would share knowledge with the children on traditional indigenous activities - water festivals were also held in Peguis and Fisher River Cree Nation. This initial collaboration led to the involvement of Peguis and Fisher River in the district's IWMP beginning in 2011. Both First Nations have representatives on the PMT and a councilor from Fisher River Cree Nation serves as the chair of the PMT for the IWMP. As part of the watershed planning, the CD has also advised the First Nations on projects like sealing wells for source water protection. The Fisher River IWMP was still in progress at the time of this study, but the level of involvement of local First Nations and collaboration between the CD and First Nation communities appeared to be quite high (Participant EICDM). This involvement is discussed further in section 4.2.

### **Kelsey Conservation District**

The Kelsey CD recently (2013) involved the Opaskwayak Cree Nation as a partner in their source water protection plan, which focused mainly on drinking water protection. This district had also conducted one of their public meetings for the Carrot-Saskatchewan River IWMP in Opaskwayak Cree Nation, and they have a First Nation

representative on the PMT of their IWMP. The CD was in the initial stages of their IWMP at the time of interviewing and the involvement of the First Nation has just begun (Participant KCDM).

### **Pembina Valley Conservation District**

The Pembina Valley CD began involving the Swan Lake First Nation in public meetings and consultations for the Pembina River IWMP about 14 or 15 years ago. First Nation representatives provided feedback during these IWMP information sessions. As part of the implementation phase of the IWMP, the CD has advised the First Nation on a project to seal abandoned wells on reserve land. The CD had experience in sealing wells, so they shared this knowledge with the First Nation crews that completed the work. When the CD holds its annual Manitoba Envirothon Program, they have First Nation elders share their traditional knowledge with students (Participant PVCDM).

### **Seine-Rat River Conservation District**

The Seine-Rat River CD had recently incorporated the Roseau River watershed into its CD. The Red River Basin Commission had involved the Roseau River First Nation on the Roseau River Watershed Plan (RRWP) that was completed in 2007. First Nation representatives were on the steering committee of the RRWP and shared their concerns about flooding in the region (SRRCD website). Representatives of this First Nation were also invited to be on the PMT for the Rat River IWMP, which is still in progress, but their involvement has been very limited (Participant SRCDM).



### **Swan Lake Watershed Conservation District**

The Swan Lake Watershed CD has been collaborating with the Wuskwi Sipiik First Nation on their IWMP for the last two years (2012 and 2013). First Nation representatives, including elders, have attended meetings for the PMT and provided valuable input on the watershed plan; however, the level of First Nation involvement has been hindered at times by the demands of other negotiations, including Bipole III (Participant SLCDM).

### **West Souris River Conservation District**

The West Souris River CD had initially developed a relationship with the Canupawakpa First Nation about 12 years ago, when they did a tree-planting project at a school on the reserve. When the CD began the West Souris River IWMP in 2008, they consulted with the First Nation and got some verbal feedback on the watershed plan. The CD also worked with the First Nation from 1998-99 to develop the Canupawakpa Trail and an interpretive sign that explained the history of the area (Participant WSCDM).

#### **4.1.2 CDs with Limited or No First Nation Involvement**

Ten of the 18 CDs in Manitoba had limited or no involvement of First Nations in watershed planning (Table 2) at the time of the initial research survey (spring/summer 2013). Six of these CDs with limited or no involvement had First Nation reserves or traditional territories within or near their CD boundaries (Figure 3). The Cooks Creek CD had a representative from Peguis First Nation on their PMT, since the CD's watershed includes traditional territories of that First Nation. The Peguis First Nation representative has also been involved in the East Interlake CD's IWMP, so this experience has led to

further involvement in the Cooks Creek watershed planning process. The Intermountain CD manager said that a First Nation representative had attended a watershed-planning meeting, but did not provide any feedback on the IWMP. The Whitemud Watershed CD manager explained that they had tried on numerous occasions to involve both Sandy Bay and Long Plain First Nations in their watershed planning processes, but there has been little to no response to their invitations (by letter and phone call). The Upper Assiniboine River CD had tried to work with schools in Birdtail Sioux and Waywayseecappo First Nation on a water quality project, but they were unable to get funding. The Little Saskatchewan River CD manager described how the PMT had held an IWMP information session in the Keeseekoowenin First Nation about eight years ago, but were unable to engage the First Nation due to the CD's limited experience with and resources for First Nation consultation. The West Interlake Watershed CD has one First Nation within their watershed and several other First Nations near the northern boundaries of the CD, but since they are in the organizational stage of their IWMP, they have not yet made contact with these First Nations.

Four out of the 18 CDs had no First Nations within their CD boundaries (Figure 3). The Lake of the Prairies CD manager said they had no involvement because there were no First Nation communities within their watersheds, which was true, but Gamblers First Nation was near the CD's southern boundary. The manager for the La Salle-Redboine CD stated that there were no First Nations within their CD boundaries, which may be accurate, but there is at least one First Nation near the CD's northern border. The manager of the Turtle Mountain CD explained that they had no First Nations within their CD boundaries, but in the Pembina Valley watershed that they shared with the Pembina

Valley CD, the Swan Lake First Nation had been involved in watershed planning. The Turtle River CD had no First Nations within their CD boundaries, but this CD includes the eastern portion of the Dauphin Lake watershed and the Tootinaowaziibeeng First Nation may be in or near this watershed.

## **4.2 FIRST NATION CASE STUDY COMMUNITIES**

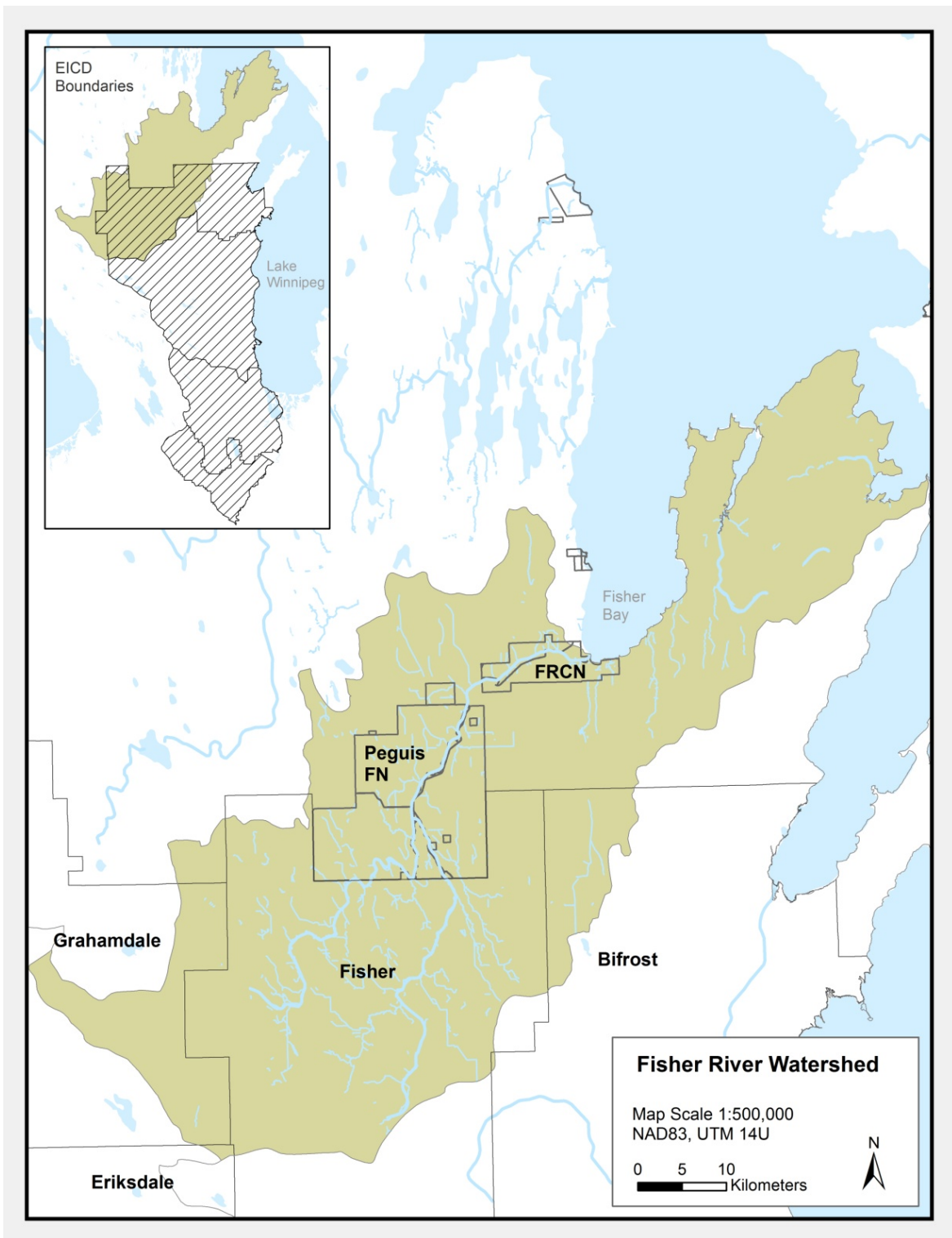
Peguis First Nation and Fisher River Cree Nation were chosen for the case study, based on their relatively high level of involvement and collaboration in watershed planning with the East Interlake CD. Representatives from both First Nations were on the Project Management Team (PMT) for the Fisher River Integrated Watershed Management Plan (IWMP) along with representatives from the CD, Manitoba Conservation and Water Stewardship, the Rural Municipality of Fisher, and the community of Dallas Red-Rose (EICD website). At the time of this study, they had almost completed their Fisher River IWMP.

This East Interlake CD is located on the southwest basin of Lake Winnipeg, and the Fisher River watershed is in the northern portion of the district (Figure 4). Peguis First Nation and Fisher River Cree Nation both have communities within the Fisher River watershed. Peguis is the largest First Nation community in Manitoba, with a registered population of almost 10,000 as of December 2013 (AANDC-2). Fisher River Cree Nation is a smaller community with a registered population of almost 3,700 as of December 2013 (AANDC-2). The Fisher River watershed has a drainage area of about 2,200 km<sup>2</sup> and is a sub-watershed of Lake Winnipeg (AECOM 2009). Flooding has occurred in the communities of this watershed with relative frequency and the First Nation communities

believe that this problem is due to upstream land clearing and drainage improvements (AECOM 2009).

Prior to their involvement in the development of the Fisher River IWMP, the Fisher River Cree Nation had created a water protection plan for their community, with the assistance of the Centre for Indigenous Environmental Resources (CIER) and the University of Manitoba, Department of City Planning (Beukens et al. 2011). With the assistance of these outside organizations, Fisher River Cree Nation was able to build their capacity for source water protection. Other First Nation communities may not have this kind of assistance to build their capacity for watershed planning. The success of the collaboration between the East Interlake CD and Fisher River Cree Nation was also attributed to “luck” and good timing by an individual involved the watershed plan.

Peguis First Nation did not have a water protection plan prior to their involvement in the Fisher River IWMP, but they had at least one highly motivated person in a leadership position that encouraged the community and the East Interlake CD to collaborate on developing a watershed plan. In the interview with the representative from Peguis First Nation, he mentioned that he had sent a letter to the provincial government, with guidance from their band lawyer, requesting consultation on the upcoming provincial watershed plan development.



**Figure 4. The Fisher River watershed showing the reserve boundaries of Peguis First Nation (FN) and Fisher River Cree Nation (FRCN). (EICD 2013 - reprinted with permission of the EICD).**

### **4.3 DETAILS ON FIRST NATION INVOLVMENT IN WATERSHED PLANNING**

As outlined in the methods section above, detailed interviews were carried out with the managers of CDs that were working with First Nations on water issues, provincial watershed managers/planners, federal environmental specialists, an indigenous environmental planner, and First Nation representatives from the case study communities. The data outlined below is presented around the three main themes that emerged: the benefits of First Nation inclusion, relationship building, and the barriers to inclusion. Quotes are used to highlight the points being made by the study participants and these quotes represent majority opinion unless otherwise noted.

#### **4.3.1 Benefits of First Nation Inclusion**

One major theme that emerged from the interview data related to the benefits and importance of First Nation inclusion in watershed planning. Three categories or sub-themes were identified in the data, including: comprehensive watershed plans, clean source waters, and proactive and efficient planning.

##### **Comprehensive Watershed Plans**

The interview participants considered the inclusion of all watershed residents and their governments as vital to effective watershed planning. The literature also recognizes this as one of the requirements of good water governance (de Loë and Kreutzwiser 2007). Since First Nation communities are situated within the watersheds of most CDs in Manitoba, the inclusion of First Nations in provincial watershed planning should result in more comprehensive watershed plans, because they encompass whole watersheds.

Several CD managers emphasized the benefits of including First Nations in watershed plans:

*“I think it’s absolutely essential if they’re a stakeholder in the watershed – you can’t develop a plan unless the stakeholders are there. If you developed a plan and you didn’t consult with a First Nation or large landholder in the watershed, you’re not going to have a good plan... you know in the country, we’re kind of lean and mean - we don’t have a lot of resources. We have to partner on things if we want to get something done, if we want to have some progress. The only way to do that is to work together.”*  
(Participant C3)

*“I think it’s really important because we’re all a player in how it works... the water flows through their land and back to us. It flows through non-First Nation communities and then into First Nation lands, so we all have to work together to protect it and make plans on how we want to use it. So, if we’re fighting each other, we’re not really going anywhere.”* (Participant C4)

*“The Province and the federal government have to recognize that they (First Nations) are within the watershed and we need to work with them.”* (Participant C6)

A First Nation representative also underscored the need for inclusiveness in watershed planning:

*“We all have to look at the big picture, understand the big picture, and work together. Excluding people in there is not the answer.”* (Participant A2)

One of the federal government representatives discussed how comprehensive, inclusive watershed plans could protect against emergencies like flooding and water contamination, or at least provide a contingency plan for communities within the watershed.

*“This whole issue of cooperation with municipalities is very, very important because the issue really is beginning to spill over, right? Unless you can have that type of approach in dealing with other issues, I don’t think your plans will be robust enough to protect you, because some of the issues may be happening where you don’t have any jurisdiction, right? So, what can you really do? If part of a problem of flooding is because somebody is doing something somewhere else, you don’t really have an issue to tell them unless you*

*are a part of that planning and you are going to look at the watershed management, as opposed to the reserve boundary or whatever municipality.” (Participant F4)*

Another federal government representative pointed out that comprehensive watershed plans could broaden the focus of federal emergency initiatives on reserves.

*“...you need to have the data on the watershed and watershed management in order to know what your potential emergencies are.” (Participant F3)*

*“We’ve created fuel spill management plans and things like that from the environment side, but they’re just not the larger – we need the umbrella one, that kind of brings them all together...” (Participant F3)*

### **Clean Source Waters**

A main goal of watershed planning in Manitoba is to protect source waters and ensure sustainable water use among stakeholders in the watershed. Involving First Nations in provincial watershed planning programs could help everyone reach these common goals. One CD manager explained why First Nation inclusion in watershed planning could help all stakeholders accomplish the goal of sustainable water use within the watershed in the following way:

*“... the reason I personally like Integrated Watershed Management Plans is because it dissolves all political boundaries and follows watershed boundaries. People that join the Project Management Team are then there to help plan the sustainability of the whole watershed and not just from their specific region or interest. It’s therefore integral in the framework of the Conservation Districts to have First Nations sitting on the board to help plan and secure the resources of the watershed. The CD program and IWMP’s provide an excellent opportunity to dissolve all political boundaries, because at the end of the day, we are finding that everybody shares the same general goals for the watershed – they just want it to be sustainable over time.” (Participant C1)*

Two First Nation representatives shared their perspectives on the benefits of First Nation inclusion in watershed planning and working towards a common goal:



*“I think we’re all working toward the same goal: quality of water – sustainability of good quality water, right? So, why would we walk down different paths when we’re trying to go to the same area? By working together, what is the old saying? Many hands make light work.” (Participant A2)*

*“...at least with this process you have everyone at the table. You have all the key stakeholders, the people who are in the authority, the policy-makers, and they’ll influence those changes through their membership. That’s what I’m hoping for, that once we have this plan, especially with these terms of reference that we’re having signed up next week, basically, it signifies that everyone is saying okay, we’re in this together now. We all agree that we have a common goal with a common purpose – we want safe water and we want a clean river.” (Participant A1)*

A federal government representative emphasized the importance of having clean water on First Nation lands and territories:

*“Really the benefits are there, if they have the capacity to look after this, to preserve the integrity of the reserve lands and resources, with water being one of those resources that they need.” (Participant F4)*

*“Some of the traditional foods are being impacted, as well, by not looking after the water. So, if you are going to preserve that and the community continues reaping benefits from the traditional foods and way of life, you’ve got to look at all aspects of the natural environment, right?” (Participant F4)*

A First Nation representative added that clean water was something that First Nations people need to continue their cultural and traditional practices:

*“It’s very important because, you know, in First Nation communities, that’s what everyone has to understand: water – we understand, in order for us to survive, we need water. To us, water is the sustenance of life, and it’s a very important part of our practices and our traditional beliefs. So, being involved in the planning and the development of management practices for the watershed is so important because now we have input and we can provide direction as to the way we see these practices should be put in place.” (Participant A2)*

### **Proactive & Efficient Planning**

Interview participants indicated that watershed planning activities could be an efficient way to get all of the necessary stakeholders involved in the development of

watershed management plans. It was established that this could also be a proactive way to mitigate potential water hazards that could have negative effects on communities and the environment in general. When the Federal Environmental Specialists were asked whether they knew of any First Nation communities that had watershed plans, one representative said:

*“There are emergency plans of some sort for all the First Nations, and there are plans to make new plans or update them in the future.” (Participant F2)*

The federal emergency plans were described as protecting against fuel spill contamination in the environment, but not necessarily protecting against hazards like flooding. Another federal representative conceded that the federal government has not been proactive in regards to flood preparation on reserves:

*“I think the blatant disregard for climate change, federally, has led us to be reactive instead of proactive, because 13 to 15 years ago, we could’ve had some programs and services in place for communities to access funding to be adaptable. Now we’re hearing that we’re spending all this money on flooding, reactively, when maybe we could have forecast that these communities may be impacted and assisted them 15 years ago in being prepared.” (Participant F1)*

Two other federal representatives stated that if the federal government were more proactive in assisting First Nations in the development of watershed plans, this could save the government lots of money on mitigation.

*“I think it would increase environmental awareness on water and everything. I think being proactive will save a lot of money down the line. You’re never going to learn to run without walking. Unless we change things and actually provide funding or help them somehow deal with this and build their capacity, we’re going to continue to be reactionary. The (First Nation) community is going to continue to be reactionary and we’re going to be reactionary. We’re just going to throw money at them, at the problem, like we already are. We have to break the cycle, and this is one way to break the cycle.” (Participant F3)*

*“Thousands of small mitigations might be able to have the same effect as a really gigantic mitigation, but it might cost less and be more beneficial.” (Participant F2)*

Watershed protection in First Nations could be more efficient and cost effective for the federal government if they helped First Nation communities participate in provincial watershed planning programs. A federal government representative pointed out that they could improve watershed protection in First Nations by:

*“... doing whatever it takes to get them (First Nations) involved with these Conservation Districts when they’re doing real, practical fieldwork, data gathering, and community outreach. Then, not to be ignoring the fact that it probably doesn’t cost much money, getting the First Nations involved would be massively beneficial to us.” (Participant F2)*

#### **4.3.2 Relationship Building for Collaboration**

Another main theme that emerged from the interview data related to building relationships between First Nations and CDs for collaboration in watershed planning. The process of relationship building that was described by participants was organized into the following categories or sub-themes: initiating contact, key contacts, partners in community development, two-way communication, and learning from others.

##### **Initiating Contact**

An important first step in the process of relationship building between First Nation communities and CDs identified by participants was initiating contact. Successful contact depended on how the CD chose to communicate with the First Nations and typically, this involved going to the First Nation communities and giving presentations on the watershed planning process to band councils. A couple of CD managers shared their experiences on initiating contact with First Nations:

*“... we’ve learned that if you want First Nation participation, it might be a good idea to go see them. Don’t just wait for them to come to you, or don’t just send them a letter. Go talk to them; make presentations to their council directly. The earlier the involvement, the better - that’s what we think now, anyway. We can’t just send them a letter and expect them to show up at a meeting. We need to go see them, go talk to their council. Get them to commit resources, time, somebody to sit on the watershed board, this type of thing.” (Participant C3)*

*“I believe the manager, our watershed planner from the province, and the chair of our watershed management planning group, went out there and spoke to the (First Nation) Council and just told them what was going on. If they were interested, they could take part. We gave them a draft plan at that time and just got some verbal feedback from that.” (Participant C5)*

A provincial Water Stewardship representative explained how watershed planners assist CDs during the initial meetings with First Nation communities:

*“... we’re basically building the capacity of conservation districts to engage First Nations within the planning process. As well as when that initial contact is made, we play a large role in explaining the watershed planning process, because it’s a new process to some CDs. So, one of the roles that watershed planners fill is explaining to First Nation communities and others involved in the planning process what the process is about, how they would benefit from participating, what are the benefits - not only as a whole, but specifically to the First Nation community being part of the process, what the time commitments are, what they can expect, that kind of thing.” (Participant P2)*

Initiating contact between CDs and First Nations could be challenging, but a provincial Water Stewardship representative described how they tried to make contact with the First Nations at different stages of the watershed planning process:

*“... sometimes our first point of contact early on in the process goes without any response, so we do try to engage First Nations at various stages throughout the development of the plan, as well as we try to communicate the status of where the planning process is at, invite them (First Nations) to participate in meetings, and provide them with opportunities to review the draft document along the whole process if we aren’t getting an initial response.” (Participant P2)*

The indigenous environmental planner suggested that the CD managers and provincial staff initiate contact with First Nations by asking them how they want to be involved in watershed planning:

*“I would ask the First Nations straight up how they see themselves being involved with this watershed. Can they participate? If they can, how will they participate? If they can’t, what do they need in order to participate? Then they (the province) could help develop some kind of budget or training to help that First Nation be at the table.” (Participant Ind1)*

Some CDs initiated contact with First Nations in other ways prior to watershed plan development. Contact was initiated through collaboration with First Nations on various projects including: water festivals, education in the schools, or cultural heritage preservation.

### **Key Contacts**

Several CD managers said that finding key contacts in First Nation communities was an important step in successful relationship building. Key contacts were identified as being community leaders who were motivated and interested in protecting water. Two CD managers felt that it took luck to find these key contacts for collaboration in watershed planning:

*“... we’ve had good luck just creating relationships right off the bat....but the key reason is that we always find individuals who are interested in the same thing...like protecting resources for future generations.” (Participant C1)*

*“To some extent it’s a matter of luck. If you’re working with First Nations there’s a two-pronged approach to dealing with them. First, you’ve got your band council, who are the elected representatives, and then on top of that, you’ve got a whole layer of elders. The two things pretty much have to be on side before you can make any serious cooperation go. I would recommend going the elder route first, if you can find an elder that’s willing to talk to you, the band council tends to listen. That’s been my experience anyway. And, as I say, we lucked into a couple of elders who were willing to work with us. Then who*

*ever is the elected person, who's usually not been there that long, they don't like to upset the elders, so they'll work with you.” (Participant C2)*

### **Partners in Community Development**

One participant indicated that First Nations should be involved in CD programs since they are part of the community:

*“I always thought that we were actually better suited to the rural development portfolio than we were to the conservation/water stewardship portfolio, because I think what we were doing was community development and community can involve First Nations. That's the way I've looked at it, but it's not always the way the government looks at it, unfortunately.” (Participant C2)*

A First Nation representative expressed the importance of building respectful relationships between First Nation communities and non-First Nation organizations:

*“That partnership, that relationship building, is going to be very important, especially right now. A lot of First Nation communities, that's what they want. They want these environmental groups to come to them, to work with them. First Nation communities, First Nation peoples, like I said, are not adverse to development – they're not adverse to business. They're adverse to when their rights are being trampled on. We're adverse to people coming into our traditional territory, thinking they can do what they want.” (Participant A1)*

If all levels of government worked together in partnership, they could build their collective capacity for watershed management. One federal representative suggested that the federal government could partner with First Nation governments and collaborate by:

*“...working with the province more, having perhaps a federal-provincial-municipal team or working group {on watershed planning}.” (Participant F1)*

### **Two-Way Communication**

Watershed planning requires effective communication amongst all stakeholders in the watershed according to participants and also the literature (Lagacé 2011). To have

collaboration between CDs and First Nations, communication was considered the responsibility of both sides:

*“It’s a two-way street: it’s not just the CDs that have to be responsible, but also the First Nations have to be responsible for some contact. I would like to see a lot more First Nations people taking an interest in the health of their environment. Now, I know they talk a good game on this, but sometimes the on-the-ground reality is not quite as good as what the speech is.” (Participant C2)*

*“We’ve got to find ways to work better together with our First Nations, ways to communicate... more regular communication I think would be good.” (Participant C3)*

The level of collaboration between CDs and First Nations in watershed planning was left up to the First Nation community, according to a provincial Water Stewardship representative:

*“... from all of the 23 plans that we have currently, either being completed or being developed, there’s a number of examples of how First Nations have been involved in those plans - at various degrees of involvement - from no involvement to sitting on the Project Management Team, to having public consultation meetings within the First Nation communities and everything in between. So, you’ll see a lot of variety in how First Nations are engaged in the process, but we really look to the First Nation to tell us how they want to be involved.” (Participant P2)*

### **Learning From Others**

Social learning is now recognized as a central component of effective resource management (Muro and Jeffrey 2008). As more CDs have built relationships with First Nations, CD managers and provincial Watershed Planners have learned more about how to effectively collaborate with First Nations on watershed planning. One CD manager explained that he had learned from other managers how to collaborate with First Nations:

*“We talk about it quite a bit at manager’s meetings and I just phone up people that have worked with them (First Nations). Like I’ll give (another CD manager) a call and see how his projects are going and learn about some of the snags and conflicts that he’s*

*running into. I try to learn from them instead of going through it by myself. There are lots of examples out there, if you just look.” (Participant C4)*

Another CD manager mentioned that they could learn how to build relationships with

First Nations by the Province of Ontario’s example:

*“I’ve been to meetings and met with different people in Ontario, from First Nations as well as from the Conservation Authority. It sounds like a really good relationship –it sounds like Conservation Authorities are offering some of their expertise or tools to First Nations that don’t have expertise in one particular area. They seem to work well together. Again, I think they recognize that they both serve the land and serve the people, and if they work together, it’s going to work out a lot better. If you’re dealing with watersheds, you just can’t ignore any of the partners, any of the stakeholders – you have to include everybody, so that’s the reason to do it.” (Participant C3)*

#### **4.3.3 Barriers to First Nation Involvement**

One of the main themes from the interview data involved the many barriers to First Nation involvement in watershed planning. The data related to barriers were organized through the identification of the following categories or sub-themes found in the data: institutional, financial, technical, social/political, and procedural. Each of these is discussed below.

##### **Institutional Barriers**

The provincial *Conservation Districts Act* was described in the interviews with CD managers as the greatest barrier to First Nation involvement in provincial watershed planning programs.

*“... When I first started with the Conservation District, one of the first conversations was how to get First Nations more involved. The answer was to include them in the Conservation Districts Act. Not just to be a consultant/stakeholder, but to be part of the conversations...” (Participant C1)*



*“The Conservation Districts Act... it really limits how we can work with federal lands. So, that right there kind of limits the boards and Conservation District employees from even contacting them. There’s not really much that we can even offer them – just advice. Like for this project, we’re not even supposed to be working on their lands – all work has to be done by them.” (Participant C4)*

A First Nation representative also noted that the current legislation is a barrier to First Nation involvement that should be changed:

*“Legislation is already developed and it’s already out there, it’s the perfect excuse, it’s a barrier and government refers to it all the time. It’s like policy, right? They say, ‘Oh, we can’t change policy’. Well, damn right you can change policy.” (Participant A2)*

The provincial Water Stewardship representative confirmed that the *Conservation Districts Act* was a challenge to First Nation and CD collaboration.

*“I would say that the main limitation there... is that the First Nation communities can’t actually be members in the Conservation District. Their lands are excluded under the Conservation Districts Act from actually being part of the Conservation District. CDs can’t do work on lands outside their boundaries. However, as participants in the IWMP process and the watershed planning process, we encourage them to be at the table and often do bring them in through the public engagement part of the process. We encourage some CDs to, if they have a relationship with the First Nation community, to help them kind of in a... it’s almost like an informal partnership lots of times.” (Participant P1)*

Several CD managers recommended that the *Conservation Districts Act* be changed to allow representatives of First Nation governments to sit on CD boards.

*“It’s integral in the framework of the Conservation Districts to have First Nations sitting on the board and partaking in the different beneficial management practices to secure the resources of the watershed.” (Participant C1)*

*“...there’s a feeling that the Conservation District boards need to expand a little bit in terms of voices, who’s on there. Because right now, it kind of looks like it’s municipal appointees. That could be limited voice. When we do watershed planning, we talk to a lot more people than just the municipal people, so I think we need to change our program to be more inclusive. And First Nations are definitely on the table I think, in terms of... okay, how do we get them more involved with Conservation District activities - on the board, perhaps?” (Participant C3)*

If CD managers want to encourage more First Nation involvement in watershed planning within the context of the Act, one First Nation representative explained how to achieve this:

*“That’s what I would have Conservation Districts do: go to the First Nations, tell them they’ll work on their behalf, they want them to partner up and come to the table. Tell them we’ll work on changing the legislation, because if the Conservation District managers don’t push to change the legislation, the ones in the office – within Manitoba Conservation – aren’t going to do it. It’s the message that’s sent from the grassroots up that’s going to make change and it’s up to those Conservation District managers to do that.” (Participant A2)*

One of the provincial representatives from Water Stewardship noted that the legislation in Ontario could serve as a model for how to update Manitoba’s outdated *Conservation Districts Act* (1976). Ontario has legislation that allows First Nations to be considered as municipalities under the *Conservation Authorities Act* (1990), so that representatives of First Nation governments could sit on Conservation Authority boards as governments.

*“By broadening the way we define municipality, or broadening that to include municipalities and First Nation communities, or some sort of additional language would help to clarify that. We’ll definitely look to Ontario’s legislation as an example of how to do that. By involving them (First Nations), in that case, on the Source Water Protection Committee, or in our case, on the Conservation Districts Board, it does give them a voice at the table and an opportunity to not only hear the discussion that goes on, but also to be able to have a say in what gets done in the watershed. So, it’s an ideal way that we would be able to move forward with it. But, we’re not there right now.” (Participant P1)*

The data from federal representatives indicated that they were typically not asked to be involved in the provincial watershed planning process, which could contribute to the limited involvement of First Nations. One CD manager identified cross-jurisdictional challenges as a barrier to First Nation collaboration with provincial CDs:

*“... just from what I’ve heard and seen... a lot of them (First Nations) just don’t want to deal with the provincial level CDs. They just want to talk with the federal government.” (Participant C4)*

It was also noted by some participants that there is a conflict between the provincial *Conservation Districts Act* and the *Water Protection Act* regarding the exclusion of First Nation lands – the *C.D. Act* excludes them, but the more recent *Water Protection Act* (2005) states that First Nations must be consulted during the watershed planning process. A provincial Water Stewardship representative agreed that the existing legislation was confusing and restrictive, and indicated that it is a problem they were working on. When asked about the consultation requirement in the *Water Protection Act*, one provincial representative stated:

*“... specifically with integrated watershed management planning, our act (the Water Protection Act) says the Water Planning Authority must consult with First Nations within the planning process. But that isn’t the Section 35 “duty to consult” type of consultation. The province provides support through their watershed planners to assist Water Planning Authorities in their task of engaging First Nation communities throughout the planning process. But because the actual act of developing the Integrated Watershed Management Plan doesn’t infringe on any rights, since projects are not being completed on the landscape, we don’t trigger the Section 35 “duty to consult” through our planning process.” (Participant P2)*

A First Nation representative and the indigenous environmental planner had the following perspectives on the consultation required for watershed planning:

*“...if you are going to make any changes to waterways or to any of the habitat within the local environment that’s going to affect any marine (aquatic) life or anything - swamps or muskegs – then it’s going to affect the First Nations people that either hunt, trap, fish, gather medicines/berries, or anything. You’ve got to consult.” (Participant A2)*

*“We don’t need consultation if we’re working together and I think as a way to develop a partnership, we could develop a working relationship on how to plan things together on the land and water.” (Participant Ind1)*

Recognition of First Nation governments and respect for Aboriginal and treaty rights is required if municipal and provincial governments want to engage First Nations in watershed planning. According to a First Nation representative:

*“The big thing that we’re pushing right now is Treaty Rights, in regards to water protection and how they go hand in hand for the First Nation communities. This is a part of our mission statement as a community and we state that our Treaty Rights are paramount. That’s really the big part there, for focusing on right now.” (Participant A1)*

The existing provincial legislation only gives First Nations a limited voice at the watershed-planning table through the mandated stakeholder-engagement type consultation process. First Nation representatives can attend CD planning meetings, but they have limited influence over the outcomes of decision-making. A provincial representative from Water Stewardship put it this way:

*“The CD meetings and the board meetings are always public. They could always come and sit in, just to hear what’s happening. But again, they wouldn’t really be able to vote on anything or have an actual say.” (Participant P1)*

Not surprisingly, a First Nation representative felt that this limited voice for First Nations in watershed planning should be changed in the provincial legislation:

*“...one of the stumbling blocks...is that under the Water Protection Act, First Nations will only have an advisory voice at the table. That has to change, especially when you’re dealing with traditional territories of First Nations people. If you don’t give them that administrative voice at the table, the voice to actually influence change or development within those watersheds, they’re going to have to consult, because you can’t come in and make recommendations to First Nations’ Traditional Territory without consultation. From as far as I understand, the Conservation Districts don’t have the funds or capacity to do consultation.” (Participant A2)*

The existing federal legislation, specifically the *First Nation Lands Management Act* (FNLMA), provides some opportunities for First Nations to gain authority and control over their lands and waters, but most First Nations – including Peguis and Fisher

River - still operate under the *Indian Act* (OAGC 2009). First Nations under the FNLMA have extensive authority, but numerous gaps remain that require federal Ministerial oversight. Considering the federal government's lack of participation in the provincial planning process, this leaves First Nations excluded. Federal representatives from Aboriginal Affairs and Northern Development Canada (AANDC) explained the potential benefits of the FNLMA:

*"...they (First Nations) can create, they can use Provincial (laws through reference), they can use Federal (incorporate the Canadian Environmental Assessment Act), or they can use other Aboriginal laws." (Participant F3)*

*"I think for those under the First Nation Lands Management Act, it gives them more autonomy and more flexibility, in a sense working like a municipality. So it may be more palatable for a Conservation District, because then they don't see the rigidity of, you know, federal law and us versus them." (Participant F1)*

The lack of appropriate legislation for water protection on reserves and the lack of enforcement of those laws were mentioned as problems by the federal government representatives interviewed.

*"...in 2009, the Federal Auditor General actually pointed out there's whole gaps around environmental management on reserves, on federal lands versus the province." (Participant F3)*

### **Financial Barriers**

The limited funding for provincial watershed planning and the inability of CDs to share that funding with First Nations were often identified as barriers to First Nation involvement. One CD manager noted:

*"The problem always comes down to dollars. Right now, our support comes provincially and municipally, so for us to go spend municipal dollars on reserve land is not viewed very well. But, it is all part of the watershed." (Participant C6)*

Another CD manager said that the funding issue was the main reason for the lack of First Nation involvement in provincial water protection programs:

*“I think because it’s federal land, and we’re funded by the province – I think that’s probably the biggest reason. I think years ago, we were told we weren’t supposed to (involve First Nations), just because it’s provincial funding, but we did it anyway - if they wanted trees, we gave them trees. We didn’t really care. We didn’t go out there and not promote our programs and stuff like that, but it’s just because we couldn’t use the provincial money to do anything out there.” (Participant C5)*

The data indicate that most stakeholders involved in the provincial watershed planning process are paid representatives of municipalities, employed by the province, or employed by businesses/organizations. These non-First Nation stakeholders were also involved in watershed planning to benefit from projects that would be conducted during the implementation phase of the plan. First Nation communities could not often benefit from projects on their lands due to the limitations on CD funding. First Nation representatives, unless they were part of the band’s government, were not always paid to be involved in watershed planning. A provincial representative explained these challenges to First Nation involvement with the following statement:

*“... when it comes down to the implementation of the plan, that’s where we’ve seen it break down in the past. Where the First Nation is definitely interested in being involved in the planning process, but they don’t always see the value in providing input into the plan when the other people that are sitting around that table are often benefitting in some way from funding for implementation either through their involvement in the Conservation District or because that municipality they represent is part of the Conservation District.” (Participant P1)*

A federal government representative explained that federal funding for water protection on First Nation reserves was mainly for infrastructure projects:

*“...there’s lots of money for drinking water and wastewater stuff, but it’s for building treatment plants and for building pipes {not for planning}.” (Participant F2)*

It was noted that there are no specific federal funds for First Nation watershed planning, so the federal government representatives suggested that First Nations would have to allocate their already limited band money for that.

*“...our overall infrastructure program has a water protocol that likely stipulates First Nations should protect their source water through planning. But it doesn’t dedicate any specific funds through it. They have a general pot of funding called band-based capital that can be used for all their infrastructure needs, including housing, that maybe they could fund some of that study work out of.” (Participant F2)*

*“It’s the same thing we would say about everything else with the First Nation – they should allocate their funding to deal with these things, at their own discretion.” (Participant F2)*

There were some potential options for funding First Nation watershed planning that were identified by the federal government representatives: 1) by making it an initiative under the Lands Environmental Action Fund (LEAF); 2) by making it part of emergency planning; or 3) by providing funds to Tribal Councils to train watershed planners.

*“I think the only opportunity that we have of funding it would be a part of this emergency planning that seems to have everybody’s ear right now. The case would have to be made that hey, you need to know your watershed and watershed plan because that’s part of the emergency planning, right?” (Participant F3)*

*“Most of the communities belong to a tribal council - even those that are independent. Sometimes when we get funding and are looking at capacity building and training, we give it to Tribal Councils in order to organize the communities and proceed with that training. So, that’s the other way, although there are some reductions in the funding of the tribal councils now.” (Participant F4)*

### **Technical Barriers**

Both CD managers and First Nation representatives should have the necessary skills and knowledge to collaborate on watershed planning. A couple of CD managers

identified the lack of watershed planning experience and high staff turnover as barriers to collaboration between First Nations and CDs:

*“There’s definitely a succession problem... what we are seeing is (CD) managers are being poached by the province and then the feds have been poaching from the province. There hasn’t been enough permanency in job training and vocational learning aspects of the whole thing in order to really get some kind of a standard of training across the board. Obviously, First Nations are just beginning to get into this process, too. And I could see them producing very good resource managers. But, they’re going to have to start working on promoting the education aspect... they’ve got to push more of these kids through to the University level. Once they do that, then there could be better involvement.” (Participant C2)*

*“With bands and their election process every two years, you know you just get going on something and the people change.” (Participant C6)*

Provincial watershed planners work with the Watershed Planning Authorities (CDs designated to create watershed plans) and Project Management Teams to advise them on the watershed planning process. If provincial watershed planners lack training or experience in how to engage First Nations in watershed planning, this could be an added technical barrier to CD and First Nation collaboration. A provincial representative explained how they are improving their training for Watershed Planners:

*“I think the other thing that we’ve been doing for the last number of years as well, is really building the capacity of our staff within the province, so that we’re better equipped to understand how to work with First Nations and what some of the considerations that we need to make are when working with that group of peoples.” (Participant P1)*

There is also insufficient training for First Nation land and water managers in the technical issues related to watershed planning. A federal government representative acknowledged the lack of training available for First Nation land managers, as well as the limited scope of that training:



*“We do have some land managers (on reserves), but they’re not properly trained, they’re under trained, and they don’t really have it within their scope of work to actually do land plans.” (Participant F3)*

One federal representative explained that the Reserve Land and Environment Management Program (RLEMP) was meant to train First Nation land managers on doing leases and permits for land development, rather than watershed planning.

*“This training would not really give them the ability and the tools to do the type of work that you’re thinking about (watershed planning). It’s more specific to administering the Indian Act and the tools under the Indian Act.” (Participant F1)*

This RLEM program only allowed one First Nation member per community to obtain training with federal funds. For any additional land management training, the individuals were responsible for paying the costs of training themselves. The limited funds for training, combined with the typically high turnover rate of First Nation staff, contributed to the lack of technical capacity for land and water management on reserves.

*“One of the challenges with the First Nation communities is high turnover. Training, or any program that focuses on that area, they have to be there for a long time because there’s always a turnover. Peoples’ mobility is very different – is much more drastic in those communities, given the limited resources to be able to attract and keep the key people that have been trained. So, you are looking at constant training because people move in and out.” (Participant F4)*

One way to counteract the problems associated with high turnover in First Nation governments could be through improving the overall capacity of First Nations, as recommended by the indigenous environmental planner:

*“Why can’t we help develop the capacity within the community - work with young people to develop them to be the consulting authority for the community? They don’t change, even if the a new Chief and Council comes in.” (Participant Ind1)*

The technical capacity of federal environmental specialists could also affect their ability to advise or assist First Nation communities in watershed planning, since this sort of technical capacity is in fact limited. One federal representative thought that their training in emergency management planning could possibly incorporate aspects of watershed planning:

*“We are sort of in the middle of going through training under the emergency management and part of the requirement or the focus is going to try to help the community to come up with their own plans. Maybe in that sense then, there will be some sort of a requirement for them to incorporate some of the things that we are talking about, to really have a comprehensive emergency management plan that would then look after all of these other issues, but we are not there yet.” (Participant F4)*

Watershed planning partners require technical knowledge on water for planning to be effective, but if data is not shared across jurisdictions, this will cause problems. One federal government representative commented in this regard that:

*“...it was readily apparent that the provincial government wasn’t aware of certain data about First Nations, like well quality data that existed.” (Participant F2)*

*“That (well water) data was totally out of the equation at that point, so that could lead to very incorrect conclusions about where your issues are. It’s a fairly simple thing for us to share, but the overall tendency is to not engage in these sorts of conversations.” (Participant F2)*

### **Social/Political Barriers**

A lack of public awareness and education on the importance of protecting water is identified in the literature (de Loë and Kreutzwiser 2003) as a barrier to getting public support for water protection programs and was also mentioned by participants. A couple of CD managers expressed, for example, the need for more public water education – especially aimed at the younger generation:

*“I think it’s very important that all people understand the value of our watershed. You notice when you talk to older people, in general, they have a lot more value in the future than the middle generation of any culture. The middle generation is just looking at moving forward – becoming more financially secure, whatever. You have to get to the younger (generation), but you have to show activity. You know, this business of just going to meetings and talking about what you’re going to do doesn’t change anything.”*  
(Participant C6)

*“It is actually sad – the lack of knowledge that there is on the value of water. When you show them (students) and you do things so they actually see, it’s incredible.”* (Participant C6)

*“Starting with the kids is good, too. That’s what we find – if you talk to the kids, they’ll take the message home to the parents. Generally, the parents will listen to the kids, not to us. They’ll listen to the kids first and then sometimes they’ll listen to us.”* (Participant C5)

A First Nation representative also noted that water education in First Nation communities was important because:

*“...education and awareness are some of the key areas to help improve and begin the development of a water protection plan.”* (Participant A2)

This same participant also emphasized that traditional knowledge on water and its value should also be taught in the community to increase awareness of water issues:

*“I think that we have to also incorporate a lot of our traditional values in this, because within our traditional values, it’s an educational process on the protection of the environment and the protection of water – it’s the source of life, right? If people understand those through our traditional practices and beliefs, then they can incorporate that into their everyday living, you know.”* (Participant A2)

A federal government representative suggested that more environmental education in First Nation schools would help to build support and capacity for First Nations to manage their lands and waters.

*“There needs to be an educational thrust for sure, but that’s beyond our ability. I know education is a huge component of what the department is focusing on. That’s not just*

*building schools, but I think they need to look at this as like what's the delivery of the curriculum." (Participant F1)*

*"I think there needs to be a focus on building skills for people to do their own groundwater monitoring. Those basic skills – just having people in the community do it, gives them way more empowerment than anything that we could ever do." (Participant F1)*

The lack of awareness on what CDs do and about provincial watershed planning in general, is likely also a barrier to First Nation involvement, but a provincial Water Stewardship representative explained that recently, awareness has been increasing.

*"I think part of the reason that we're seeing that difference between involvement and no involvement doesn't necessarily have to do with the First Nation or the CD, but in large part is due to when that plan was completed, as well. With a lot of the earlier plans that we did, it was difficult to get First Nation involvement in the plan, which I think is partly due to the fact that there wasn't as much awareness about what the plan was intended to accomplish and how it worked. As we've completed now eleven plans across the province, there's been a lot more publicity and a lot more awareness and understanding of what the process is and how their involvement can benefit them, because they see examples and we can show them examples of where that participation has helped in other First Nation communities." (Participant P1)*

Another potential barrier to First Nation involvement in watershed planning identified by participants was the lack of political support for these initiatives. The political will to protect the environment often begins with the grassroots political activism of an informed public. In regards to water protection in their communities, one First Nation representative said:

*"I think our political will would be a lot more confident in making decisions in regards to any legislation that impacts water... if they heard the population – that that's what they want and people made it an election issue – things would get done, they always do, right? The problem is nobody is making it an election issue." (Participant A1)*

Political support for First Nation involvement in watershed planning could be important from a top-down perspective, as well. One federal government representative explained their role in First Nation water management:

*“Policy-wise, I think we’re often referred to as having that supportive role – to support the First Nations in a number of ways so that they can look after their interests - one of which of course is healthy communities.” (Participant F4)*

Without effective leadership in First Nations, negotiations and consultations with outside groups could be difficult. A First Nation representative had this comment on the politics of collaboration:

*“How you deal with government can impact your leadership or your community. Politics can be a high stakes game sometimes, when it comes down to it. For myself, you always want to make sure that you’re addressing your concerns up front, that the government knows where you stand, but at the same time, you’re not burning bridges. You don’t want everyone closing doors on you because of one incident that might have happened.” (Participant A1)*

First Nation elders were often seen as important community leaders, along with elected leaders, so having elders involved in watershed planning could be beneficial for both the knowledge that they share and their influence in the community. One CD manager said:

*“... I would like to see an elder on our board. It would be a time commitment and there’s not big money in it, that’s for sure, so there would have to be a desire on that person’s part to do this, to try and further the cooperation between the two groups. It’s not going to be an easy process... I think that we need a pioneer – somebody to lead the way.” (Participant C2)*

A First Nation representative added:

*“We always make sure that we get the elders’ input on any one of these issues, especially when it comes down to traditional management. We get their input first.” (Participant A1)*

Conservation District managers also carried some of the responsibility for effectively leading their CDs towards collaborative water management with First Nation communities. According to one First Nation representative:

*“Conservation District managers have a lot of work to do – they’re the ones that have to make the leadership in the First Nation communities believe that they’re working for their benefit.” (Participant A2)*

### **Procedural Barriers**

Time constraints were often mentioned as a barrier to collaboration between First Nations and CDs on watershed planning. The CD program framework states that CDs should try to complete their IWMPs in less than two years (CDFC 2009). Three out of the six CD managers who were interviewed said there was either insufficient time for involving First Nations in the watershed planning process, or their First Nations contacts were too busy to attend all of the planning meetings. Newer CDs, like the West Interlake CD (established 2008), may not have had sufficient time to build the necessary relationships with local First Nations.

#### **4.3.4 Summary**

At least fourteen out of the 18 CDs have First Nation communities, land, or traditional territories within their CD or watershed boundaries (Figure 3). Eight CDs had some involvement of First Nations in their watershed planning activities at the time of this study. Besides watershed planning, other activities that First Nations were involved in include well sealing, livestock management, cultural site development, tree planting, and environmental education. Most First Nation involvement in CD watershed planning has occurred after 2005, when the provincial *Water Protection Act* (Government of

Manitoba 2005) stated that CDs should consult with First Nations in their watersheds. The Alonsa CD was the first to collaborate on a project (cultural) with a First Nation in the watershed, and the Pembina Valley CD was the first to engage a First Nation in watershed planning. The East Interlake CD had a high level of involvement with Peguis First Nation and Fisher River Cree Nation on their IWMP, so they were chosen for the case study.

The three main themes that emerged from the data in terms of the details of First Nation involvement in watershed planning included: 1) the benefits of First Nation involvement; 2) relationship building; and 3) barriers to First Nation involvement. In relation to these, two interview participants shared the following visions for the future of water governance:

**CD Manager**

*“You know, looking into the future, you could have a First Nation, just like a municipality, sitting on a Conservation District board, providing board members and being part of the programming and not having that federal/provincial line to cross. That would be ideal, I guess, but that really shouldn’t stop us from working together. I guess in the future we could work towards that...” (Participant C3)*

**First Nation representative**

*“I think that’s my perfect vision: a First Nation management system or First Nations playing an integral part of water management when it comes to looking after the quality of water within this region. I think that we have that understanding, we have those teachings, and we have that passion to do what it takes to protect water.” (Participant A2)*

## **Chapter 5: Watershed Planning and First Nations**

### **5.0 CD PROGRAM FIT FOR FIRST NATIONS**

The provincial Conservation Districts (CD) Program was initially developed to build partnerships for land and water conservation between the province of Manitoba and rural municipalities (CDFC 2009). The CD program promotes local watershed management, rather than top-down provincial government control of natural resources, which is beneficial if all interests in the watershed are allowed a voice in water governance. One of the shortcomings of the program is the fact that most CD boundaries are based on municipal boundaries, rather than watershed boundaries (Barg and Osborne 2006). The provincial Water Stewardship staff confirmed that the program has been evolving towards management based on the watershed level, while also becoming more inclusive of First Nations, as outlined above. However, the data presented in Chapter 4 indicates that there is still much progress to be made before the CD program can really fit First Nations' needs for watershed protection.

Many of the interview participants pointed out the benefits of First Nation inclusion in such provincial watershed planning. The data shows that at this time, there are no federal programs specifically for watershed planning on First Nations, and that the provincial CD program is really quite variable in terms of how First Nations can be involved. In the boreal regions of Manitoba, where the CD program does not apply, First Nation communities may have other programs for watershed planning in conjunction with development projects like the East Side Planning Authority or Wabanong



Nakaygum Okimawain (Government of Manitoba 2004). There is also the Lake Winnipeg Basin Initiative that has involved the Chief of Fisher River Cree Nation and could involve more First Nations in the Lake Winnipeg watershed (Environment Canada 2010).

One option described by the federal environmental specialists, for regions outside of the CD program, would be to incorporate watershed planning into existing land-use or emergency plans in First Nations. This is not a great option since emergency plans for reserves are often outdated and incomplete, roles and responsibilities are often unclear, the emergency management program is underfunded, and plans are mainly focused on response and recovery rather than prevention (OAGC 2013). First Nation emergency plans would not likely involve stakeholders outside of the reserves and compared to watershed plans, emergency plans would be narrower in scope.

## **5.1 OVERCOMING THE BARRIERS**

Through reviewing the literature, many potential barriers to First Nation involvement in watershed planning were identified (Table 1). The interviews with CD managers, provincial watershed managers/planners, federal environmental specialists, and First Nation representatives provided verification of most of the barriers identified in the literature. The following section discusses some of the issues brought up during the participant interviews, and overlap of those with the literature.

## Legislation

Appropriate legislation is a requirement for effective SWP (CCME 2004). Many interview participants described enabling legislation as the key to promoting First Nation collaboration with CDs. The provincial *Conservation Districts Act* (1976) was prohibitive to First Nation involvement in CD programs, as confirmed by the data. Conservation District programs were incentive-based and not legally binding (CDFC 2009), so water on First Nations would not be legally protected until further SWP regulations are made to support Bill S-8 (PC 2012). In Ontario, the *Conservation Authorities Act* (1990) allowed First Nations to be considered as municipalities so they could be included in watershed planning (Government of Ontario). This option could also work in Manitoba, as discussed in the results, however, First Nations likely do not want to be considered the same as municipalities. First Nations could be recognized as governments without making a comparison to municipalities. The *Conservation Districts Act* could also be amended to allow First Nation government representation on CD boards, as suggested by several CD managers.

The First Nations Land Management (FNLM) Regime was expanded in 2013 with an investment of \$9 million over two years (AANDC-4) to enable more First Nations to gain increased control over their lands and waters as recommended by the Auditor General (OAGC 2009) and confirmed by the data. There are currently three operational, two developmental, and nine interested First Nations listed under the FNLM Regime in Manitoba (AANDC-4). As First Nation self-governance capacity is enhanced under the FNLM Regime, it could be up to First Nations to decide how they want to protect their lands and waters, and collaboration with CDs would likely increase. An

example of collaborative watershed planning in the Northwest Territories has been done while respecting First Nation self-government; the key to the success of this joint planning process was the fact that the territorial government recognized that it was a government to government agreement with First Nations (GNWT and INAC 2010).

### **Consultation**

Water workshop participants, in a study undertaken by von der Porten and de Loë (2010), described First Nation consultation in watershed planning as inadequate. There was some disagreement between provincial Water Stewardship representatives and a First Nation representative, regarding the extent and adequacy of consultation required during the watershed planning processes in Manitoba. The provincial *Water Protection Act*, section 17(1), dictates that First Nations should be consulted during the initial stages of watershed planning (Government of Manitoba 2005). A provincial Water Stewardship representative stated that the type of consultation required for watershed planning was not the same as “the duty to consult” in section 35 of the Canadian Constitution. During the stage of watershed planning, changes were not being made to the environment and thus, would not trigger the “duty to consult”, as explained by a provincial Water Stewardship representative. However, during the implementation stage of the watershed plan, changes to the environment could be made and thus, required consultation with First Nations that could be affected by those projects, as one First Nation representative pointed out. The definition and degree of consultation required for watershed planning should be clarified, as recommended in von der Porten and de Loë (2010), but if First Nations were involved as equal partners in watershed planning, there would not be a need for consultation, as one First Nation participant pointed out.

Good leadership is also necessary in watershed planning, as described by de Loë and Kreutzwiser (2003). Based on the data, it was unclear who should take the lead responsibility for consultation with First Nations: provincial watershed planners and/or the Watershed Planning Authority (CD managers). Federal government representatives could be asked to participate during the consultation phase of watershed planning with First Nations. Until recently, there has been no involvement of federal environmental specialists in the provincial watershed planning process with First Nations. According to the literature (Swain et al. 2006) and this data, federal (AANDC) staff are mainly responsible for drinking water and wastewater facilities – the inspection, planning, and funding of them.

The provincial Conservation and Water Stewardship department likely had a limited capacity for consultation with First Nations during watershed plan development, as one First Nation representative indicated during our interview. By involving federal representatives in the process, this could build capacity for First Nation consultation.

### **Financial**

The Auditor General's report (CDFC 2009) discussed the issue of insufficient federal funding for First Nation environmental programs. If more funding were available through the federal Reserve Land and Environment Management Program (RLEMP), this could help train First Nation land and water managers. The federal environmental specialists mentioned that First Nations could set aside their own band money for watershed planning, if specific federal funding could not be obtained. As suggested in the interviews with provincial Water Stewardship representatives, the funding arrangements

for CD watershed planning programs could be amended in the *Conservation Districts Act* to reflect the possibility of First Nation inclusion. As described in the CD framework (CDFC 2009), CDs receive funding from the province (75%) and municipalities (25%), but if First Nations were interested in collaborating as governments with CDs on watershed planning, they could also contribute to CD funding. However, considering the limited funding that First Nations have for everyday operations (Swain et al. 2006) and the potentially high cost of watershed planning (CCME 2004), it is unrealistic to think that bands could set aside their own money for watershed planning. Another option brought up during the interviews was the idea of funding First Nation watershed planning through Manitoba's seven First Nation Tribal Councils, but again, this option would require further funding.

### **Social/Political**

Public awareness of SWP issues was described as important for gaining support for watershed planning in the literature (CCME 2004; de Loë and Kreutzwiser 2003). Many interview participants also mentioned the need for improved education to increase awareness and support for water protection. Holding water festivals in First Nation communities has had a positive impact on public awareness, as described by several CD managers. Improving water education in First Nation schools could help increase awareness, but this could be a challenge in some First Nation communities, since less than half of First Nation students graduate from high school (AANDC-3).

### **Other Complexities**

The history of colonialism in Canada is a contentious subject for many in this country. The *Indian Act* is still in place in most communities in Manitoba, as noted above, with many of its old, oppressive, colonial ideas still in effect (Coates 2008). The lack of recognition of indigenous water rights remains a contentious issue (Phare 2009; Walkem 2007). Negative perceptions of cross-cultural partnerships, lack of trust, and mutual respect could limit the desire for First Nation and CD collaboration on watershed planning (von der Porten and de Loë 2010). Canada's colonial history could limit the desire for collaboration between CDs and First Nations in Manitoba, but none of the interview participants cited this as a direct barrier.

## **5.2 BUILDING CAPACITY**

A prominent theme in the literature about watershed planning relates to the need to build capacity among all the participants involved – including governments and other key stakeholders (de Loë et al. 2002; Ivey et al. 2006; Timmer et al. 2007). The data confirmed that CD managers, Watershed Planning Authorities (WPA), and Project Management Teams (PMT) often do not have the capacity to engage First Nations in watershed planning. In some cases, successful First Nation engagement occurred when the WPA and provincial watershed planner went to the First Nation to inform the community about watershed planning – invitations sent by mail, email, or by phone were often insufficient. A pre-existing relationship between CDs and local First Nations was an advantage when it came time for CDs to initiate watershed planning.

It appears that a process of social learning (Muro and Jeffrey 2008) is slowly unfolding: some CDs have learned how to engage First Nations in their watershed activities, and this knowledge and experience is being shared with other CDs. Provincial watershed planners are also learning how to help CDs engage First Nations, however, provincial staff still lack the capacity to support CDs in consultations with First Nation communities.

Ivey et al. (2006) discussed how capacity building could be empowering - promoting meaningful participation and a departure from oppressive power structures. The literature also established that the need for capacity building is particularly acute as it relates to First Nation involvement (von der Porten and de Loë 2010; Phare 2011). Based on the many barriers to First Nation involvement in watershed planning discussed above, there is room for improvement when it comes to First Nation capacity building in Manitoba.

Improvements in communication also help build the capacity of all potential partners in watershed planning (GNWT and INAC 2010). For example, prior to this study, there had been limited or no communication between federal environmental specialists, provincial watershed planners, and CD managers. During this study, several federal contacts were shared with CD managers and one provincial planner during and after the interviews to promote collaboration between federal environmental specialists, CDs, and First Nations.

## **Chapter 6: Conclusions and Recommendations**

### **6.0 INTRODUCTION**

The research purpose was to consider how First Nation communities could be more engaged in source water protection (SWP) planning in Manitoba. The specific objectives of this research were: 1) to determine the extent of involvement and collaboration between Conservation Districts (CDs) and First Nation communities in source water protection (SWP) planning in Manitoba; 2) to identify the barriers to First Nation involvement in SWP planning; 3) to explore the ways that capacity can be built in both CDs and First Nation communities to enable more collaboration on SWP; and 4) to provide recommendations for CDs and First Nations in future SWP planning initiatives. Qualitative data was obtained in response to these objectives through key participant interviews and a case study examining the collaboration between the East Interlake Conservation District (CD) and Peguis and Fisher River First Nations. In this chapter, conclusions are drawn based on the objectives and then recommendations for improving First Nation involvement in source water protection planning in Manitoba are offered.

### **6.1 CONCLUSIONS**

#### **Extent of First Nation Involvement**

Eight of the 18 Conservation Districts (CDs) in Manitoba had some involvement of neighboring First Nations in their watershed planning activities. This result was an improvement compared to the First Nation involvement documented by Barg and Osborne (2006), that established that only the Alonsa and Pembina Valley CDs had been involving



First Nations in their activities. Recent efforts (CDFC 2009) by the CDs and the province to collaborate with First Nations during watershed planning processes may be paying off. The degree of First Nation involvement in CD watershed planning ranged from low-level engagement (representatives attended public watershed planning meetings), to medium level involvement (representatives were on the Project Management Team), to high-level partnership and collaboration on watershed projects. Relatively high levels of First Nation involvement and collaboration were identified in the following CDs: Alonsa, Assiniboine Hills, East Interlake, Pembina Valley, and West Souris River. As more CDs have success in collaborating with First Nations in the development of their Integrated Water Management Plans (IWMPs), their experiences will likely be shared with other CDs, potentially promoting further partnerships. However, First Nation involvement in provincial watershed planning programs was still rather limited or in the beginning stages, with only about five out of the 23 existing IWMPs demonstrating high levels of involvement and collaboration between CDs and First Nations.

### **Barriers to First Nation Involvement**

The research revealed many barriers to First Nation involvement in watershed planning that need to be overcome before First Nation involvement and collaboration can occur and be made more meaningful in all of Manitoba's watersheds. The main barriers to First Nation involvement in watershed planning identified in this study were: 1) institutional barriers – the outdated *Conservation Districts Act*; 2) financial barriers - limited funding for both CDs (CDFC 2009) and First Nations (OAGC 2009); 3) technical barriers – the lack of trained land and water managers in First Nations (OAGC 2009); and 4) social/political barriers – the lack of awareness and support for watershed planning.

The literature did not specifically refer to the institutional, social, or political barriers in Manitoba, but the research data supported these findings.

### **Building Capacity**

Building the capacity of First Nations and CDs to collaborate in watershed planning will require relationship building. Partnerships between First Nations, provincial CDs, the federal government, and other organizations (non-profit, non-government, or Universities) could enable First Nations to overcome some of their financial and technical barriers to involvement in watershed planning. The Fisher River Cree Nation was an example of a First Nation community that had successfully built its capacity for watershed planning through the development of partnerships with other organizations.

Good relationships have been developed between some CDs in Manitoba and neighboring First Nation communities. These relationships have helped to promote cross-cultural learning, partnerships on water protection projects, public education programs (water festivals), and collaboration on watershed management plans. In cases where First Nations have developed relationships with CDs, four criteria characterized the effective working relationship: 1) positive personal interaction between CD managers, provincial planners and First Nation councilors; 2) mutual interest in SWP; 3) a water governance-sharing process; and 4) mutually beneficial outcomes for participants. If municipal and First Nation governments want to build their relationships, there is a helpful guide published by the Federation of Canadian Municipalities (FCM toolkit – Unit 2).

## 6.2 RECOMMENDATIONS

Each First Nation community may have a different path to developing their watershed plans – what works for some, may not work for others. As recommended by the First Nation participants in this study, First Nation elders and community leaders could promote water education and awareness to increase support for watershed planning. The data revealed several options for First Nations that want to work on watershed plans: 1) look for ways to collaborate with CDs if their lands are within watersheds managed under CD programs; 2) incorporate watershed plans into existing community land-use/emergency plans with guidance from the federal government; 3) create their own plans with the assistance of non-profit or non-government organizations that have experience in watershed planning. For the latter option, CIER (Centre for Indigenous Environmental Resources) could be a potential organization with the staff and tools to assist First Nation communities in developing their watershed plans. There are guidebooks (six volumes) available with titles such as “First Nations Integrated Watershed Planning” (CIER 2011) created to assist First Nation communities through the various stages of watershed planning, but resources are needed to train First Nation watershed planners and implement the plans.

Overcoming the barriers to First Nation involvement in provincial watershed planning will take time and effort on the part of Conservation Districts, municipal governments, watershed managers and planners, federal environmental specialists, and First Nation communities. The CD program will need to ensure that its future framework continues to be adaptable and flexible to allow CDs to be inclusive to all stakeholders in the watershed (CDFC 2009). If it is decided that the *CD Act* can be changed to allow First

Nation involvement, First Nations should have a say in how the Act will involve them. Based on the findings of this study, some of the key ways to increase First Nation involvement in watershed planning could be: 1) enabling legislation - changes to the *Conservation Districts Act* that allow First Nation involvement in the CD program and possibly First Nation representation on CD boards; 2) specific federal funding for First Nation watershed planning; 3) partnerships between all levels of government - First Nation, municipal, provincial, and federal; and 4) enhanced water education in First Nations to increase public awareness and support for watershed protection.

### **6.3 CONCLUDING COMMENTS**

Involving First Nations in watershed planning could result in more socially integrated watershed management plans, while ensuring water governance processes are equitable and inclusive. The examples of successful collaboration between CDs and First Nations in Manitoba described above can provide inspiration to other CDs and First Nations in their future watershed plans. These results and recommendations may also be applicable to other provinces in Canada. By recognizing First Nation governments and demonstrating respect for First Nation water rights, municipal and provincial governments can work towards partnerships with First Nations for source water protection planning.

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Appendix 1      **Ethics Certificate**

PANEL ON  
RESEARCH ETHICS  
Navigating the ethics of human research

TCPS 2: CORE



*Certificate of Completion*

*This document certifies that*

**Melanie Burt**

*has completed the Tri-Council Policy Statement:  
Ethical Conduct for Research Involving Humans  
Course on Research Ethics (TCPS 2: CORE)*

Date of Issue:      29 November, 2012

## Appendix 2      Interview Schedule for Conservation District Managers

### **Introduction:**

Hello, my name is Melanie Burt, and I am a student at the University of Manitoba's Natural Resources Institute. For my master's degree I am studying the participation of First Nation communities in water management and protection programs in Manitoba. I would like to use our discussion today as part of my thesis research. My research will not necessarily influence water management policy in Manitoba, but I will make recommendations in my thesis that could be used in future water protection planning. Thank you for taking the time to participate in my research and feel free to ask me any questions as we go along.

### **Questions:**

1. In our earlier conversation, you told me that your CD has been collaborating with one or more First Nation communities. - How was the initial contact made between your CD and these First Nation communities?
2. How many First Nation communities are located within your Conservation District's watershed? - Can you identify these communities? - Are some First Nation communities involved in your CD's work and not others? - If some are not involved, why not?
3. Can you tell me about some of the projects that your CD has done or is currently doing that have involved First Nation communities? - What is the extent of First Nation involvement in each of these projects? - How long were these projects/are they ongoing?
4. Who are the key individuals from either your CD or the First Nation community that are involved in these watershed-planning activities?
5. In your opinion, what are the benefits of including First Nations communities in watershed management planning?
6. How could Conservation Districts that have limited First Nation involvement encourage more First Nation participation? - Do you share experiences or learn from other CDs about how to engage First Nation communities?
7. Almost half of the 18 Conservation Districts in Manitoba have some involvement of First Nations in their watershed planning activities. Why don't all Conservation Districts collaborate with First Nations in watershed management?
8. In the future, how can we improve First Nation involvement in watershed planning?

**Debriefing:**

Thank you for sharing your thoughts with me. I will use the information from this interview to narrow down my potential study sites and to help me identify contact people in those communities. After I have gone over my notes or transcribed this interview, I will send you a copy of my initial results so that you can confirm that I am accurately representing the information you shared with me. I will also send you a non-technical summary of my final results once the study is completed. If you would like to read my thesis, it will be available on the Natural Resources Institute website ([www.umanitoba.ca/institutes/natural\\_resources](http://www.umanitoba.ca/institutes/natural_resources)) after it is completed. Please contact me if you have any further questions or comments.

## Appendix 3 Interview Schedule for Provincial Watershed Manager/Planners

### **Introduction:**

Hello, my name is Melanie Burt, and I am a student at the University of Manitoba's Natural Resources Institute. For my master's degree I am studying the participation of First Nation communities in Manitoba's water management and source water protection programs. I would like to use our discussion today as part of my thesis research. My research will not necessarily influence water management policy in Manitoba, but I will make recommendations in my thesis that could be used in future water protection planning. Thank you for taking the time to participate in my research and feel free to ask me any questions as we go along.

### **Questions:**

1. In your opinion, how important is it that all stakeholders within a watershed are involved in integrated watershed management planning?
2. What do you think are the benefits of including First Nations communities in watershed management planning?
3. Do provincial watershed planners encourage partnerships between Conservation Districts and First Nation communities?
  - If so, can you give me examples of successful partnerships?
  - If not, why not?
4. The *Conservation Districts Act* (1976) used to exclude First Nation reserves since they are under federal jurisdiction. Has this law been changed to include them?
  - If not, does this *Act* take precedence over the *Water Protection Act* (2005) that dictates that the water planning authority must consult with First Nation communities within the watershed?
  - If so, the *Water Protection Act* (2005) dictates that the water planning authority must consult with First Nation communities within the watershed so...
5. With regards to Integrated Watershed Management Plans, whose responsibility is it to consult with First Nations?
  - At what stage of the IWMP do consultations usually occur with First Nations?
  - To your knowledge, what is the extent of this consultation?
6. In Ontario, Conservation Authorities can partner with First Nations in watershed planning – First Nation reserves are considered as municipalities in the *Conservation Authority Act*. First Nation representatives can sit on the Source Protection Committees under Ontario's *Clean Water Act*. Do you think this is an example that Manitoba could follow?



7. Most of the Conservation Districts in Manitoba have First Nations communities within their watersheds, but only half of the CDs have involved First Nations in their watershed planning or other activities. How could CDs that have limited First Nation involvement encourage more First Nation participation?

8. As the provincial manager for watershed planning and programs, how can you help CDs be more inclusive to First Nation participation in Manitoba's watershed planning programs?

**Debriefing:**

Thank you for sharing your thoughts with me. I will use the information from this interview to narrow down my potential study sites and to help me identify contact people in those communities. After I have gone over my notes or transcribed this interview, I will send you a copy of my initial results so that you can confirm that I am accurately representing the information you shared with me. If you would like to read my thesis, it will be available on the Natural Resources Institute website ([www.umanitoba.ca/institutes/natural\\_resources](http://www.umanitoba.ca/institutes/natural_resources)) after it is completed. Please contact me if you have any further questions or comments.

## Appendix 4 Interview Schedule for Federal Environmental Specialists

### **Introduction:**

Hello, my name is Melanie Burt, and I am a student at the University of Manitoba's Natural Resources Institute. For my master's degree I am studying the participation of First Nation communities in Manitoba's water management and source water protection programs. I would like to use our discussion today as part of my thesis research. My research will not necessarily influence water management policy in Manitoba, but I will make recommendations in my thesis that could be used in future water protection planning. Thank you for taking the time to participate in my research and feel free to ask me any questions as we go along.

### **Questions:**

1. First Nation communities in Manitoba are technically excluded from provincial watershed planning due to the *Conservation Districts Act*; however, some First Nations have been working with Conservation Districts on watershed management planning. Is there a federal water management program, specifically for reserve lands, that would fill this jurisdictional gap for First Nations that are not involved in provincial programs?
2. Can you tell me about the federal government's role (if any) in First Nation water management?
  - Which department is mainly responsible for water management (your department or Health Canada)?
3. Does the federal government assist First Nation communities in Manitoba with watershed planning or advise them on source water protection?
  - If so, can you give me some examples? – What is the extent and type of assistance?
  - If not, why not (since First Nation reserves are under federal jurisdiction)?
  - Do federal representatives participate in watershed planning consultations with First Nation communities?
4. How can you help build the capacity of First Nation communities to manage their water resources?
  - Are there opportunities for cost sharing, knowledge sharing, skills training, and is there enabling legislation in place?
5. What do you think are the benefits of building First Nation community capacity for managing and protecting water?

### **Debriefing:**

Thank you for sharing your thoughts with me. I will use the information from this interview to narrow down my potential study sites and to help me identify contact people

in those communities. After I have gone over my notes or transcribed this interview, I will send you a copy of my initial results so that you can confirm that I am accurately representing the information you shared with me. If you would like to read my thesis, it will be available on the Natural Resources Institute website ([www.umanitoba.ca/institutes/natural\\_resources](http://www.umanitoba.ca/institutes/natural_resources)) after it is completed. Please contact me if you have any further questions or comments.

## Appendix 5      Interview Schedule for Indigenous Environmental Planner

### **Introduction:**

Hello, my name is Melanie Burt, and I am a student at the University of Manitoba's Natural Resources Institute. For my master's degree I am studying the participation of First Nation communities in Manitoba's water management and source water protection programs. I would like to use our discussion today as part of my thesis research. My research will not necessarily influence water management policy in Manitoba, but I will make recommendations in my thesis that could be used in future water protection planning. Thank you for taking the time to participate in my research and feel free to ask me any questions as we go along.

### **Questions:**

1. Can you describe your role as an indigenous environmental planner?
2. In your opinion, what are the benefits of including First Nations communities in provincial watershed planning programs?
3. What do you see as barriers or challenges to First Nation involvement in CD programs?
4. First Nations are technically excluded from Conservation District programs according to the *Conservation Districts Act* (1976). Has there been any progress towards changing this law to allow First Nation inclusion?
5. In Ontario, Conservation Authorities can partner with First Nations in watershed planning – First Nation reserves are considered as municipalities in the *Conservation Authority Act*. First Nation representatives can sit on the Source Protection Committees under Ontario's *Clean Water Act*. Do you think this is an example that Manitoba could follow?
6. The *Water Protection Act* (2005) dictates that the water planning authority must consult with First Nation communities within the watershed, so when it comes to Integrated Watershed Management Plans (IWMPs), whose responsibility is it to consult with First Nations? - To your knowledge, what is the extent of this consultation and is it sufficient for First Nations?
7. Most Conservation Districts in Manitoba have First Nations communities or traditional territories within their watersheds, but only 8 of the 18 CDs have some involvement of First Nations in their watershed-planning activities. As an indigenous environmental planner, how can you help CDs become more inclusive to First Nations?

**Debriefing:**

Thank you for sharing your thoughts with me. After I have gone over my notes or transcribed this interview, I will send you a copy of my initial results so that you can confirm that I am accurately representing the information you shared with me. If you would like to read my thesis, it will be available on the Natural Resources Institute website ([www.umanitoba.ca/institutes/natural\\_resources](http://www.umanitoba.ca/institutes/natural_resources)) after it is completed. Please contact me if you have any further questions or comments.

## Appendix 6 Interview Schedule for First Nation Watershed Planners

### **Introduction:**

Hello, my name is Melanie Burt, and I am a student at the University of Manitoba's Natural Resources Institute. For my master's degree I am studying the participation of First Nation communities in Manitoba's water management and source water protection programs. I would like to use our discussion today as part of my thesis research. My research will not necessarily influence water management policy in Manitoba, but I will make recommendations in my thesis that could be used in future water protection planning. Thank you for taking the time to participate in my research and feel free to ask me any questions as we go along.

### **Questions:**

1. The local Conservation District manager (insert name) recently told me that your First Nation community has been collaborating with the (insert name) Conservation District in watershed management planning or other environmental activities. How was the initial contact made between your First Nation and this Conservation District?
2. What is the extent of your community's involvement in watershed planning? – What is your role in watershed planning? – Who else in your community is involved in water protection planning?
3. In your opinion, how important is it that your community is involved in watershed planning? - What are some of the concerns about water in your community? - Does your community have its own water protection/management plan?
4. How can water protection planning be improved in your community? - What does your community need to enhance its involvement in water protection planning? – Which agencies could help your community meet these needs?
5. What are some of the challenges to collaboration between your community and the Conservation District? - What are the benefits of collaboration between your community and the Conservation District?
6. How can more First Nation communities be encouraged to collaborate with Conservation Districts in water protection planning?
7. What can Conservation Districts do to encourage more First Nation communities to participate in water protection planning?
8. Can you describe your ideal vision of collaborative water protection planning in Manitoba?

**Debriefing:**

Thank you for sharing your thoughts with me. After I have gone over my notes or transcribed this interview, I will send you a copy of my initial results so that you can confirm that I am accurately representing the information you shared with me. If you would like to read my thesis, it will be available on the Natural Resources Institute website ([www.umanitoba.ca/institutes/natural\\_resources](http://www.umanitoba.ca/institutes/natural_resources)) after it is completed. Please contact me if you have any further questions or comments.