



DRINKING WATER WATERSHED PROTECTION

Technical Advisory Committee Meeting
June 19, 2013
12h30 – 15h00: Parksville, BC





DRINKING WATER AND WATERSHED PROTECTION TECHNICAL ADVISORY COMMITTEE

A G E N D A

CALL TO ORDER

MINUTES

- Minutes of the regular DWWP Technical Advisory Committee meeting held December 13th, 2012.

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

REPORTS

- Gabriola, Mudge, & Decourcey Water Budget Project Report – M. Donnelly (Report for Submission)
- Vancouver Island Water Budget Project Report – M. Donnelly (Report for Submission)
- Water Conservation Plan Report - M. Donnelly (Report for Comment)
- Municipal Updates - B.Weir, M. Squire, B. Sims, F.Spears (Overview)
- Public Awareness and Involvement - Watershed Tours - J.Pisani (Presentation)
- Water Use Management -Water Use Reporting Tool - D.Keim (Presentation)
- Fall 2013 Public Information Sessions - D.Keim (Announcement)

ADDENDUM

BUSINESS ARISING FROM COMMUNICATIONS

NEW BUSINESS

ADJOURNMENT

AGENDA

Call to order

Minutes

Business...

Communications..

Unfinished business

Reports

- **Reports for submission**
- Reports for comment
- Municipal updates
- Watershed tours
- Water use reporting tool
- Fall information sessions

Addendum

New business

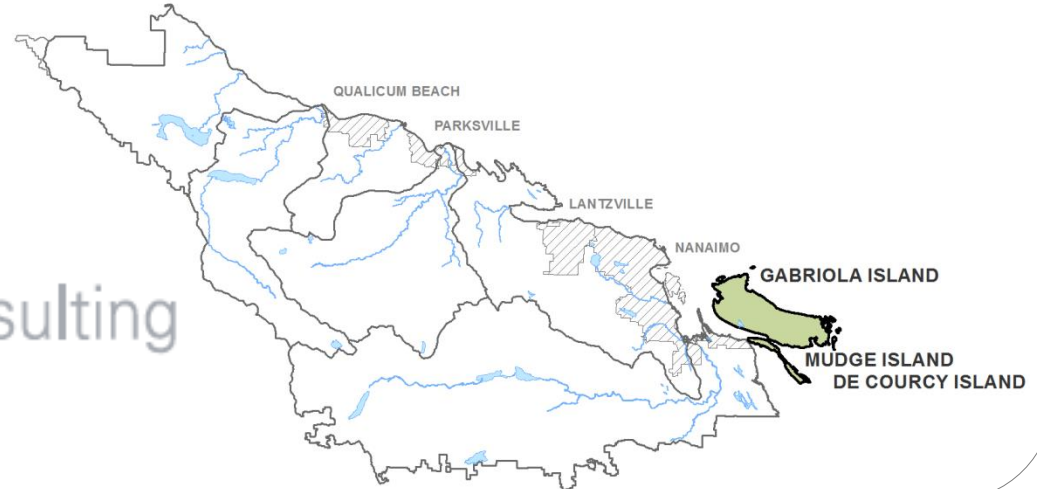
Adjournment



Reports for Submission: PHASE ONE WATER BUDGETS

- **Gabriola, Mudge, & Decourcey Water Budget Project Report**

Prepared by:



- **Vancouver Island Water Budget Project Report**

Prepared by:



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Reports for Comment: WATER CONSERVATION PLAN

Regional District of Nanaimo Water Conservation Plan



Prepared for:



Regional District of Nanaimo

6300 Hammond Bay Road
Nanaimo, B.C. Canada
V9T 6N2

Prepared by:



AquaVic Water Solutions Inc.

University of Victoria
Victoria, B.C. Canada V8W 3W2

Prepared by:



AGENDA

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Municipal Updates



Bill Sims, City of Nanaimo



Mike Squire, City of Parksville



Bob Weir, Town of Qualicum Beach



Fred Spears, District of Lantzville

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Public Awareness & Involvement: School Visits

Current school education program



Next steps: take the school program outside of the classroom ...

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Public Awareness & Involvement: School Visits



***Exploring our Watersheds
&
Discovering Connections***
A field trip for grades 4 & 5



metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION



AGENDA

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Public Awareness & Involvement: Watershed Tours



...Out of the classroom and into the watershed!



Explore sustainability in your classroom and beyond!



Photos from Metro Van field trip – Coquitlam Watershed

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Public Awareness & Involvement: Watershed Tours



Exploring our Watersheds and Discovering Connections

Teacher Planning & Activity Guide

How to make your visit to the watershed meaningful and memorable

Pre & Post -Trip Activities for the students – connected to BC Curriculum

Already developed by Metro Van, available for us to adapt for our region

WATERSHED PLEDGE – SIDE 1

My Watershed Pledge

Your pledge helps protect our watersheds and reservoirs.

I, _____ agree to:

(print your name)

- Pack out everything I bring
- Use the toilets provided
- Respect plants and animals
- Stay with my group

Signature: _____

Date: _____

This pledge also allows you to enter the watershed. Watershed Security will collect your pledge when you arrive. Your official business is to explore and learn about the watershed with us so you can share this with others.

A circular logo with a blue water drop in the center, surrounded by a sunburst pattern. The words "Watershed Pledge" are written around the perimeter of the logo.

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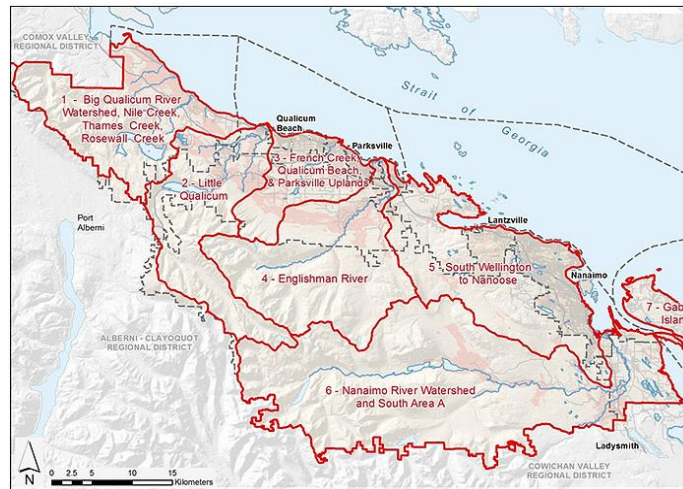


Public Awareness & Involvement: Watershed Tours

Explore partnerships with:



RDN Watershed Tours....



DWWP Action Plan, Item 1B:

Develop school modules and teacher assistance packages coordinated with Intended Learning Outcomes in the BC teaching curriculum.

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Water Use Management: Water Use Reporting Tool



Search the OBWB website:

Google™ Custom Search



Ministry of **Environment**

Ministry of **Agriculture**

Ministry of **Forests, Lands and
Natural Resource Operations**

Ministry of **Community, Sport and
Cultural Development**



**WATER SUPPLY
ASSOCIATION OF B.C.**

spot
solutions



BC
**Water Use
Reporting Centre**



One valley. One water. One stop reporting.

A simple, free, secure water-use
tracking and reporting solution.



Brought to you by the



Bringing your water management into the 21st century

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Water Use Management: Water Use Reporting Tool

PROFILE



Organization: REGIONAL DISTRICT OF NANAIMO

General →

Company Profile

* indicates required fields

Organization Utility: RDN Whiskey Creek

General Licence Ground Water Reservoir/Lake Level Return Flow Users

Save Cancel

Utility Name: * RDN Whiskey Creek Water Used (%) Enabled

Utility No: * 13638

Client No: * 13638

Owner: * Nanaimo Regional District

Office Location Latitude: 49.234805 Longitude: -124.041825 Map

Data Entry Units: * cubic m

Area Served: * Whiskey Creek History

Population Served: * 270 History

Basis of Population Estimate: * Best local estimates (reviewed annually) History

Area Units: * Acres Hectares

Irrigated Hectares (currently): 0 History

Total Committed Hectares: 0 History

Weather Station: Qualicum Airport

Customers

Connections	Customer Type	
123	Residential	X
<input type="text"/>	Please Select	<input type="button" value="Add Customer"/>

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Water Use Management: Water Use Reporting Tool

PROFILE

Licence →

Ground water ↓

Company Profile
Organization Utility: RDN Whiskey Creek

General Licence Ground Water Reservoir/Lake Level Return Flow Users

Water Licence Information
Clicking the 'Node' on the map will display the Licence detail information.

PoDs (1)	Water System
<input type="checkbox"/> C045726/PD29757	

Object: 19277 Hide

Licence #: C045726
PoD #: PD29757
Name: Crocker Creek
Volume: 72180.54 MY
Latitude: 49.304426
Longitude: -124.502663
Purpose: WATERWORKS LOCAL AUTH

Licence details

Company Profile
Organization Utility: RDN Whiskey Creek

General Licence Ground Water Reservoir/Lake Level Return Flow Users

Import Well Depth Sample Edit Delete

Ground Water Information

Please Select Add New Ground Water

- 41896
- 43090
- 26661
- 75341
- 75343
- 28459
- 75326
- 40102
- 75319
- 75320
- 75321
- 46979
- 44157
- 40733
- 40309
- 48870
- 48340
- 75339
- 75338
- 75327
- 75328
- 75323
- 75322
- 75346
- 75347
- 75345
- 75344
- 94530
- 99119

Notes

Tag Number
This is the electronic number the well is assigned in the WELLS database (WELLS - Ground Water Wells and Aquifer Database) from the Ministry of Environment.

Plate Number
This is the physical number found on the stainless steel plate attached to the well.

Well Location
Provide the Land District (e.g. New Westminister) for the well location and include in "Legal Description of Well Location" section.

Geographic Coordinates

- Ensure the GPS map datum on your GPS is set to "NAD 83"
- If using UTM Coordinates, please include the zone (e.g. Zone 10)
- Latitude and Longitude can be expressed as decimal degrees (50.514575)

Well tag

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Water Use Management: Water Use Reporting Tool

DATA ENTRY

Data Entry

Organization Utility: RDN Whiskey Creek Year: 2013 Month: 05

Water Usage: Hydrometric Stations

Import Template

May 2013

Surface Water

Water System Name	Volume [m³]	History
Crocker Creek C039791	<input type="text"/>	<input type="text"/>
Crocker Creek C045726	<input type="text"/>	<input type="text"/>
Monthly Total	<input type="text"/>	

Notes/Comments

Ground Water

Well Name	Tag Number	Volume [m³]	History
	41896	<input type="text"/>	<input type="text"/>
	43090	<input type="text"/>	<input type="text"/>
	26661	<input type="text"/>	<input type="text"/>
	75341	<input type="text"/>	<input type="text"/>
	75343	<input type="text"/>	<input type="text"/>
	28459	<input type="text"/>	<input type="text"/>
	75325	<input type="text"/>	<input type="text"/>
	40102	<input type="text"/>	<input type="text"/>
	75319	<input type="text"/>	<input type="text"/>

Combined Total



Monthly Total Volume of Water Used

Category	Volume [m³]	Measured	% Ground water
Industrial/Commercial/Institutional	<input type="text"/>	<input type="text"/> History <input type="text"/> Please Sele	<input type="text"/>
Agriculture	<input type="text"/>	<input type="text"/> History <input type="text"/> Please Sele	<input type="text"/>
Residential	<input type="text"/>	<input type="text"/> History <input type="text"/> Please Sele	<input type="text"/>
Leakage / Unaccounted for	<input type="text"/>		
Daily Demand Max	<input type="text"/>	<input type="text"/> History <input type="radio"/> Measured <input checked="" type="radio"/> Estimated	
Daily Demand Min	<input type="text"/>	<input type="text"/> History <input type="radio"/> Measured <input checked="" type="radio"/> Estimated	

RESOURCES

Resources

Organization Utility: RDN Whiskey Creek

Dashboard

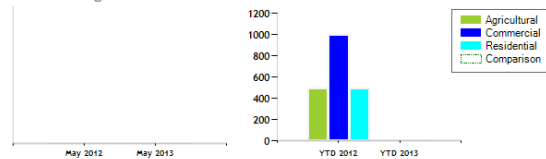
The RESOURCES is designed to be a single glance location on this reporting site that provides a familiar look at your water districts Usage and Storage performance. Capabilities are built in to this site so that you can tailor your needs to get a quick "read" on your water resource performance in your District and the surrounding area. There are a number of tools such as GRAPHS and LINKS that can be added to your Resources to enable you to control the data you require at your fingertips to run your system.

Metrics

Comparison utility:

Water Usage (m³)

Bar Graph Pie Chart



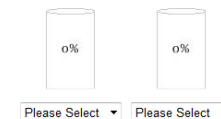
Resources

- Snow pillow (province)
- Snow pillow (Interior)
- Snow pillow (general)
- Weather data
- Real time water levels for Nanaimo
- Water licence query
- MoE snowpack

Consumption (Litres/person)

	2012	2013	Year-to-date	2012	2013
May					
You	0	0	11,111	11,659	
Comparison	0	0	0	0	

Water Storage (%)

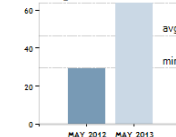


History of Water Levels

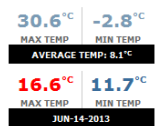
Ground Water Comparison Ground Water

Non-comparative Metrics

Precipitation (mm)



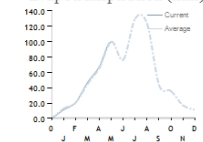
Temperature (°C)



Source: Environment Canada
Location: Qualicum Airport

Source: Environment Canada
Location: Qualicum Airport

Evapotranspiration (mm)

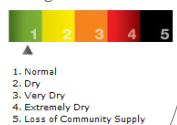


Source: Environment Canada
Location: Qualicum Airport

Snowpack



Drought Level



AGENDA

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Addendum

New business

Adjournment

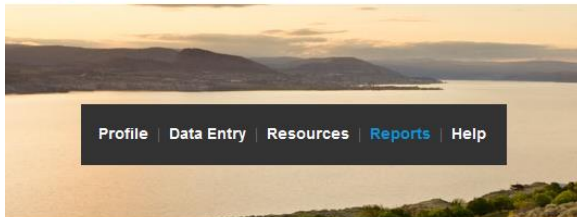


Water Use Management: Water Use Reporting Tool

REPORTS



BC
Water Use
Reporting Centre



Reports ←

- Ministry of Environment Annual Water System Return
- Ministry of Environment Annual Water System Return - All Water Users
- Summary of Water Usage
- Summary of Reservoir Levels
- Summary of Return Flows
- Ad Hoc Report
- Utility Data Entry
- New Ground Water Wells
- Reservoir Heights
- Annual Water Consumption
- Monthly Total Water Consumption



Ministry of Environment
Water Stewardship Division
Annual Water System Return

June 17, 2013

REGIONAL DISTRICT OF NANAIMO

Return Report by: March 15, 2013
Client No: 13638
Water System No: 13638
Water System Name: RDN Whiskey Creek
Owner: Nanaimo Regional District

The information in this report will be considered in the calculation of your next annual rental. Failure to verify this information, and complete and return the form by the due date, may result in being charged at the maximum level as determined by the Comptroller of Water Rights.

For Calendar Year: 2012				
Purpose:	Total Volume (cubic meters)	Metered Location	Is any of your water supply from a Groundwater Source?	If Yes, what percentage of the Total Supply?
Water Works	1,500.00	At the Source 1,500.00 At the customer _____ or Not Metered _____	Yes	100.00%
Irrigation	500.00	At the Source _____ At the customer _____ or Not Metered 500.00	Yes	100.00%
Minimum Daily Demand: 5.00 Cubic meters		Date: Jan 09, 2012	Maximum Daily Demand: 100.00 Cubic meters	
		Date: Jan 05, 2012		
Source(s) of Water Used Please indicate the source name(s) and the percentage of supply obtained from each.			Please provide the following information about Your Customers:	
1 43090 66.67% 2 41896 33.33% 3 101720			Number of Residential Connections 123 Number of Other Connections: _____ Total Population: 270 Basis of Estimate: Best local estimates (reviewed) Cultivated Area: 0 Acres	
Attach a list to report additional sources.				
A listing of existing licenses held in your name is enclosed. If any of these licenses are not used and do not form part of your development plan, you should consider their abandonment.				
I certify that the above information is correct.				
Signature of Official: _____		Position/Title: _____		
Print Name: _____		Phone No. (:) _____		Date: _____

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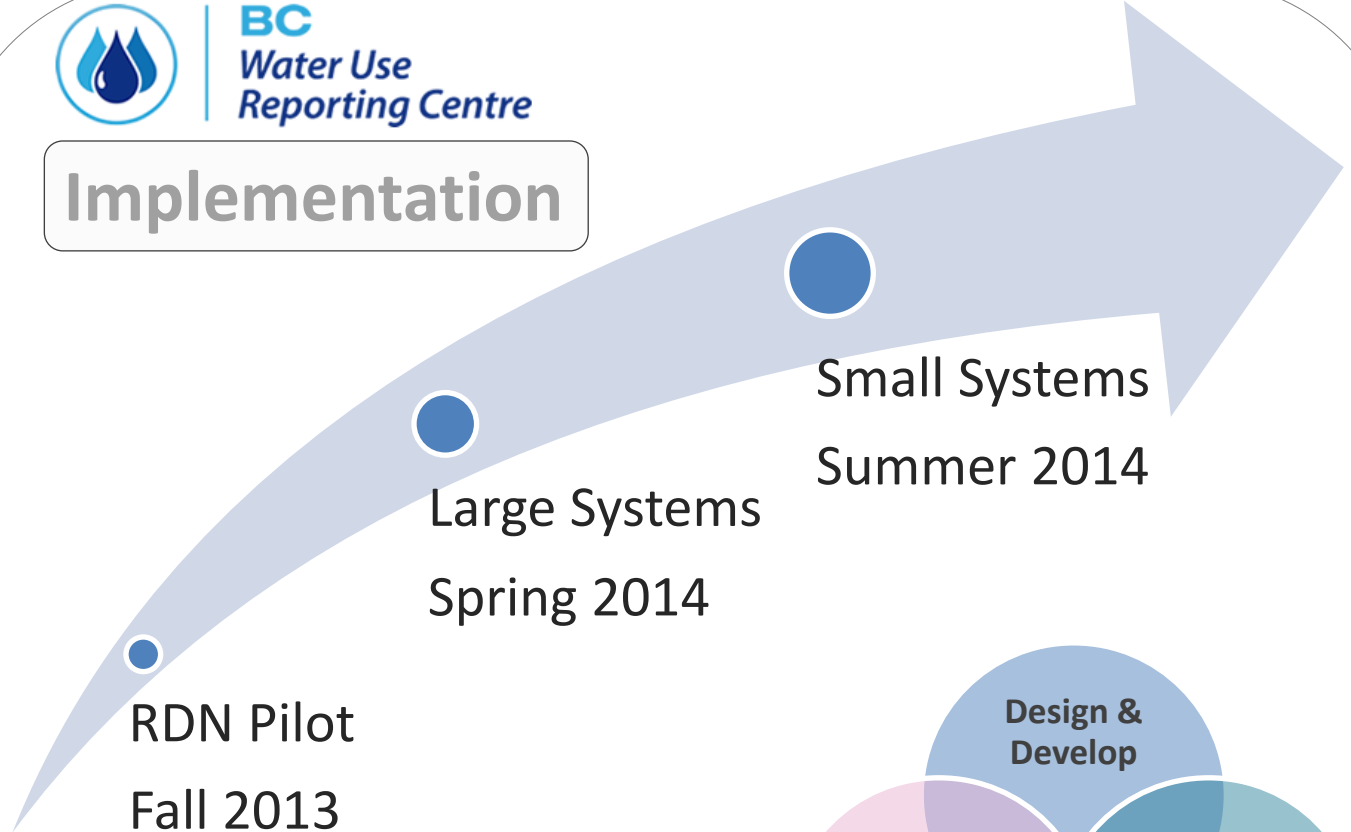


Water Use Management: Water Use Reporting Tool



BC
Water Use
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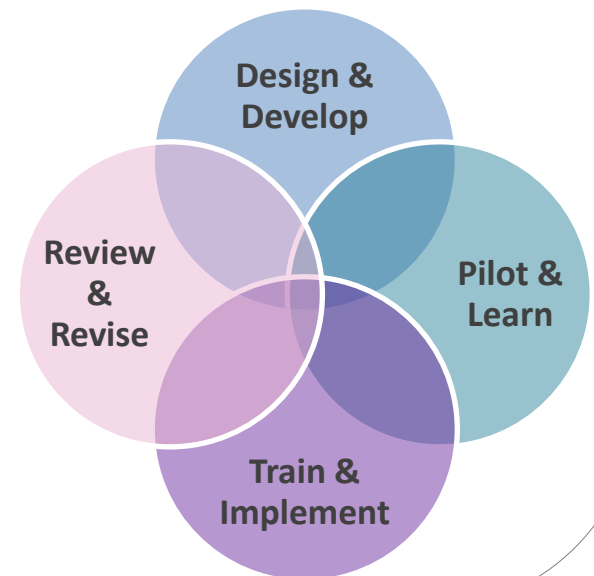
Implementation



Small Systems
Summer 2014

Large Systems
Spring 2014

RDN Pilot
Fall 2013



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Public Information Sessions: Fall 2013



**MARK YOUR CALENDAR!
UPCOMING DWWP PUBLIC INFO
SESSION DATES IN YOUR AREA:**

**7pm – 9pm: Thurs Oct 10
Parksville Community and
Conference Centre**

**7pm – 9pm: Thurs Oct 17
Beban Social Centre, Nanaimo**

**7pm – 9pm: Thurs Oct 23
Qualicum Beach Civic Centre**

**7pm – 9pm: Thurs Oct 29
Gabriola Agi Hall**



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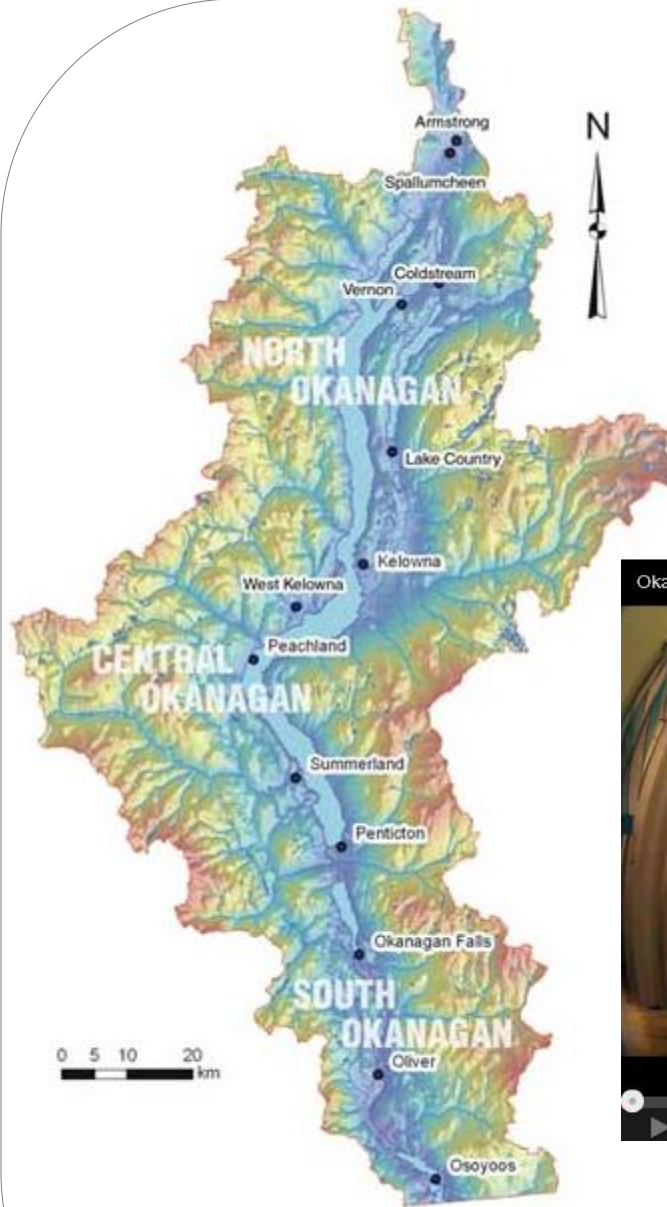
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[Okanagan WaterWise Rap - YouTube](#)



DRINKING WATER
WATERSHED
PROTECTION

Thank You!