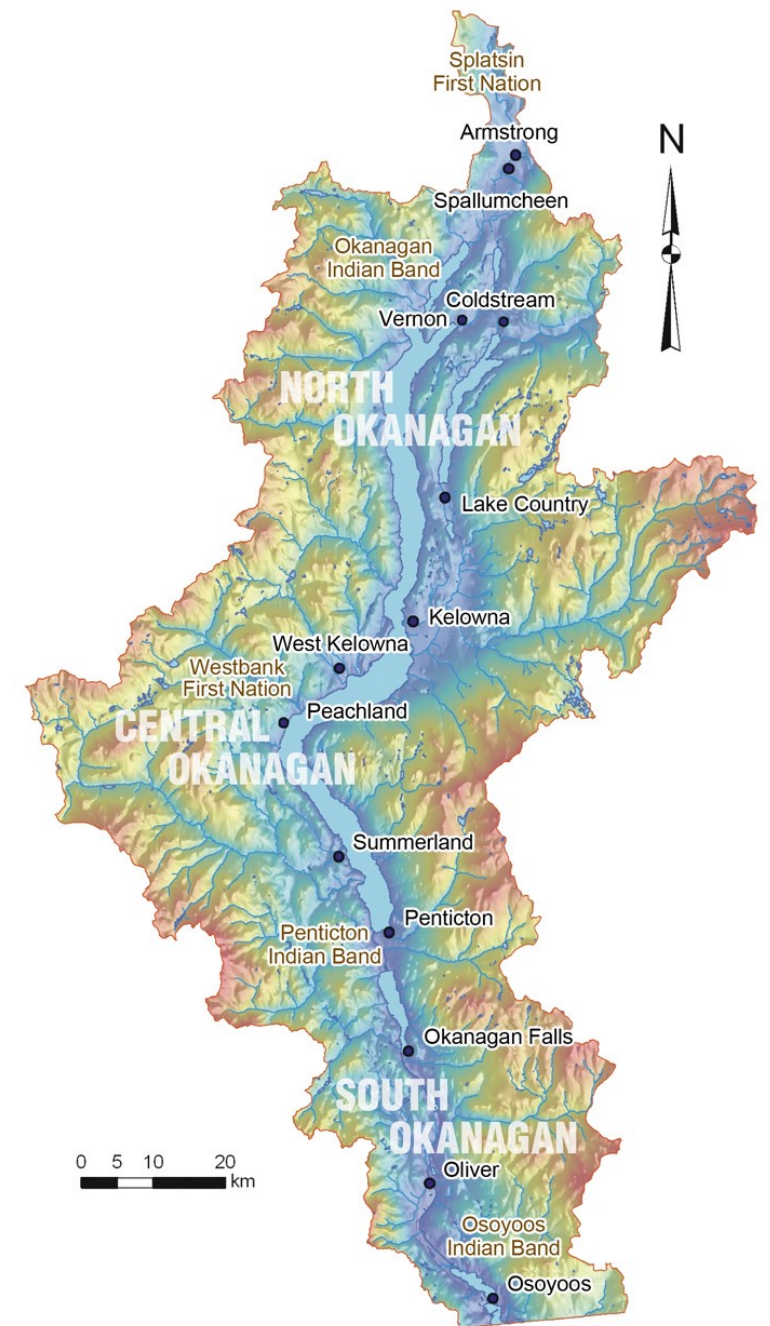


SOURCE WATER

Protection Toolkit

The Okanagan Basin Water Board

- Founded more than 50 years ago
- Focus on projects and programs that benefit the Okanagan watershed as a whole



Meet the Directors



Sue McKortoff, Chair, RDOS
Mayor, Town of Osoyoos



Cindy Fortin, Vice-Chair, RDCO
Mayor, District of Peachland



Rick Fairbairn, RDNO
Director, Electoral Area "D"



Bob Fleming, RDNO
Director, Electoral Area "C"



Viktor Cumming, RDNO
Mayor, City of Vernon



James Baker, RDCO
Mayor, District of Lake Country



Colin Basran, RDCO
Mayor, City of Kelowna



Doug Holmes, RDOS
Councillor, District of Summerland



Rick Knodel, RDOS
Director, Electoral Area "C"



Chief Christopher Derickson,
Okanagan Nation Alliance



Robert Hrasco,
Water Supply Association of BC



Scott Boswell, Chair, Okanagan
Water Stewardship Council

Source water protection – *what it is and why it matters ...*

- Source water protection is the safeguarding of the quality and quantity of drinking water sources (rivers, streams, lakes, reservoirs, springs, groundwater) and their contributing areas
- Source water protection is the first barrier in the multi-barrier ‘source-to-tap’ approach to minimize impacts to human health
- Drinking water sources can be easily contaminated and long-term issues can develop that are costly or even impossible to remediate
- Source water protection also delivers cumulative socio-economic benefits and ecological services

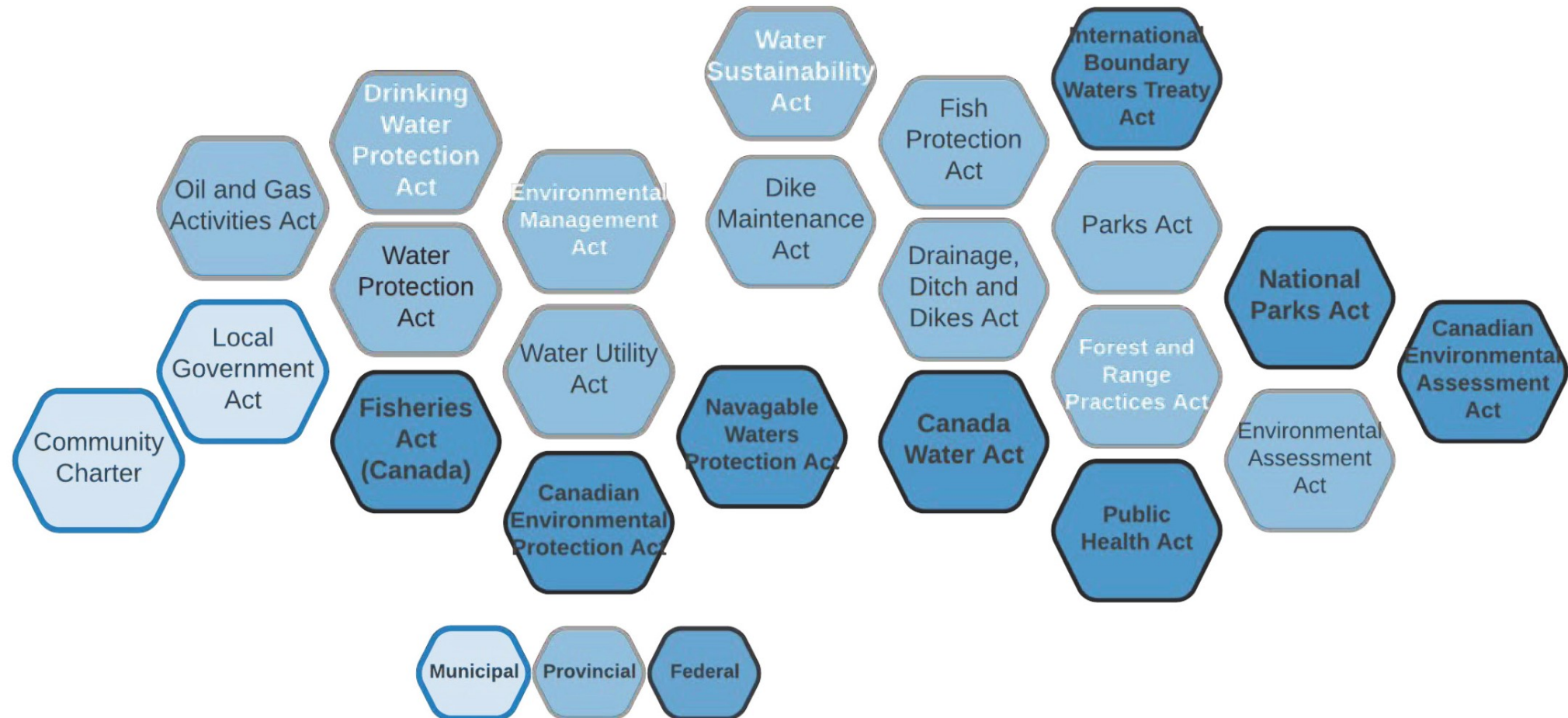
Challenges

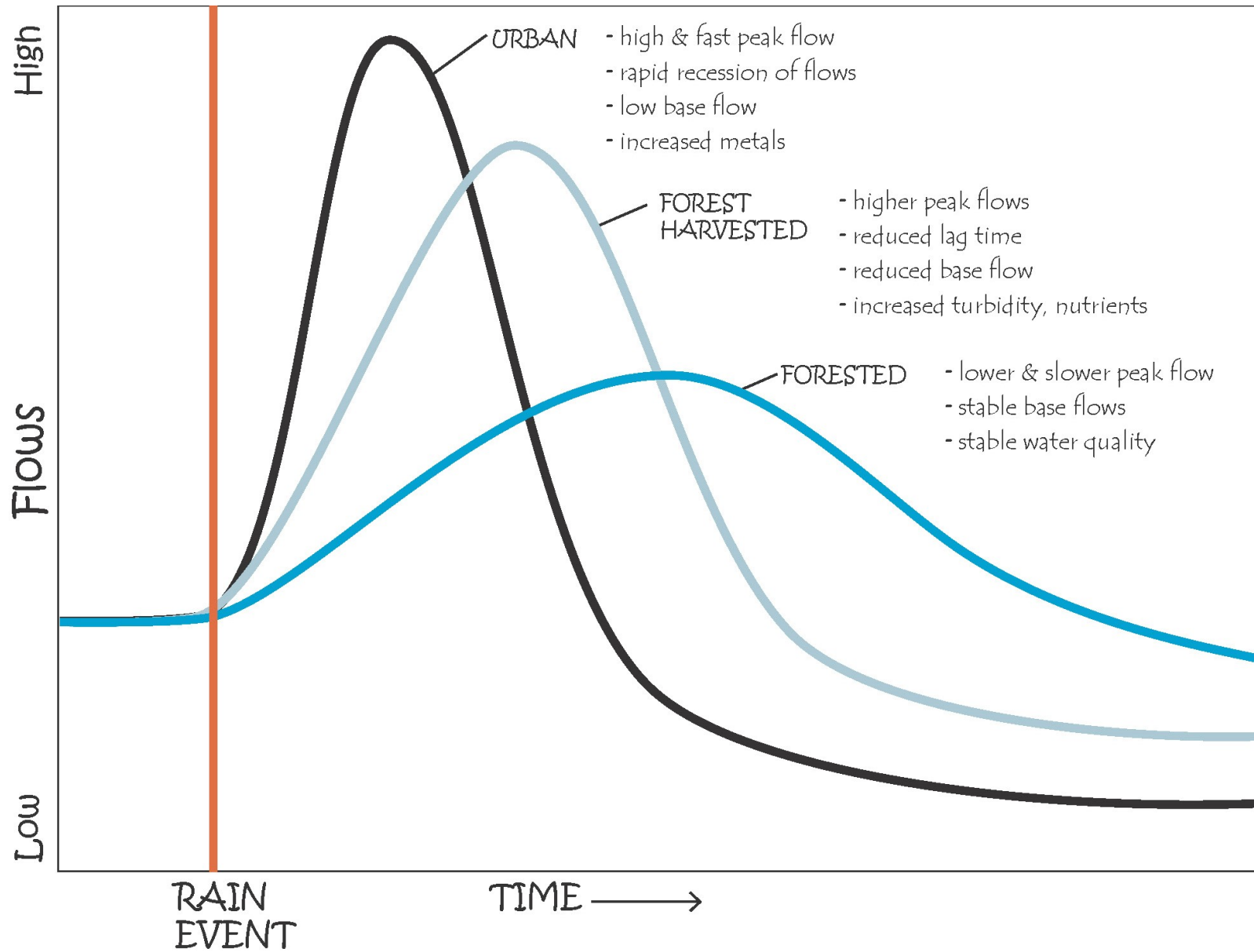
- Multi-use watersheds = many players, many sources of contamination
- Land development = more impermeable surfaces, less infiltration
- Climate change = more frequent landslides and erosion, flooding, increased runoff, wildfire
- Complicated legislative framework = conflicting mandates, gaps in authority

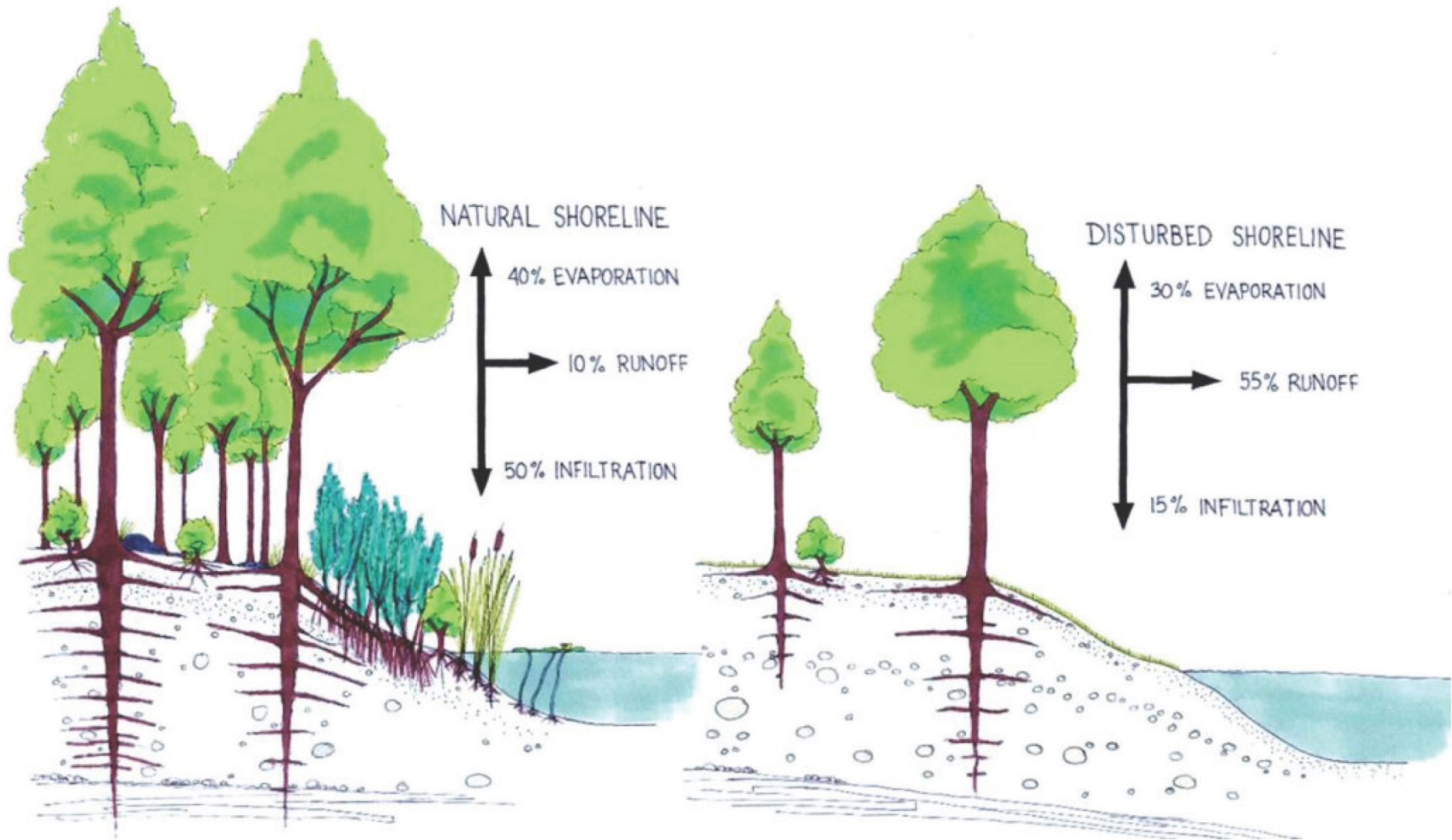


Water governance in BC involves 23 pieces of legislation

Key legislation are in white lettering

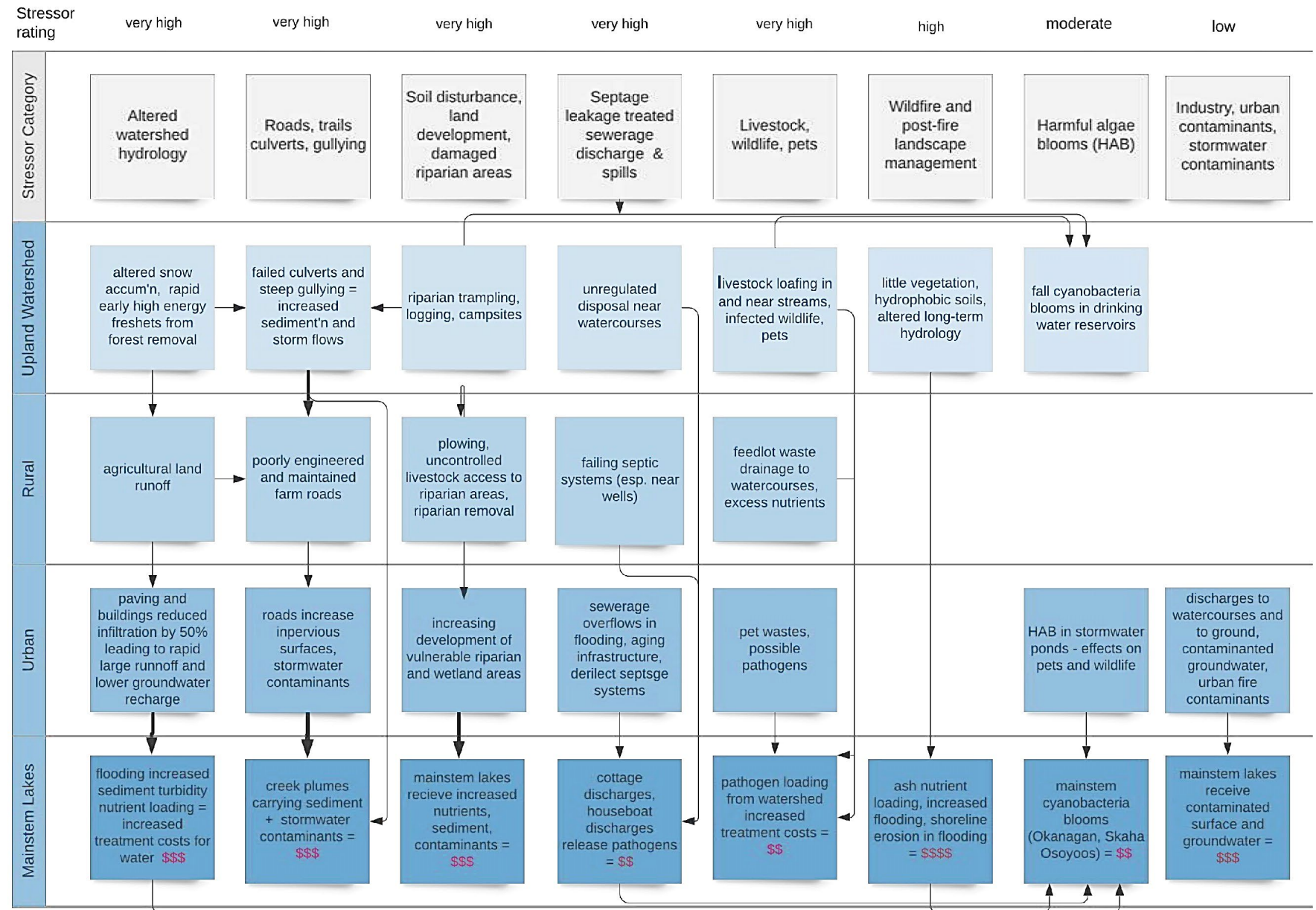






Every elevation layer generates source water protection issues ...


Elevation layer



\$\$ = 10,000-100,000 | \$\$\$ = 100,000-1,000,000 | \$\$\$\$ = >1,000,000

Drinking Water Protection Act

- Conditions on Permit:

 **Interior Health**
Health Protection


Permit To Operate
Drinking Water System 301 – 10,000 Connections

Facility Number: _____
Name of Facility: _____
Address: _____
Primary Owner: _____
Permit Number: _____

Conditions on Permit:	Timeline
1. Submit an application for Filtration Exemption to Interior Health.	December 1, 2021
2. Complete a Source Protection Plan.	December 1, 2022
3. Report out on Source Protection Activities in annual report.	Annually
4. Provide an updated Water Quality Monitoring Plan.	December 1, 2021
5. Submit monthly water quality monitoring reports to Interior Health.	By 10 th of month
6. Provide an annual summary of water quality monitoring results.	Annually by April 1 st
7. Provide a copy of the updated ERCP.	December 1, 2021
8. Provide an implementation plan for water system improvements.	December 1, 2021

April 1, 2021
Effective Date

March 31, 2022
Expiry Date

 Environmental Health Officer

June 25, 2021
Issue Date

Place Decal Here

This permit is nontransferable and must be displayed in a conspicuous place

- Source Water Assessment

- Delineate water source
- Identify the hazards
- Assess the risk
- Recommend actions

- Response Plan

- Develop and implement a plan to reduce risk

The toolkit supports an informed, coordinated, and collaborative approach to source water protection

- ✓ Clarifies the source protection planning process – **saves water suppliers TIME and MONEY and makes regulators happy**
- ✓ Compiles and delivers best practices
- ✓ Enables communities to draw on successes and lessons learned of others
- ✓ Helps communities understand and use their jurisdiction to protect water sources
- ✓ Teaches communities how to build awareness and gain support (political and public)

Technical Advisory Committee Members

NAME	ORGANIZATION		
Andrew Reeder	Regional District of Okanagan-Similkameen	Laura Code	B.C. Ministry of Agriculture
Andrew Petersen	B.C. Ministry of Agriculture	Marni Turek	University of British Columbia Okanagan
Angela Lambrecht	Regional District of Central Okanagan	Michael Firlotte	City of Penticton
Anna Warwick Sears	Okanagan Basin Water Board	Nelson Jatel	Okanagan Basin Water Board
Bob Hrasko	Black Mountain Irrigation District	Nicole Penner	Associated Environmental Consultants Inc.
Brent Magnan	City of West Kelowna	Patti Meger	District of Lake Country
Brittany Lange	Regional District of Central Okanagan	Ray Crampton	B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development
Cory Labrecque	Regional District of Okanagan-Similkameen	Renee Clark	Independent
Dan Ricciuti	City of West Kelowna	Rob Hillis	City of West Kelowna
Danielle Noble-Brandt	City of Kelowna	Rob Dinwoodie	B.C. Ministry of Forests, Lands and Natural Resource Operations and Rural Development
Dave Tamblyn	First Nation Health Authority	Rob Birtles	Interior Health Authority
Dennis Einarson	B.C. Ministry of Environment and Climate Change Strategy	Rob Fleming	First Nations Health Authority
Desni Bachmann	City of Kelowna	Robyn Laubman	Splatsin First Nation
Devon van der Meulen	District of Summerland	Scott Boswell	Okanagan Collaborative Conservation Program
Don Dobson	Dobson Engineering	Scott Smith	Eternna Consulting
Ian McLellan	B.C. Ministry of Forests, Lands, Natural Resource Operations and Rural Development	Shawn Grundy	District of Peachland
Jing Niu	City of Vernon	Tessa Terbasket	Okanagan Nation Alliance
Kat Zimmer	B.C. Ministry of Health	Tracy Guidi	City of Kelowna
Krista Derrickson	Westbank First Nation	Tricia Brett	Regional District of North Okanagan
Laura Frank	Regional District of North Okanagan	Tyler McNeill	Township of Spallumcheen
Lorne Davies	B.C. Wildlife Federation		

Funding

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 Karen Christensen

Key Messages

Acknowledgements

INTRODUCTION

Clean water – essential and irreplaceable

Syilx/Okanagan Nation *siwtkʷ* (Water) Declaration

Purpose of the Toolkit

How to use the Toolkit

PART 1: ROADMAP TO SOURCE WATER PROTECTION

STEP 1. Partner

STEP 2. Assess

STEP 3. Plan

STEP 4. Act

STEP 5. Evaluate

PART 2: THE TOOLS

TOOL 1. Collaboration

TOOL 2. Funding

TOOL 3. Policies, plans, and bylaws

TOOL 4. Education and engagement

TOOL 5. Natural assets and green infrastructure

TOOL 6. Emergency preparedness and response

TOOL 7. Mapping

TOOL 8. Monitoring and reporting

PART 3: ADDITIONAL INFORMATION AND RESOURCES

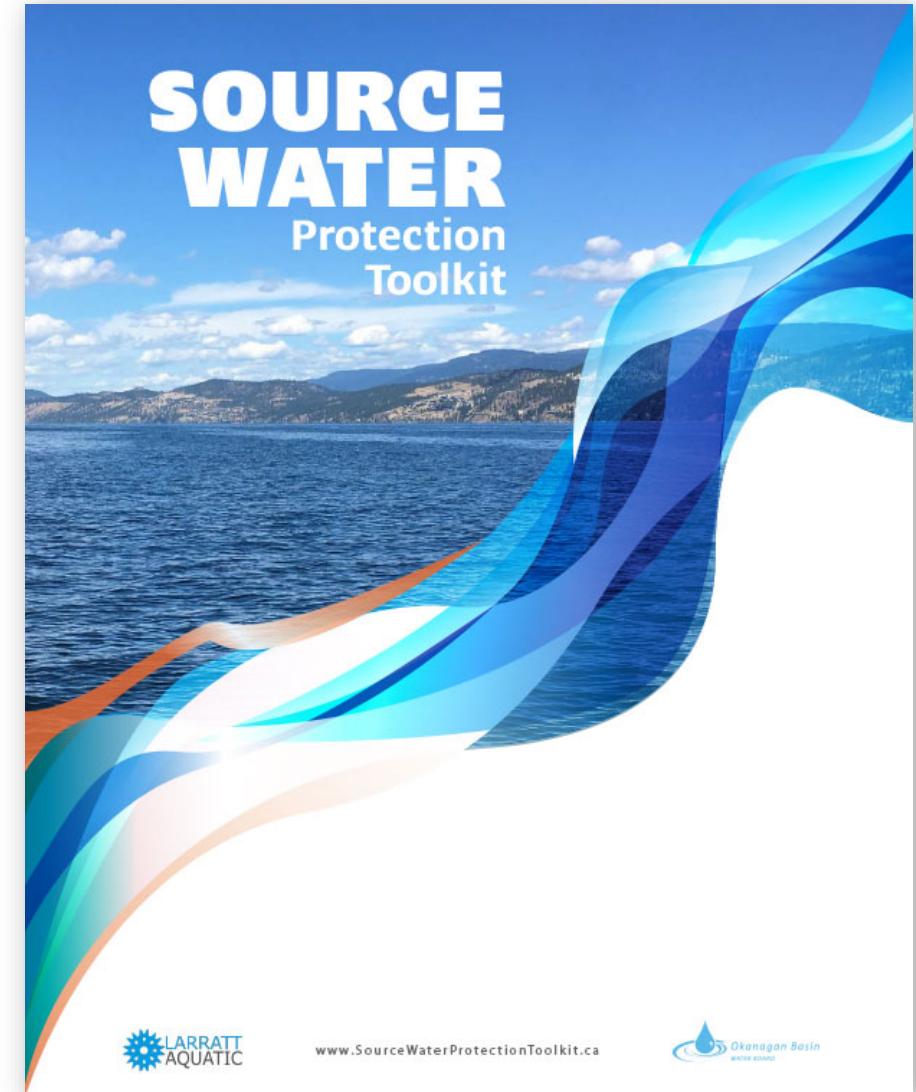
3.1 Regulatory framework

3.2 Economic benefits of source water protection

3.3 Common threats to drinking water and how to overcome them

3.4 Useful links

3.5 Templates



www.sourcewaterprotectiontoolkit.ca

Key Messages

A healthy watershed is central to clean and abundant source water.

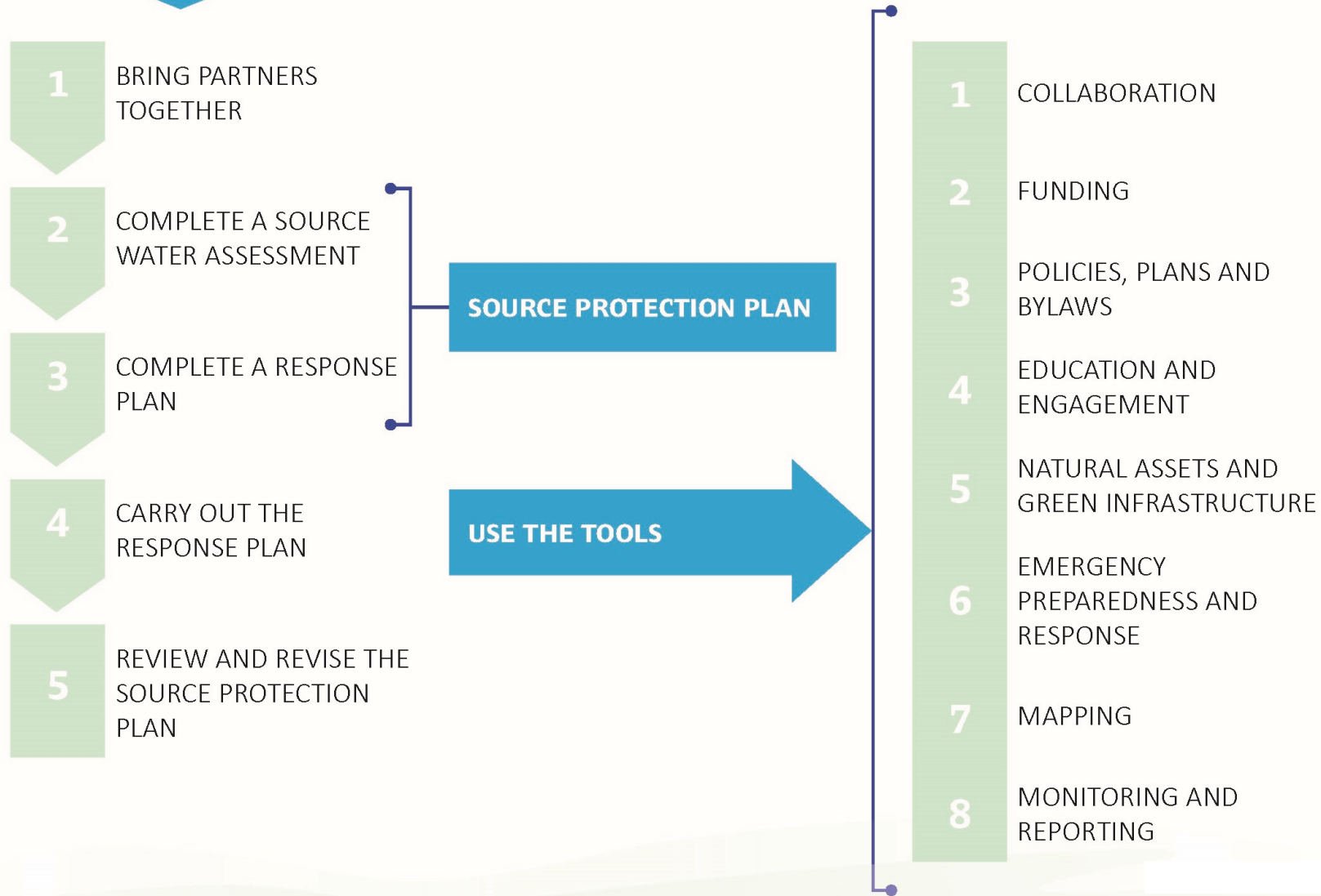
- Establishing setbacks, restoring riparian buffer zones along watercourses, and acquiring watershed segments can save money by preventing costly impacts to source water.
- Roads often have the greatest impact on water quality, so they require careful long-term planning.

British Columbia legislation related to source water protection is complicated, and the Government of British Columbia does not have a lead water agency. Local action supported by stable funding and consistent and coordinated approaches is imperative to maintaining source water quality.

Collaboration is essential to protect source waters for today and for generations to come. Our collective efforts will bring cumulative benefits.

We are all downstream.

ROADMAP TO SOURCE PROTECTION



SOURCE WATER PROTECTION WEBINAR SERIES

WEBINAR SERIES

- Oct. 20** Source water protection steps and tools
- Oct. 27** Shared challenges, shared opportunities: transcending jurisdiction through partnerships
- Nov. 3** Working together to protect water: learning from Indigenous-led projects
- Nov. 10** Increasing awareness and stewardship of watersheds and drinking water resources
- Nov. 17** Advancing local government policies and regulations to protect water sources
- Nov. 24** Securing long-term funding for source water protection
- Dec. 1** Protecting and restoring watersheds and aquifers to improve water quality
- Dec. 8** Using mapping to understand and manage risks to drinking water
- Dec. 15** Monitoring and reporting for source water protection

TOOLS

COLLABORATION
FUNDING
POLICIES, PLANS, AND BYLAWS
EDUCATION AND ENGAGEMENT
NATURAL ASSETS AND GREEN INFRASTRUCTURE
EMERGENCY PREPAREDNESS AND RESPONSE
MAPPING
MONITORING AND REPORTING

OVERVIEW

Join us every Wednesday for an interactive webinar series featuring OBWB's newly published Source Water Protection Toolkit. This resource was specially designed to support water utilities, local and provincial government staff, elected officials, First Nations, conservation groups and water professionals who are interested in or responsible for protection of drinking water sources in B.C. and beyond. Each webinar will consist of presentations by expert panelists followed by a moderated Q&A period.

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WHEN

Every Wednesday
October 20 to December 15, 2021
11 am to 12 pm PST

[REGISTER HERE](#)

For more details, contact Kasey at
k.moran@alumni.ubc.ca

www.sourcewaterprotectiontoolkit.ca



The background features abstract, flowing shapes in various shades of blue and orange. A large, dark blue shape curves from the top right towards the center. To its left, a bright orange shape curves upwards. The bottom of the image is dominated by a large, light blue shape that tapers towards the right. The overall effect is a sense of movement and modern design.

THANK YOU!

www.sourcewaterprotectiontoolkit.ca