

NICOLA BASIN COLLABORATIVE

A STRATEGIC PLAN DESIGN FOR
COMMUNICATION, PROJECTS, AND RESEARCH
IN THE NICOLA RIVER BASIN

PREPARED BY: FRASER BASIN COUNCIL

PREPARED FOR: HABITAT STEWARDSHIP PROGRAM – PREVENTION STREAM

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BACKGROUND

The Fraser Basin Council has been facilitating planning committees, developing plans, and managing projects on the ground in the Nicola River basin, primarily in the Nicola Lake area, since 2012. Planning committees have broad representation including four orders of government, industry, non-profit organizations, and home owners.

There have been several planning committees and members since 2012. Table 1 shows the evolution of the committees and their purpose.

Table 1. Nicola planning committees since 2012 and their function

Committee	Function
Nicola Working Group 2012 - 2013	Guide the development of the Nicola Lake Action Plan
Nicola Lake Steering Committee 2013 - 2015	Guide the implementation of the Nicola Lake Action Plan strategies
Nicola Steering Committee 2015 - present	Provide feedback and guidance on the development of communication and outreach
Nicola Technical Committee 2015 – present	Guide the development of technical, operational projects on the ground
Nicola Research Collaborative 2016 – present	Working with the Nicola Technical Committee to provide guidance and develop research projects

The planning process revealed that many projects and plans have been completed and are underway in the Nicola basin and most of those projects are stand alone. First Nations, agencies, and other organizations are doing important work across the Nicola, work that is often not coordinated with other agencies/organizations. All of the planning partners and committee members have expressed interest in combining resources, expertise, data, and knowledge to help inform communication, operations, and research in the Nicola River basin.

INTRODUCTION

This project aims to design a plan to coordinate communication, operational projects, and research in the Nicola River basin. At this time, the focus is on ecosystem function, watershed management, and water however, future projects are not limited to these subject areas.

ASSUMPTIONS

Aboriginal Rights and Title

We recognize that Aboriginal nations within British Columbia assert Aboriginal rights and title. These rights and title, now being defined, must be acknowledged and reconciled in a just and fair manner. ~ Fraser Basin Council, Charter for Sustainability

Climate Change

Climate change has been linked through research to the release of greenhouse gasses into the atmosphere via human activities. Based on historic emissions, continues release of greenhouse gasses will cause additional changes in the near future. The average temperature of BC may rise between 1.3^o C and 2.7^o C in 2050 and average annual rainfall may increase from two to twelve percent in southern BC. The increase in rainfall provides potential for increased frequency of drier summers and extreme rain events. ~ BC Ministry of Environment

VISION

Healthy and resilient ecosystems, people, and economies in the Nicola River Basin

MEMBERSHIP & STRUCTURE

The Nicola Basin Collaborative (NBC) is divided into three themes and respective guiding committees including the Nicola Steering Committee (communication), Nicola Technical Committee (operations), and Nicola Research Collaborative (research). Several members of the NBC sit on all three committees. Figure 1 shows the structure of the NBC. Table 2 lists the agencies and organizations that are represented on at least one of the Nicola Basin Collaborative guiding committees.



Figure 1. Nicola Basin Collaborative structure

Table 2. Organizations represented on Nicola Basin Collaborative committees

BC Parks
Citxw Nlaka'pamux Assembly
City of Merritt
Coldwater Indian Band
Coquihalla Cattle Co.
Cook's Ferry Indian Band
Douglas Lake Ranch
Emcon Services Inc.
Fisheries and Oceans Canada
Guichon Ranch
Lower Nicola Band
Ministry of Agriculture
Ministry of Environment
Ministry of Forests, Lands & Natural Resource Operations
Nicola Fish and Game Club
Nicola Tribal Association
Nicola Valley Institute of Technology
Nicola Watershed Community Round Table
Nicomén Indian Band
Nooaitch Indian Band
Okanagan Nation Alliance
Shackan Indian Band
Simon Fraser University
Southern Interior Weed Management Committee
Stuwix Resources Ltd.
Teck - Highland Valley Copper
Thompson Rivers University
Thompson-Nicola Regional District
University of Northern British Columbia
Upper Nicola Indian Band

Communication – Nicola Steering Committee

Communication and outreach work within the Nicola Basin is guided by the Nicola Steering Committee. Communication between Nicola Basin Collaborative committees as well as out to the public is guided by the Nicola Steering Committee. The Steering Committee is a non-technical group with broad representation from four orders of government, industry, non-profit groups, and local home owners. This committee includes members from the Nicola Technical Committee and the Nicola Research Collaborative.

Operations – Nicola Technical Committee

Operational projects are developed and guided by the Nicola Technical Committee. This is a technical group with representation from First Nations, federal and provincial agencies, and others as required. This is an informal, ad hoc group that is pulled together for each of the Nicola operational projects. Committee members are drawn from the same group of people that

This committee includes members of the Nicola Steering Committee and the Nicola Research Collaborative.

Research – Nicola Research Collaborative

Research projects are guided by the Nicola Research Collaborative in coordination with the Nicola Technical Committee. This group has membership from First Nations, federal and provincial agencies, as well as universities and colleges. This committee includes members of the Nicola Steering Committee and the Nicola Technical Committee.

PURPOSE

The purpose of this plan design is to provide a guide for communication, projects, and research in the Nicola River basin.

PLANNING AREA

The planning area includes the Nicola River basin as seen in Figure 1 below.

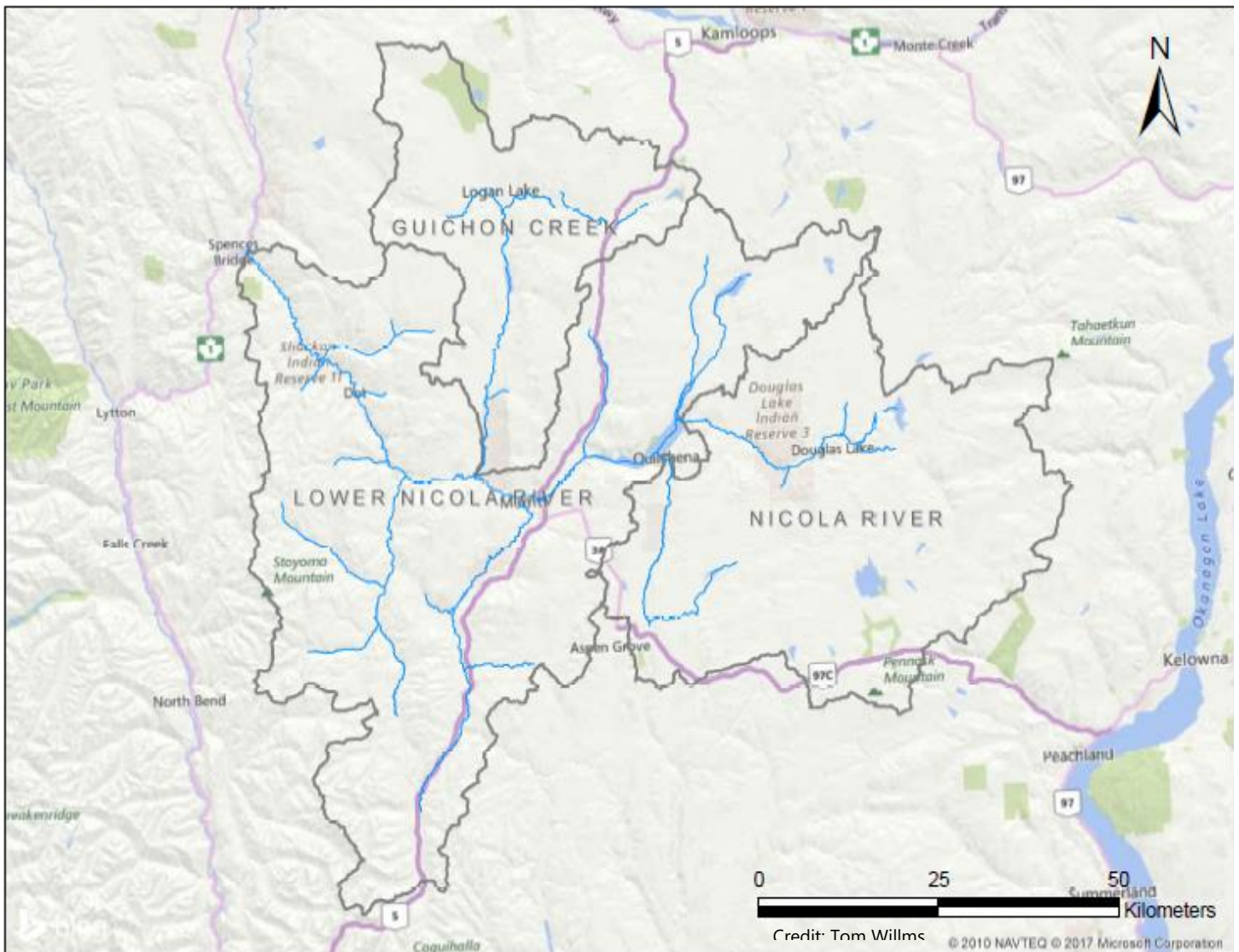


Figure 1. Nicola River basin

GOALS, OBJECTIVES & STRATEGIES

Communication & Outreach

Goal 1 - Improve information sharing and collaboration within the Nicola Basin Collaborative membership

Objective 1-1: Share information and data where possible

Strategy 1-1A: post information, projects, and updates on Nicola webpage www.nicolaplan.ca (2017-ongoing)

Strategy 1-1B: email information and updates to Nicola Basin Collaborative membership

Strategy 1-1C: provide links to partner websites where applicable (2017-2018)

Objective 1-2: Coordinate projects across participating agencies and organizations

Strategy 1-2A: develop a communication plan (2017-2018)

Strategy 1-2B: develop Terms of Reference for the Nicola Basin Collaborative (2017)

Goal 2 – Improve public understanding of the Nicola basin issues and opportunities and the work being done

Objective 2-1: Provide public learning opportunities

Strategy 2-1A: deliver at least four public workshops per year based on public feedback

Strategy 2-1B: share information and updates with other groups and organizations operating in the Nicola River basin

Communication & Outreach

Goal 3 – Improve land and water decision making and management to support water sustainability in the Nicola River basin

Objective 3-1: Collaborate and form partnerships with agencies and organizations that make decisions affecting water

Objective 3-2: Move toward joint-decision making related to water

Strategy 3-2A: Investigate examples of successful multi-government decision making (2018-2019)

Strategy 3-2B: develop a five year plan that includes roles and responsibilities, types of decisions, and degree of input (2019-2014)

Operations

Goal 4 – Support Nicola River basin operators/mangaers with operational projects consistent with the Plan purpose and with guidance from the Nicola Basin Collaborative committees

Objective 4-1: Identify the locations and sources of groundwater at upwelling sites in the Nicola River and throughout the Nicola basin

Strategy 4-1A: conduct an inventory of thermal refuge in the Nicola and Coldwater rivers (2016-2017)

Strategy 4-2B: conduct groundwater mapping in the Nicola basin (2017-2018)

Strategy 4-3C: conduct groundwater budgets in the Nicola basin (2017-2018)

Operations

Objective 4-2: Determine the current state of fish habitat in the Nicola River basin

Strategy 4-2A: conduct Sensitive Habitat Inventory and Mapping (SHIM) projects on Nicola basin streams (2017 - ongoing)

Objective 4-3: Optimize water use in the Nicola basin

Strategy 4-3A: develop a Water Sustainability Plan for the Nicola basin (2018-2020)

Research

Goal 5 – Understand Nicola watershed hydrology and its implications to social, environmental, and economic perspectives

Objective 5-1: Understand Nicola basin hydrology

Strategy 5-A: Conduct water budgets and groundwater mapping in the upper Coldwater River and in the Nicola River from Merritt to Spences Bridge to (2017-2018)

Objective 5-2: Understand the relationship between water temperature and fish behaviour

Strategy 5-2A: Identify the needs of fish (salmonid and resident) regarding water – flows (timing, volume), temperature, thermal refuge (groundwater)

Strategy 5-2B: Identify the needs of fish (salmonid and resident) regarding habitat – in-stream, riparian, and upland areas

Research

Objective 5-3: Understand present and future water use in the Nicola basin

Strategy 5-3A: Identify current and future volume and source of water use – domestic/industry/agriculture (building on the existing body of work)

Objective 5-4: Conduct research as directed and agreed upon by the Nicola Research Collaborative and supported by the Nicola Steering and Technical committees to reach goal 4 (2017-ongoing)

Strategy 5-4A: Nicola Basin Collaborative Committees meet face to face at least twice per year to help plan research projects

APPENDIX 1 – NICOLA BASIN COLLABORATIVE 2016-2017 EVENTS SUMMARY

Communication & Outreach – Nicola Steering Committee

April 11, 2016 – Presentation to the Thompson Steelhead Working Group

The Fraser Basin Council delivered a Nicola Basin Collaborative presentation to the Thompson Steelhead Working Group in Kamloops.

May 24, 2016 – Presentation to Merritt Mayor and Council

The Fraser Basin Council delivered a Nicola Basin Collaborative presentation to Merritt Mayor and Council in Merritt

July 25, 2016 – Presentation to the Thompson Steelhead Working Group

The Fraser Basin Council delivered a Nicola Basin Collaborative presentation to the Thompson Steelhead Working Group in Kamloops

August 9, 2016 – Lower Nicola Band Open House

The Fraser Basin Council participated in the Lower Nicola Band Open House and presented the Nicola Water Management Tool interactive display.

October 28, 2016 – Unmanned Aerial Vehicle Workshop

The Fraser Basin Council coordinated a free, public Unmanned Aerial Vehicle (UAV) workshop at the Nicola Valley Institute of Technology in Merritt. Participants learned about the thermal refuge project on the Nicola and Coldwater rivers as the operation of thermal cameras and UAVs.

December 2, 2016 – Thompson Steelhead Assembly

Several Nicola Basin Collaborative project displays were set up at the Thompson Steelhead Assembly including, groundwater budget and mapping development in the Nicola basin, thermal refuge mapping (mapping thermal refuge sites in the Nicola and Coldwater rivers), Sensitive Habitat Inventory Mapping (SHIM) and Aquatic Habitat Inventory (AHI) of the Lower Nicola River, and the Nicola Water Management Tool.

January 20, 2017 – Nicola Steering Committee Meeting

The Steering Committee met in Merritt; the meeting objectives included:

- Provide an update on the Nicola Basin Collaborative program
- Review committee membership and governance
- Review Nicola Basin Collaborative draft Plan

The Committee received updates regarding the following projects:

- **Groundwater Science Program** – 2016-2017 is the second year of the Groundwater Science Program in the Nicola. The Groundwater Science Program is funded by the Ministry of Environment (MOE), Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) and includes groundwater budget development in the Merritt and Coldwater areas.

This project will continue in 2017-2018 with funding from the federal Habitat Stewardship Program (prevention stream), MOE, and MFLNRO. The project will include developing groundwater maps and groundwater budgets from the Merritt area to Spences Bridge.

- **Thermal Refuge Mapping in the Nicola and Coldwater Rivers** – 2016-2017 is the first year of a two-year project that is part of Tom Willms Master's project through Thompson Rivers University. The project is funded by the **Habitat Stewardship Program (prevention stream)** and Thompson Rivers University. The first year of the project includes using a drone and thermal camera to identify and map groundwater upwelling sites in the Nicola and Coldwater rivers.

Tom Willms will continue this project in 2017-2018. The final project will provide details regarding the nature of several groundwater upwelling sites.

- **Nicola Basin Collaborative Plan Design** – The Fraser Basin Council has completed a strategic plan design to guide communication, operations, and research in the Nicola River basin. The plan aims to coordinate the projects and improve communication across the basin. The project is funded by the **Habitat Stewardship Program (prevention stream)** and the City of Merritt. The Committee reviewed the draft Plan and provided feedback to be incorporated.
- **Sensitive Habitat Inventory & Mapping (SHIM) and Aquatic Habitat Index (AHI) in the Nicola River** – Ecoscape Consulting Ltd. was contracted to complete a SHIM and AHI in the Nicola River from Merritt to Spences Bridge. Sensitive Habitat Inventory and Mapping (SHIM) is a protocol used to collect baseline

information regarding the current condition of watercourses, shorelines, and associated riparian habitats. These inventories provide information on, channel character, shore/bank types and condition, substrates, land use, and habitat modifications. The project is funded by the **Habitat Stewardship Program (prevention stream)**, Nooaitch Indian Band, Lower Nicola Band, the Thompson-Nicola Regional District, and the City of Merritt.

- **Nicola Water Management Tool** – The Nicola Water Management Tool (NWMT) is a tool used to aid in the management of the Nicola Lake dam. This project has been underway since 2013. Funding has been obtained from the **Habitat Stewardship Program (prevention stream)** for the completion of the tool in 2018.

March 6, 2017 – Nicola Open House

A free, public open house was held at the Nicola Valley Institute of Technology in Merritt. The half day event provided the public with an opportunity to hear about the work that is underway in the Nicola basin (projects listed above) and to speak directly with the biologists conducting the work. Approximately 55 people attended the open house and provided input for future public education opportunities.

Operations – Nicola Technical Committee

Members of the Nicola Technical Committee took part in operational planning meetings as outlined below.

April 20, 2016 – Nicola Water Management Tool Meeting

The Nicola Technical Committee met to provide direction and feedback to ESSA Technologies regarding the development of the Nicola Water Management Tool.

May 26, 2016 – Groundwater Science Meeting

The Nicola Technical Committee met to provide direction for the Groundwater Science project.

June 1, 2016 – Nicola Water Management Tool Meeting

The Nicola Technical Committee met to provide direction for the ongoing development of the Nicola Water Management Tool.

July 29, 2016 – Thermal Refuge Mapping Meeting

The Nicola Technical Committee including representatives from Fisheries and Oceans Canada, Thompson Rivers University, and the Nicola Valley Institute of Technology met to discuss plans for the thermal refuge mapping project.

August 11, 2016 – Nicola Water Management Tool Meeting

The Nicola Technical Committee met to discuss the ongoing development of the Nicola Water Management Tool.

October 26-27, 2016 – Nicola Water Management Tool Workshop

Members of the Nicola Technical Committee took part in a two-day workshop to review the work that the consultant (ESSA Technologies) had done to date on the development of the Nicola Water Management Tool. Participants gave feedback that was incorporated into a very detailed meeting summary.

November 24, 2016 – Groundwater Science Meeting

The Nicola Technical Meeting met at the Ministry of Environment to discuss and plan for the Groundwater Science project.

January 27, 2017 – Nicola Water Management Tool Meeting

Members of the Nicola Technical Committee (the Nicola Water Management Tool Steering Committee) including representation from Fisheries and Oceans Canada, Nicola Tribal Association, and the Ministry of Forests, Lands and Natural Resource Operations met to review changes that ESSA Technologies had made to the NWMT development plan, based on feedback received from the October 26-27 workshop.

February 15, 2017 – Groundwater Science Meeting

Members of the Nicola Technical Committee including the Ministry of Forests, Lands and Natural Resource Operations, Ministry of Environment, Fraser Basin Council met with a representative from Golder Associates and Thompson-Nicola Regional District Director Stephen Rice to discuss plans for the 2017-2018 Groundwater Science project extending from Spius Creek to Spences Bridge.

Research – Nicola Research Collaborative

The NRC participated in several meetings during 2016-2017 as outlined below.

November 17, 2016 – Nicola Research Collaborative Meeting

Members of the Nicola Technical Committee and representatives from the Fraser Basin Council, Thompson Rivers University, Nicola Valley Institute of Technology, and Simon Fraser University met to determine the collective interest in becoming a formal research group. Participants discussed membership, research themes, and worked through a draft Terms of Reference.

December 7, 2016 – Nicola Research Collaborative Meeting

The fish-flows research team participated in a conference call regarding the possibility of beginning work in this subject area as soon as possible and specific project ideas. This research team includes representation from Fisheries and Oceans Canada, Nicola Tribal Association, Simon Fraser University, Ministry of Forests, Lands and Natural Resource Operations, Nicola Valley Institute of Technology, and University of Northern British Columbia.

January 24, 2017 – Nicola Research Collaborative Planning Meeting

Fisheries and Oceans Canada representatives had a conference call with the Fraser Basin Council to discuss the direction of the NRC and opportunities regarding research that reflects the strategies in the Wild Salmon Policy.

January 31, 2017 – Nicola Research Collaborative Planning Meeting

The Fraser Basin Council met with Fisheries and Oceans Canada representatives to discuss the direction of research within the NRC and possible opportunities.

March 17, 2017 – Nicola Research Collaborative Meeting

The NRC met for a half day meeting in Kamloops, to receive updates on the Nicola projects underway (thermal refuge mapping, SHIM & AHI, Nicola Water Management Tool, and Groundwater Science), and to review the second draft of the Terms of Reference.

APPENDIX 2 – NICOLA STEERING COMMITTEE

TERMS OF REFERENCE

As at March 2017

Background

A public meeting was held on September 19, 2012 in Merritt to seek input on the future of Nicola Lake and area. More than 70 participants expressed their concerns and highlighted priorities. The Nicola Lake Working Group was formed, which met nine times from November 2012 through May 2013 to create the Nicola Lake Action Plan. The Plan was presented and endorsed at a public meeting on June 8, 2013 in Merritt. The Nicola Lake Steering Committee was the successor to the Nicola Lake Working Group and charged with implementing the Nicola Lake Action Plan.

The Nicola Lake Steering Committee Terms of Reference (TOR) was updated on October 7, 2013 to reflect changes in membership. The TOR was updated again on July 13, 2015 to reflect changes in membership and scope of the Plan. The Nicola Lake Steering Committee has become the Nicola Steering Committee to reflect the inclusion of the watershed to the originally lake focused planning process.

Purpose

The purpose of the Nicola Steering Committee (NSC) is to guide communication and outreach related to the Nicola Basin Collaborative operations and research programs.

Composition and Structure

The Nicola Steering Committee includes representation from a broad range of agencies and organizations in the Nicola basin including but not limited to those included in Table 1 below.

Table 1. Organizations represented on the Nicola Steering Committee

Perspective	Organization
Community Group	Beaver Point Estates
Community Group	Harmon Estates
Community Group	Nicola Lakeshore Estates
Federal Government	Fisheries and Oceans Canada
First Nation Government	Coldwater Indian Band
First Nation Government	Cook's Ferry Indian Band
First Nation Government	Lower Nicola Band
First Nation Organization	Nicola Tribal Association <i>(no assigned representative yet)</i>
First Nation Organization	Nicola Tribal Association – Nicola Watershed, Stewardship and Fisheries Authority
First Nation Government	Nicomen Indian Band
First Nation Government	Nooaitch Indian Band
First Nation Government	Shackan Indian Band
First Nation Government	Upper Nicola Indian Band
Industry - Forestry	<i>Aspen Planers (no assigned representative yet)</i>
Industry - Forestry	Stuwix Resources
Industry - Forestry	<i>Tolko Industries (no assigned representative yet)</i>
Industry - Mining	Highland Valley Copper
Industry - Ranching/agriculture	Coquihalla Cattle Co.
Industry - Ranching/agriculture	Douglas Lake Cattle Company
Industry - Ranching/agriculture	Gerrard Guichon Ranch
Local Government	City of Merritt
Local Government	Thompson Nicola Regional District
Non-Profit	BC Wildlife Federation
Non-Profit	Nicola Valley Fish and Game Club
Non-Profit	Nicola Watershed Community Roundtable
Non-Profit	Southern Interior Weed Management Committee
Post-Secondary Institution	Nicola Valley Institute of Technology
Post-Secondary Institution	Thompson Rivers University
Provincial Government	BC Conservation Service <i>(no assigned representative yet)</i>
Provincial Government	BC Parks
Provincial Government	Ministry of Environment - Water quality
Provincial Government	Ministry of Forests, Lands and Natural Resource Operations – Fisheries
Provincial Government	Ministry of Forests, Lands and Natural Resource Operations – Forestry
Provincial Government	Ministry of Forests, Lands and Natural Resource Operations – Recreation, Sites and Trails <i>(no assigned representative yet)</i>
Provincial Government	Ministry of Forests, Lands and Natural Resource Operations – Water Authorizations
Provincial Government	Ministry of Forests, Lands and Natural Resource Operations – Groundwater

Steering Committee Member Roles & Responsibilities

The role of Steering Committee members is to:

- Provide direction and oversight to the development of outreach events and materials where required;
- Provide direction and oversight to the development of public communication;
- Provide direction and oversight to the implementation of the Plan including the achievement of the vision, goals, objectives, and action items;
- Promote the role of the NSC to collaboratively address issues;
- Attend meetings and work collaboratively with the NSC to seek joint opportunities ;
- Communicate from and to respective membership.

If the NSC chooses to appoint a chair or co-chair, their role, in addition to the roles above, is to understand all perspectives on the NSC, seek consensus, and be a spokesperson for the NSC. The Chair and Co-Chair will not make decisions independent of the NSC.

Support to the Nicola Steering Committee

The Fraser Basin Council is an impartial non-profit organization that provides support to the NSC but is not a member. Support to the NSC includes but is not limited to:

- Coordinating, facilitating, and summarizing meetings;
- Communicating with members of the public;
- Communicating with the media;
- Maintaining the webpage;
- Receiving and managing funds;
- Issuing and managing contracts; and
- Hiring staff.

Reporting and Transparency

The NSC will report to the larger public through an annual public meeting. Meeting summaries will be posted on the Nicola webpage at www.nicolaplan.ca.

Meeting Frequency

The NSC will meet at least one time per year or as needed. Participation can be by teleconference or by means other than in-person.

Committees

The NSC may create sub-committees to address specific issues. Sub-committees must have specific objectives or tasks, membership criteria, and a limited time period outlined for their work. Committees may have expertise from outside the NSC, as needed. Committees have no delegated decision making authority, and will report back to the NSC.

Decision Making Process

Quorum for meetings to proceed is six steering committee members. The NSC will seek consensus on all decisions. Where consensus cannot be reached, a decision will be made by simple majority.

Funding

The Nicola Basin Collaborative has been funded by all four orders of government, and industry. Funding for specific projects that fall under the guidance of the Nicola Steering Committee will be obtained from local, provincial, federal, industrial, and other funding sources where they exist. The NSC can apply for additional funds to complete projects through Fraser Basin Council or through individual member organizations.

Modification of the Terms of Reference

The TOR will be updated as needed and agreed to by consensus of the members.

Completion

The NSC will cease to exist if and when agreed to by consensus of the members. The NSC can make recommendations for a more permanent body (society or similar), including the modification of an existing society. Modification includes but is not limited to the constitution, bylaws, and structure of membership

APPENDIX 3 – NICOLA RESEARCH COLLABORATIVE TERMS OF REFERENCE

As approved at: *not approved to date*

Background

The Fraser Basin Council (FBC) has been developing plans and managing projects in the Nicola watershed in and around Nicola Lake since 2012. The planning process is guided by the Nicola Steering Committee and projects are guided by the Nicola Technical Committee. The Nicola committees have representation from four orders of government including First Nations, with additional participants from Thompson Rivers University, Nicola Valley Institute of Technology, the mining and ranching/agriculture industries, recreation groups, and members of the public at large.

The need for a coordinated research group was realized during the planning process as there are many one-off projects that are undertaken in the Nicola by several different agencies and organizations. The aim for the Nicola Research Collaborative (NRC) is to identify, prioritize, and conduct research to improve land and water management in a coordinated fashion.

Purpose

The purpose of the Nicola Research Collaborative is to develop, prioritize, and conduct research based on information and feedback from Nicola watershed land and water operators/managers including but not limited to the Nicola Tribal Association, Ministry of Forests, Lands and Natural Resource Operations, and Fisheries and Oceans Canada. Feedback and research are not limited to subjects related only to land and water and may include social, environmental, and economic subject areas.

Structure & Composition

The NRC is one of three groups that make up the larger Nicola Collaborative Program including the following:

1. **Nicola Steering Committee** – a non-technical group that guides the development of public education projects and communication;
2. **Nicola Technical Committee** – a technical group that guides the development of science based projects in the Nicola watershed; and
3. **Nicola Research Collaborative** – a technical group that guides the development of research projects in the Nicola watershed.

The NRC has representation from local land and water managers including provincial, federal, and First Nations as well as universities and colleges. The Nicola Collaborative Program includes a much broader representation including all four orders of government, industry, non-profit societies, and local residents.

Table 1. The Nicola Research Collaborative membership 2017-2018

Category	Organization	Representative
Colleges & Universities	Nicola Valley Institute of Technology	Tom Willms
	Simon Fraser University	Jonathan Moore
	Thompson Rivers University	Brian Heise
	Thompson Rivers University	Darrell Carlyle Moses
	Thompson Rivers University	David Hill
	Thompson Rivers University	Tom Pypker
	Thompson Rivers University	Wendy Gardner
	University of British Columbia	Marwan Hassan
Consultants	University of Northern British Columbia	Mark Shrimpton
	Biologist - Schick Consulting	Jody Schick
Federal Government	Forestry - Central Coast Consulting	Paul Mitchell-Banks
	Fisheries and Oceans Canada	Doug Edwards
	Fisheries and Oceans Canada	Jeffrey Lemieux
	Fisheries and Oceans Canada	Kim Hyatt
	Fisheries and Oceans Canada	Michael Crowe
	Fisheries and Oceans Canada	Richard Bailey
First Nations Government	Fisheries and Oceans Canada	Timber Whitehouse
	Lower Nicola Indian Band	Dave Caswell
	Nicola Tribal Association	Sara Martin
	Nicola Tribal Association	Tracy Wimbush
	Nooaitch Indian Band	David Lawrence
Provincial Government	Okanagan Nation Alliance	Elinor McGrath
	Ministry of Agriculture	Andrew Petersen
	Ministry of Environment	Dennis Einarson
	Ministry of Environment	Jordan Rosenfeld
	Ministry of Forests, Lands & Natural Resource Operations	Andy Morris
	Ministry of Forests, Lands & Natural Resource Operations	Chris Walder
	Ministry of Forests, Lands & Natural Resource Operations	Christian St Pierre
	Ministry of Forests, Lands & Natural Resource Operations	Jeptha Ball
	Ministry of Forests, Lands & Natural Resource Operations	Laurie Lyons
	Ministry of Forests, Lands & Natural Resource Operations	Melissa Wade
	Ministry of Forests, Lands & Natural Resource Operations	Patrick Farmer
Ministry of Forests, Lands & Natural Resource Operations	Rich McCleary	
Ministry of Forests, Lands & Natural Resource Operations	Ryan Whitehouse	
Ministry of Forests, Lands & Natural Resource Operations	Rita Winkler	

Table 2 Nicola Technical Committee & Nicola Steering Committee membership

Category	Organization	Representative
Business	Emcon Services Inc.	Frank Rizado
	Emcon Services Inc.	Harry Sandur
Universities	Thompson Rivers University	Jacque Sorensen
Consultants	Al Caverly Consulting	Al Caverly
First Nation Government	Coldwater Indian Band	Chief Lee Spahan
	Cook's Ferry Indian Band	Chief David Walkem
	Cook's Ferry Indian Band	Pearl Hewitt
	Lower Nicola Band	Aaron Sam
	Lower Nicola Band	Leona Antoine
	Nicomen Indian Band	Chief Ursula Drynock
	Nooaitch Indian Band	Christine Oppenheim
	Shackan Indian Band	Angela Fountain
	Shackan Indian Band	Chief Percy Joe
	Upper Nicola Indian Band	Chief Harvey McCleod
First Nations Organizations	Citxw Nlaka'pamux Assembly	Tamlyn Botel
	Nicola Tribal Association	Sharon Joe
Home Owner	Resident	Jenny Ohata
	Resident	Vern and Lorna Latrimouille
Industry	Coquihalla Cattle Co.	Lou Cooke
	Douglas Lake Ranch	Stewart Murray
	Guichon Ranch	Allison Guichon
	Stuwix Resources Ltd.	Lennard Joe
	Stuwix Resources Ltd.	Shaun K
	Teck - Highland Valley Copper	Genevieve Pelletier
Local Government	Teck - Highland Valley Copper	Richard Ducette
	City of Merritt	Diana Norgaard
	Thompson-Nicola Regional District	Director Randy Murray
	Thompson-Nicola Regional District	Herb Graham
	Thompson-Nicola Regional District	Martin Dickson
	Thompson-Nicola Regional District	Regina Sadlikova
Non-Profit Organizations	Thompson-Nicola Regional District	Steve Rice
	Thompson-Nicola Regional District	Sukh Gill
	Nicola Fish and Game Club	Brian Moore
Provincial Government	Nicola Watershed Community Round Table	Al Mackay-Smith
	Southern Interior Weed Management Committee	Justine Densmore
	BC Parks	Michelle Wiebe
	Ministry of Forests, Lands & Natural Resource Operations	Andy Oetter
Provincial Government	Ministry of Forests, Lands & Natural Resource Operations	Phil Belliveau
	Ministry of Forests, Lands & Natural Resource Operations	Ted Zimmerman
	Ministry of Forests, Lands & Natural Resource Operations	Trevor Bohay

Member Roles & Responsibilities

The role of Collaborative members is as follows:

- Managers/operators provide insight and direction regarding land and water management issues;
- Researchers help to advance knowledge around key issues;
- Utilize and promote the role of the NRC to address issues;
- Identify opportunities from respective agencies and organizations;
- Attend scheduled meetings and provide input/feedback where required;
- Communicate from and to respective membership; and
- Share any other related initiatives that may be of interest to other NRC members.

Support to Nicola Research Collaborative

The Fraser Basin Council is an impartial non-profit organization that provides support to the NRC but is not a member. Support to the NRC includes but is not limited to:

- Coordinating, facilitating, and summarizing meetings;
- Coordinating projects;
- Communicating with members of the public, media, agencies, and organizations;
- Applying for, receiving, and managing funds; and
- Issuing and managing contracts.

Communication

Communication to the Research Collaborative, Technical Committee, Steering Committee, the general public, media or other agency or organization from an individual member or research team will be conducted by the Fraser Basin Council.

The Research Collaborative will meet at least biannually or as needed. Participation can be by teleconference or by means other than in-person.

Reporting and Transparency

The Fraser Basin Council will report on behalf of the NRC, to the other Nicola committees annually or as need based on active projects. NRC meeting summaries and other documents as agreed to by the members and with respect to member organizations/agencies existing policies, will be posted on www.nicolaplan.ca. An annual report will be developed depending on funding available.

Research Teams

The NRC may create operational research teams to address specific research areas or projects. Teams may utilize expertise from outside the NRC, as needed. Research teams have no delegated decision making authority, and will report back to the NRC through the Fraser Basin Council.

Local Opportunities

Research Collaborative members will build in a local educational opportunity as part of project development. Opportunities may include but are not limited to:

- Public presentations, workshops or other outreach;
- Hiring local professionals and or field technicians;
- Hiring local unskilled labour;
- Providing field or data collection training;
- please add opportunities to this list

Traditional Territory and Private Land Access Protocol

1. If you want to set up a project, who do you need to communicate with?
2. How much time is needed/expected prior to land access?

Data Sharing & Storage

Research Collaborative members will share existing data where possible respecting the policies of their respective organization. New data, developed as a product of the Nicola Research Collaborative will be shared where possible respecting the policies of the respective member organization. Data will be stored by NRC members.

Report Sharing & Storage

Research Collaborative members will share existing reports where possible and as needed respecting the policies of their respective organization. New reports, developed as a product of the Nicola Research Collaborative will be shared where possible respecting the policies of the respective member organization that produces/publishes the report. Existing reports will be stored by NRC members; new reports may be posted to the Nicola webpage where possible.

Funding – sources

The Fraser Basin Council will apply for funding on behalf of the NRC from local, provincial, and federal governments, industrial, and other applicable funding sources. Members of the NRC will apply for funding to complete projects through their respective organizations in coordination with the Fraser Basin Council where possible. Funding may be applied for on a project by project or long term basis with the goal that stable base funding be obtained.

Funding - awards

Where the Research Collaborative receives base funding, members will award funding to those projects that reflect the purpose of the Collaborative and where they are able to come to consensus. Funding may be provided to cover all or part of a project at the discretion of the NRC members.

Decision Making Process

Quorum for meetings to proceed is six NRC members including at least one representative from each of the Provincial Government, Federal Government, and First Nations. The NRC will seek consensus on all decisions. Where consensus cannot be reached, a decision will be made by simple majority.

Modification of the Terms of Reference

The Nicola Research Collaborative Terms of Reference will be updated as needed and agreed to by consensus of the members.

Completion

The NRC will cease to exist if and when agreed to by consensus of the members.