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**To:** Regional District of Okanagan Similkameen  
**From:** Brian Guy and Nicole Penner  
**Project:** Similkameen Watershed Plan  
**Subject:** Draft: Summary of regulatory tools and relevant governance models

## MEMO

### 1 INTRODUCTION

Associated Environmental Consultants Inc. (Associated) is preparing a draft Watershed Plan for the Similkameen River watershed. Successful implementation of the Similkameen Watershed Plan (SWP) will require a governance structure acceptable to the key entities with interests in water management in the watershed. This is an interim memo, prepared in support of the development of a recommended governance structure, and which addresses the following objectives:

- Research and summarize the requirements of the *Water Sustainability Act*, and other key regulatory tools that are relevant to the watershed, including the Riparian Areas Regulation, Canada *Fisheries Act*, *Drinking Water Protection Act* and Regulation, and *Environmental Management Act*.
- Research and summarize watershed governance models used in other jurisdictions with similar water challenges to those of the Similkameen watershed.

In preparing the first draft of the SWP, we contacted local organizations to obtain their perspectives on an appropriate governance structure for the Similkameen Watershed Plan, and the results of these discussions, along with recommendations for next steps, are reported in the main plan document. Engagement with the Lower Similkameen Indian Band on governance is pending, based on the understanding that LSIB is developing a framework for water law and governance in collaboration with the Indigenous Law Research Unit at the University of Victoria

### 2 SUMMARY OF RELEVANT REGULATORY TOOLS

#### 2.1 Water Sustainability Act and Regulation

On February 29, 2016, the B.C. *Water Sustainability Act* (WSA) replaced the B.C. *Water Act*. One of the biggest changes under the new regulations (which include the Water Sustainability Regulation) is that groundwater use will now be regulated in B.C. All groundwater users, except for domestic water users<sup>1</sup> extracting 2,000 L/day or less, must now apply for a water licence. This change brings groundwater use in line with surface water use, which was regulated under the previous *Water Act*.

The WSA includes measures to protect stream health and aquatic environments by requiring that the environmental flow needs be considered when granting future water licences on streams or for groundwater that is likely hydraulically connected to a stream. It also sets out provisions for restricting water use to protect critical environmental flows in times of scarcity.

In addition to updating water use licensing, the WSA and associated regulations include provisions for diverting water and making changes in or near a stream, identifies stream and groundwater protection measures (including well decommissioning and controlling artesian flow conditions), and allows the Province to develop site-specific water quality

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<sup>1</sup> Domestic water use is generally defined as water that is used by a dwelling for drinking water, food preparation, irrigation of small gardens (less than 1,000 m<sup>2</sup>), and providing water to animals kept as pets or for household use (including poultry).



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objectives and designate an area for the development of a regulatory Water Sustainability Plan. This option is available to the Similkameen Valley Planning Society, but the current intent is for the SWP to be a non-regulatory plan.

## **2.2 Riparian Areas Regulation**

The *Riparian Areas Protection Act* provides legislative authority and enables the Province to provide direction to local municipalities to protect fish habitat through zoning bylaws and permits. The main objectives of the Riparian Areas Regulation (RAR) are to ensure sufficient water for fish, protect and restore fish habitat, improve riparian protection and enhancement, and provide stronger local government powers in environmental planning. RAR was enacted in 2005 to protect the area surrounding streams, lakes, and inland waters in the most populated areas of B.C. from development that would damage the habitat of fish in those waters. These regions cover 18% of BC's land mass but account for 74% of the population. RAR is applied at the local government level and is not followed in all areas of BC; however, it was adopted by the RDOS and is followed in the Similkameen watershed. It applies to all electoral areas and is enforced through bylaws and the requirement for Watercourse Development Area permits. It also applies within the Town of Princeton and Village of Keremeos.

## **2.3 Fisheries Act**

The *Fisheries Act* is the main federal legislation affecting all fish, fish habitat and water quality. In June 2012, the Act was amended through Bill C-38, the *Jobs, Growth and Long-Term Prosperity Act*. Under the amended Act, there is a prohibition against causing serious harm to fish, provisions for flow and passage, and a framework for decision-making to provide for sustainable and productive fisheries. One of the more contentious changes was the removal of the prohibition against the "harmful alteration, disruption or destruction (HADD) of fish habitat" and replacement with a prohibition against causing "serious harm" to fish.

In response to concerns raised by various organizations, in February 2017 the Parliamentary Committee on Fisheries and Oceans completed a review of the amended Act.<sup>2</sup> The first recommendation of that report was to remove the term "serious harm" and revert to the prohibition against HADD. In total, the Committee made 32 recommendations which must now be reviewed by the Federal Government.

## **2.4 Drinking Water Protection Act and Regulation**

The *Drinking Water Protection Act* and Drinking Water Protection Regulation require water suppliers to provide water that is potable, and applies to all water systems except single-family dwellings or those that do not provide water for human consumption/food preparation. The Act outlines operating requirements for water systems and drinking water protection measures, including prohibiting activities that are likely to result in a drinking water health hazard. The Act also allows drinking water officers to require the development of Source Water Assessment Plans, which are used to identify threats

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<sup>2</sup> Report of the Standing Committee on Fisheries and Oceans. February 2017. Review of Changes made in 2012 to the Fisheries Act: Enhancing the Protection of Fish and Fish Habitat and the Management of Canadian Fisheries.

<http://www.parl.gc.ca/content/hoc/Committee/421/FOPO/Reports/RP8783708/foporp06/foporp06-e.pdf>



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to drinking water systems and develop recommendations to protect the system. The Regulation defines water quality standards for potable water and outlines requirements for water treatment, water system construction permits, well floodproofing, and the development of emergency response plans.

## **2.5 Environmental Management Act**

Fundamentally, the *Environmental Management Act* (EMA) prohibits discharging waste in a way that causes pollution, unless the discharge is done in accordance with a regulation, permit, approval, or code of practice issued under the EMA. It includes provisions and prohibitions for dealing with hazardous waste (Hazardous Waste Regulation) and reporting of spills, disposing of municipal wastewater (Municipal Wastewater Regulation), and identifying, determining, and remediating contaminated sites (Contaminated Sites Regulation). The EMA outlines enforcement requirements and legislative powers (such as pollution prevention/abatement orders or environmental protection orders) and defines the appeals process.

## **2.6 Relationships between Colonial Law and Indigenous Law**

A research project titled 'Water Law: Lessons from Colonial and Indigenous Stewardship' is underway at the University of Victoria. The three-year project, which began in 2016, seeks to investigate the relationship between Indigenous water law and colonial water law, particularly in the context of the WSA. It will focus on three watersheds in BC, one of which is the Similkameen, and will explore how Indigenous communities and licensed water users can work together to support water sustainability. The research team will interview water licence holders (both agriculture and utilities) to understand how they manage water use and work with Indigenous communities (including the Lower Similkameen Indian Band) to map their water law and assess parallels between Indigenous water stewardship and water licensing.

## **3 SUMMARY OF RELEVANT WATERSHED PLANS AND GOVERNANCE MODELS**

There are many examples of watershed plans and associated governance approaches in use in B.C. and elsewhere. In this section, we describe some of the plans and governance approaches that are most relevant to the Similkameen watershed planning process.

### **3.1 Kettle River**

In 2014, the Regional District of Kootenay Boundary (RDKB) finalized the [Kettle River Watershed Management Plan](#). Development of the plan began in 2010 with a State of the Watershed Technical Study (Phase 1) and a series of discussion papers. The Watershed Management Plan built upon the technical work and was developed collaboratively through a Stakeholder Advisory Group with support from a Technical Advisory Committee. Members of the committees included local and provincial governments and representatives from various organizations/sectors (including major water suppliers, First Nations, forestry, tourism, recreation, agriculture, and industry). The plan presented nine goals to help achieve "healthy aquatic ecosystems, safe and secure water supplies, and a reliable water system supporting a sustainable economy and local food system" and several strategies and actions to meet the goals.



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When the plan was released in 2014, the RDKB and Boundary Electoral Areas committed to funding coordination of the plan over a three-year period. Implementation of the plan is being governed by a Steering Committee and an Implementation Team under the authority of the RDKB Directors. Other implementation recommendations from the plan included a watershed “Round Table” committee to review progress, provide advice, and identify priorities for further work.

## **3.2 Nicola Watershed**

### **3.2.1 Nicola Water Use Management Plan**

Development of the [Nicola Water Use Management Plan](#) (NWUMP) began in 2004 in response to drought conditions in 2003. A Community Round Table organized a workshop in 2004 to obtain community input. The overall goal was to “ensure that the future water supply will be divided equitably among all water users balancing the community’s social, economic, traditional and ecological values.” This led to a four-phase plan development process that included plan initiation, plan development (technical studies and assessments of water management options), community evaluation, and implementation and adaptation.

The NWUMP planning process was run primarily by two committees: the Multi-Stakeholder Committee (MSC) and the Steering Committee (SC). The MSC was responsible for decision making during the plan’s development and included representatives from all levels of government, First Nations, interest groups, and individuals. The SC provided organizational and technical support. Several sub-committees were formed to aid the MSC and the Nicola Watershed Community Round Table provided administrative and support services throughout the project. The NWUMP was completed in 2010 and included 37 recommendations for implementation within six categories: general, water quantity, water quality, environment, learning, and management. The NWUMP included an implementation schedule for each of the 37 recommendations, including approximate costs (low, medium, or high), timeline, and organization responsible. It also recommended that a full review take place within five years of plan implementation.

No updated information on plan implementation, governance structure, or active committees was found using a web search. However, in 2015 the Nicola Lake Steering Committee (Section 3.2.2) decided to expand its mandate to include the entire Nicola watershed. More information on the development and structure of this committee is provided below.

### **3.2.2 Nicola Lake Action Plan and Steering Committee**

Another initiative that focused specifically on Nicola Lake began in 2012, with the Thompson-Nicola Regional District (TNRD) and the City of Merritt initiating the development of the [Nicola Lake Action Plan](#). The plan was completed in 2013 by Nicola Lake Working Group with public input. The plan included a proposed governance structure, beginning with the development of a Terms of Reference (TOR) for the proposed Nicola Lake Steering Committee. The TOR were presented and reviewed at a public meeting on June 8, 2013, and then approved by consensus at the meeting. The committee’s main purpose (as stated in their TOR) was to update and implement the Nicola Lake Action Plan. The original committee included members from local government (TNRD and City of Merritt), First Nations, non-profit organizations (such as the



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Nicola Watershed Community Roundtable), industry (forestry, mining, ranching), community groups, and recreation societies.

In 2015, the committee decided to expand its TOR to incorporate challenges in the entire Nicola watershed and is now the Nicola Steering Committee. The original TOR (from 2013) included a provision that allows updating the TOR as needed, if agreed to by consensus of the members of the committee. The latest TOR (July 2015, draft only) indicates the committee continues to be made up of members from local government, First Nations, non-profit organizations, industry, community groups, and recreation societies. The federal and provincial government provide technical expertise and in-kind resources. The committee also receives support from the Fraser Basin Council. General and project-based funding is provided by various groups (local government, federal government, First Nations, industrial). Rather than acting as a formal decision-making body, it focuses primarily on outreach/public education initiatives and projects.

### 3.3 Cowichan River

The [Cowichan Basin Water Management Plan](#) was completed in 2007. A severe drought in 2003 prompted creation of the plan, which was commissioned by the Cowichan Valley Regional District (CVRD), Cowichan Tribes, provincial and federal government, Catalyst Paper (a large water extractor), and the Pacific Salmon Commission. The planning process included establishing a water management forum, developing a public outreach strategy, identifying water issues and developing a vision statement and goals, preparing the plan, and reviewing/approving the plan. The plan identified six goals, 23 objectives, and 89 actions relating to water conservation and supply management, water quality, habitat and biodiversity, flood management, governance, and communication.

The Cowichan Watershed Board and Cowichan Watershed Society were formed in 2010 as per the recommendations of the plan. In 2014, the Cowichan Watershed Society was incorporated as a legal entity under the *Society Act*.<sup>3</sup> The Board does not have regulatory authority, but promotes sound water management practices and is responsible for guiding and coordinating implementation of the plan. They provide an advisory role and encourage regulatory agencies to base water management decisions on the Board's recommendations. The Board is co-chaired by members from the CVRD and Cowichan Tribes.

Information on the governance structure is provided in the [Governance Manual](#), last updated October 31, 2016. The Board includes 14 members who are appointed by the government partners (Department of Fisheries and Oceans, Ministry of Environment, CVRD, and Cowichan Tribes) and held accountable to those partners. The CVRD and Cowichan Tribes each appoint three members (including two co-chairs) from the CVRD board and the Cowichan Tribes. Jointly, the CVRD and Cowichan Tribes also appoint three or four members-at-large from the community. The remaining members are recommended by the federal government and the Ministry of Environment. Currently, funding for the Board's establishment and basic operations is provided by the partners but the Board is exploring options for long-term funding. Ideas presented in the Governance Manual include surcharges on water licences and possibly water use or sewerage fees.

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<sup>3</sup> The BC *Society Act* was recently (November 28, 2016) replaced with the BC *Societies Act*.

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### **3.4 Shuswap**

#### **3.4.1 Shuswap River Watershed**

Development of the [Shuswap River Watershed Sustainability Plan](#) was initiated by the Regional District of North Okanagan (RDNO) in 2010. The driver for the plan was concerns that land uses and pressures from recreational activities could compromise the integrity of the watershed. The planning process occurred in three phases. Phase I – Issues Identification and Visioning was completed in 2011. Phase II – Plan Development was completed in 2014 by three Working Groups (comprising 32 community members) with support from a Technical Advisory Committee (including federal, provincial, and local government and First Nations) who provided information and reviewed the recommendations provided by the Working Groups. In total, five goals, 19 objectives, and 114 strategies were identified in the plan, which is considered a non-regulatory document. The next steps are Phase III – Implementation and Monitoring, but implementation is currently on hold. However, the plan serves as a guidance document to “help decision making authorities, resource managers, water users, recreation users and residents make informed and integrated decisions regarding the Watershed”<sup>4</sup>.

#### **3.4.2 Shuswap and Mara Lakes**

A separate organization has been working on preserving the water quality in Shuswap and Mara Lakes (Note: the plan area for the Shuswap River Watershed Sustainability Plan is the catchment upstream of Mara Lake). The Shuswap Lake Integrated Planning Process (SLIPP) began in 2008 with a vision statement of “Working together to sustain the health and prosperity of the Shuswap and Mara Lakes.” In 2009, the SLIPP Strategic Plan for Shuswap and Mara Lakes identified goals and recommendations to protect lake health. The SLIPP pilot project ended in 2014, and has been replaced by the [Shuswap Watershed Council](#) (SWC) which is made up of 18 members from First Nations, local government, provincial government, and community representatives. The SWC is currently implementing a five-year Water Quality & Recreation Safety and Education Program with financial support from the Columbia Shuswap Regional District, the Thompson-Nicola Regional District, and the City of Salmon Arm.

### **3.5 Okanagan**

The [Okanagan Basin Water Board](#) (OBWB) is a local governance entity with a broad mandate for water management within the geographic boundary of the Okanagan watershed. The OBWB was established in 1970 by the three Okanagan Regional Districts to address water issues that demand regional scale management. Its authority derives from the B.C. *Municipalities Enabling and Validating Act* and Supplementary Letters Patent provided by the Province to the three Regional Districts. These documents establish the authority, objectives, and purpose for the OBWB. The OBWB Board of Directors includes members from the three Okanagan Regional Districts, the Okanagan Nation Alliance, the Water

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<sup>4</sup> Web site: <http://www.rdno.ca/index.php/services/planning-building/planning-projects/shuswap-river-watershed-sustainability-plan>



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Supply Association of B.C., and the Okanagan Water Stewardship Council (a technical advisory body to the Board of Directors, comprised of representatives of about 30 organizations with an interest in water in the Okanagan).

The vision of the OBWB is to have clean and healthy water in perpetuity, meeting the needs of natural ecosystems, residents, and agriculture. Its mission is to provide leadership to protect and enhance quality of life in the Okanagan Basin through sustainable water management. Its work is funded through local taxation combined with leveraged financial support from senior governments and other funders. It has no regulatory authority but instead works in a collaborative manner. Its strength lies in building partnerships and encouraging joint action towards achieving its vision. It advocates for solutions to Okanagan water issues, and plays a strong education, communication, and outreach role within and beyond the Okanagan. The OBWB has been providing stable leadership in water management in the Okanagan for over 40 years, although it is worth noting that the current governance and management framework has evolved over the years.

### **3.6 Alberta**

In Alberta the *Water for Life Strategy* led to creation of [Watershed Planning and Advisory Councils](#) (WPACs) that are specifically designated by Alberta Environment to assess the condition of specific watersheds and prepare plans to address watershed issues. WPACs also complete stewardship activities in their watersheds and carry out public education. The councils are directed by watershed stakeholders, including government agencies, industry, First Nations, and conservation groups. Many feature active volunteer programs and aim to develop plans through consensus. Within Alberta there are currently eleven WPACS. Those in relatively arid regions with similar issues to the Similkameen include:

- Battle River Watershed Alliance
- Bow River Basin Council
- Milk River Watershed Council Canada
- Oldman Watershed Council
- Red Deer River Watershed Alliance
- South East Alberta Watershed Alliance

The *Water for Life Strategy* requires each WPAC to prepare an Integrated Watershed Management Plan (IWMP). IWMPs establish watershed scale outcomes and develop recommendations for the consideration of government and agencies with decision-making authority. IWMPs are typically preceded by several technical studies completed in partnership with government agencies. In particular, the [Milk River Watershed Council Canada](#) is a relevant example of a WPAC's planning process because, like the Similkameen, it is a trans-boundary watershed, sharing an aquifer with the United States.

### **3.7 International**

There are many international examples of watershed planning and governance models. Herein, we focus on the USA, and on Washington State, into which the Similkameen River flows as it leaves Canada. Washington State is divided into 62 separate watersheds of about 1,000 to 3,000 square miles. A multi-stage watershed planning process, funded by the



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state, was initiated between 1998 and 2012. During that time, Watershed Resource Inventory Area planning units were formed under the *Watershed Planning Act* and allowed to apply for funding for plan development and implementation. A total of 44 planning units initiated the watershed planning process, which generally included four phases (Phase 1 - Organizational, Phase 2 - Assessment, Phase 3 - Planning, and Phase 4 - Implementation). According to the Washington State Department of Ecology website, watershed plans were adopted by 33 planning units and a few continue to implement the priority actions from their plans.

The two planning units that share part of their watershed with the Similkameen are the Methow River planning unit (south of Manning Park) and the Okanogan River planning unit (east of Methow River and south of where Similkameen River crosses the International Border). Similar to the Similkameen watershed, there is extensive irrigated agriculture, many operating and disused irrigation canals, and much water use planning and allocation required to balance fish habitat requirements and agricultural water needs. The Methow River planning unit completed Phases 1-3 and has published the [Methow Subbasin Plan](#) (2004) and a [Detailed Implementation Plan](#) (2009). It is unclear whether the Implementation Plan was ever approved by the Department of Ecology. The Okanogan River planning unit published the [Okanogan Subbasin Plan](#) in 2004, but does not appear to have completed an Implementation Plan.

There is no information online on current plan implementation or governance structure. Historical information for each planning unit is hosted on the Department of Ecology website, but pages are noted as archived and not updated. However, the Department of Ecology continues to fund Watershed Plan Implementation Grants: twelve grants have been issued for the 2015-2017 period, but none were for projects in the Methow River or Okanogan River areas.

Generally, there is a lack of information and clarity on watershed planning activities in the areas south of the Similkameen watershed (i.e., Methow River and Okanogan River). Whether the lack of information is because plans are not being implemented or because activities are not promoted on websites is unclear, but it does highlight the importance of communicating initiatives to the public through commonly used resources (such as websites and news articles) to improve accountability and garner interest in watershed protection measures.

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