Okanagan Basin Water Board Meeting Agenda

DATE: Tuesday, May 5, 2026

TIME: 9:00 a.m. – 10:00 a.m.

PLACE: Manteo Resort, 3762 Lakeshore Rd., Kelowna, B.C., V1W 3L4

1. CALL MEETING TO ORDER

1.1 Acknowledgement of First Nations Traditional Territory

We acknowledge that we work on the traditional, ancestral, and unceded tmx̌ʷúlaʔxʷ land of the syilx Okanagan people who have resided here since time immemorial. We honour and respect this land and the siwɬk water which flows through the valley and connects us all.

2. INTRODUCTION OF LATE ITEMS

3. APPROVAL OF AGENDA

Recommendation:

THAT the agenda of the meeting of the Okanagan Basin Water Board of May 5, 2026, be approved.

4. ADOPTION OF MINUTES

4.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board of April 7, 2026, held at the Regional District of Okanagan-Similkameen, 101 Martin St. Penticton, B.C. V2A 5J9.

Recommendation:

THAT *the minutes of the Regular Meeting of the Okanagan Basin Water Board of April 7, 2026 held at the Regional District of Okanagan-Similkameen be approved.*

P. 3

5. BOARD CHAIR REMARKS

6. DELEGATION

7. STAFF REPORTS

7.1 Executive Director Report P. 9

Recommendation:

THAT *the Board direct staff to send a letter to the Province outlining the challenges associated with the SSR and expressing the Board's willingness to work collaboratively on potential changes and improvements; and further*

THAT *staff be directed to explore and, where appropriate, advance the recommendations set out in the discussion paper; and*

THAT *the Executive Director Report, dated April 28, 2026, be received.*

7.2 Chief Operating Officer Report P. 11

Recommendation:

THAT *the Chief Operating Officer Report, dated April 27, 2026, be received.*

7.3 Water Stewardship Director Report P. 13

Recommendation:
THAT *the Water Stewardship Director's Report, dated April 27, 2026, be received.*

7.4 Communication Manager Report P. 17

Recommendation:
THAT *the Communications Manager's Report, April 27, 2026, be received.*

7.5 Water Science Specialist Report **(To be circulated)**

Recommendation:
THAT *the Water Science Specialist's report April 27, 2026, be received.*

8. NEW AND UNFINISHED BUSINESS

8.1 Okanagan Basin Water Board 5 Year Strategic Direction, 2026-2030 P. 23

Recommendation:
THAT *the Board approve and adopt the Okanagan Basin Water Board 5 Year Strategic Direction 2026-2030 as the organization's guiding framework for the next five years.*

9. CORRESPONDENCE

9.1 Letter from Chair Blair Ireland to Collaborative Leadership Table Co-Chairs Chief yilmixʷm Robert Louie and Councillor Tricia Brett dated April 15, 2026 P. 39

Recommendation:
THAT *the letter be received.*

9.2 Response Letter from Collaborative Leadership Table Co-Chairs Chief yilmixʷm Robert Louie and Councillor Tricia Brett to Chair Blair Ireland dated April 22, 2026 P. 40

Recommendation:
THAT *the letter be received.*

9.3 Discussion Paper from the Policy Committee of the Okanagan Water Stewardship Council, *Sewerage System Regulation and the Protection of Drinking Water Sources - Version 6* P. 41

Recommendation:
THAT *the discussion paper, Sewerage System Regulation and the Protection of Drinking Water Sources, as drafted by the Policy Committee of the Okanagan Water Stewardship Council, be received.*

10. NEXT MEETING

10.1 The next meeting of the Okanagan Basin Water Board will be Tuesday, June 2, 2026 at 10 a.m. at the Regional District of Okanagan-Similkameen, 101 Martin St. Penticton, B.C. V2A 5J9.

11. ADJOURNMENT

Recommendation:
THAT *there being no further business, the regular meeting of the Okanagan Basin Water Board of May 5, 2026 be adjourned at ____.*

**** NOTE:*** *Meetings of the Okanagan Basin Water Board are open to the public, and only closed for in-camera sessions as set out in the B.C. Community Charter. From time-to-time, the board will be holding its meeting online. If you are interested in attending an online meeting, please contact communications@obwb.ca for further details.*

MINUTES OF THE REGULAR MEETING OF THE OKANAGAN BASIN WATER BOARD HELD TUESDAY APRIL 7, 2026 AT THE OFFICES OF THE REGIONAL DISTRICT OF OKANAGAN SIMILKAMEEN

PRESENT

Chair Blair Ireland	Regional District of Central Okanagan
Vice Chair Doug Holmes	Regional District of Okanagan-Similkameen
Director Brian Guy	Regional District of North Okanagan
Director Bob Fleming	Regional District of North Okanagan
Director Rick Fairbairn	Regional District of North Okanagan
Director Kevin Kraft	Regional District of Central Okanagan
Director Ron Cannan	Regional District of Central Okanagan
Director Sue McKortoff	Regional District of Okanagan-Similkameen
Alternate Director Adrienne Fedrigo	Regional District of Okanagan-Similkameen
Director Sheena Spencer	Okanagan Water Stewardship Council (OWSC)
Director Tim Lezard	Okanagan Nation Alliance

REGRETS

Director Bob Hrasko	Water Supply Association of B.C.

STAFF

Melissa Tesche	Executive Director
James Littley	Chief Operating Officer
Nelson Jatel	Water Stewardship Director
Carolina Restrepo Tamayo	Office and Grants Manager
Carmen Weld	Communications Manager
Sandra Schira	Water Science Specialist
Amanda Burnett	Communications Coordinator

1. CALL MEETING TO ORDER

1.1. Chair Ireland called the meeting to order at 10:33 a.m.

He respectfully acknowledged that we work on the traditional, ancestral, and unceded tmɨxʷúlaʔxʷ land of the Syilx Okanagan people who have resided here since time immemorial. We honour and respect this land and the siwlɬk water which flows through the valley and connects us all.

2. INTRODUCTION OF LATE ITEMS

No late items.

3. APPROVAL OF AGENDA

"THAT the agenda of the regular meeting of the Okanagan Basin Water Board of April 7, 2026 be approved."

CARRIED

4. ADOPTION OF MINUTES

4.1 Minutes of the Regular Meeting of the Okanagan Basin Water Board held March 3, 2026.

"THAT the minutes of the regular meeting of the Okanagan Basin Water Board on March 3, 2026, held online, be approved."

CARRIED

5. BOARD CHAIR REMARKS

Chair Ireland provided brief remarks to the Board, advising that he would soon be participating in a site tour of the Aberdeen Plateau with representatives from Lake Country and the provincial government, including Minister of Water, Land and Resource Stewardship Randene Neill. The tour will focus on watershed conditions and demonstrate the impacts of recent wildfires on the watershed's upland areas.

6. DELEGATION/PRESENTATION

No delegation.

7. STAFF REPORTS

7.1 Executive Director Report – Melissa Tesche

Ms. Tesche reported that the Okanagan Basin Water Board had been invited to appear before the Select Standing Committee on Private Members' Bill M216, scheduled for April 15, 2026. She summarized committee proceedings to date. During discussion, Directors shared brief updates on related independent discussions they had with provincial representatives, raising concerns about Bill M216's scope, professional liability, and potential unintended consequences for local government decision-making.

Ms. Tesche also reported that staff would apply to appear before the Select Standing Committee on Finance and Government Services during consultations on the 2027 provincial budget, continuing advocacy for sustained funding for invasive mussel prevention. She noted that a similar submission would also be made through the federal budget consultation processes.

She shared that the new OBWB Strategic Direction document is expected to be brought forward to the May 5, 2026 joint OBWB-Okanagan Water Stewardship Council meeting for consideration and potential adoption. Ms. Tesche further advised that, following adoption of the Strategic Direction, she is planning to conduct a valley-wide tour of municipal councils and regional boards in May and June to present the plan, provide program updates, and extend invitations to the OBWB's 20th Anniversary Celebration scheduled for Sept. 11, 2026, in Kelowna.

"THAT the Executive Director's Report, dated March 31, 2026, be received."

CARRIED

7.2 Chief Operating Officer Report - James Littley

Mr. Littley reported on a UBCO capstone project examining lessons learned from the Snake River, Idaho quagga mussel infestation and informed the Board of his participation in a Pacific NorthWest Economic Region (PNWER) Aquatic Invasive Species meeting held in Saskatoon, noting that discussions focused on inter-jurisdictional coordination of watercraft inspection programs. He highlighted examples from Montana and Manitoba, and discussed different inspection models, including shared enforcement authority, mandatory inspections, and denial of entry for mussel-fouled watercraft.

He further reported on updates from Idaho regarding chemical treatment efforts on the Snake River quagga mussel infestation. Sampling following multiple chemical treatments indicated that

the total area of river infected has dropped by approximately half. Complete eradication has not been achieved. He also noted that within-waterbody containment has proven ineffective at containing invasive mussel infestations to one section of a waterbody in other regions where it has been attempted.

Mr. Littley advised that OBWB staff were continuing work on early detection and rapid response preparedness, including development of guidance materials and exploration of a regional appendix to provincial response plans, while noting that limited external funding remains a constraint. He also advised that he had been invited to present OBWB's Invasive Mussel Vulnerability Assessment Guide for Raw Water Infrastructure at upcoming regional and international forums, including a summit in Idaho and the PNWER summit scheduled for June in Edmonton, AB.

He concluded with brief updates on the milfoil control program, reporting that winter de-rooting activities were nearing completion and that spring maintenance and harvesting planning was underway.

"THAT the Chief Operating Officer's Report, dated March 30, 2026, be received."
CARRIED

7.3 Water Stewardship Director Report – Dr. Nelson Jatel

Dr. Jatel reported on his recent invited presentation to the Town of Oliver's Committee of the Whole regarding drought-trigger approaches as the municipality looks to modernize its Drought Management Plan..

Dr. Jatel provided an update on the regional hydrometric program and cyanobacteria monitoring project.

Dr. Jatel concluded his report by provided updates from recent and upcoming meetings of the Okanagan Water Stewardship Council, noting that the March meeting focused on forest hydrology and implications for water supply, while the next meeting would examine emerging climate-modelling tools and their relevance for long-term water planning in the Okanagan Basin.

During discussion, Directors raised questions and shared observations related to drought stages, drought communication, hydrometric data, local water supply conditions, and variability in municipal drought-response approaches.

"THAT the Water Stewardship Director's Report, dated March 31, 2026, be received."
CARRIED.

7.4 Communications Manager Report – Carmen Weld

Ms. Weld reported on communications activities completed since the previous meeting, including outreach related to World Water Day. She advised that the public screening of the documentary All Too Clear, hosted in partnership with UBC Okanagan, was well attended and included a facilitated panel discussion and audience question-and-answer session.

Ms. Weld provided an update on media and communications supporting invasive mussel awareness, including coverage related to the launch of a regional Rotary fundraising campaign in support of eDNA mussel-detection research. She noted broad media interest in the initiative and acknowledged Board members and partners who participated in the launch event.

She reviewed recent outreach and presentations delivered by OBWB staff to a range of community, professional and public audiences, as well as ongoing media engagement related to drought conditions, snowpack, invasive mussels and water management.

Ms. Weld highlighted that preparations were underway for an upcoming amphibious harvester launch event, including plans for a public naming contest.

"THAT the Communication Manager's Report, dated March 31, 2026, be received."
CARRIED.

7.5 Water Science Specialist Report – Sandra Schira

Ms. Schira's update noted that March temperatures across the valley had generally been warmer than historical averages, with notable variability, particularly in the North Okanagan. She advised that cumulative precipitation remained well below normal across much of the basin, with Penticton recording extremely low precipitation. Snowpack conditions were reported as significantly below normal throughout the Okanagan, including record or near-record lows at several monitoring stations.

Ms. Schira advised that seasonal forecasts indicated a high likelihood of warmer-than-normal conditions through the spring, while precipitation forecasts showed no clear signal. She noted that the combination of low snowpack and warmer temperatures increased the risk of drought conditions developing earlier in the year.

She provided an overview of current lake and stream conditions, noting that Osoyoos Lake levels remained at historic lows, while Okanagan Lake levels were relatively stable. She advised that stream flows were expected to increase with freshet, but that timing and quantity would depend on weather conditions and the limited snowpack.

During discussion, Directors raised questions regarding drought outlooks, longer-term cumulative precipitation deficits, and the potential for increased public-facing reporting. Ms. Schira emphasized that her reporting reflected observed data rather than forecasts, noting the inherent uncertainty in seasonal prediction. Directors also discussed recent local water-supply conditions and shared recent watering restriction decisions in their communities.

"THAT the Water Science Specialist's Report, dated March 30, 2026, be received."
CARRIED.

8. NEW AND UNFINISHED BUSINESS

No new or unfinished business.

9. IN-CAMERA

9.1 The Board entered an in-camera session (under sec. 90(1)(a) and 90(2)(b) of the Community Charter) at 12:52 p.m.

"THAT the Okanagan Basin Water Board enter into an in-camera session."
CARRIED.

The board exited the in-camera session at 1:36 p.m. to rise and report.

9.2 Rise and Report

Following the in-camera session, the Board reported that it approved $380,000 in Water Conservation and Quality Improvement grant funding to support 19 projects in the Okanagan.

"THAT the OBWB approve the 2026 grant funding as presented; AND THAT the OBWB rise and report the 2026 grant funding as approved:

	Organization	Project Title	$ Awarded
1	City of Penticton	Investigating PFAS Across the Okanagan Region	$ 30,000.00
2	Okanagan Nation Alliance	Water Quality Assurance during the Construction of Okanagan River Restoration in Okanagan Falls	$ 27,500.00
3	B.C. Wildlife Federation	10,000 Wetlands Initiative: Restoring Hydrologic Function at Coteay Creek	$ 18,500.00
4	Okanagan Indian Band	Equesis Creek – groundwater connectivity assessment for source water protection – Phase 2	$ 30,000.00
5	District of Summerland	Source water investigation at the Trout Creek Perpetual Slide – Phase 2	$ 25,000.00
6	City of Kelowna	Okanagan Algae Monitoring Network – Phycocyanin Probe for Scada	$ 25,000.00
7	Okanagan Nation Alliance	Post-wildfire changes in snowpack dynamics and their impacts on summer low flows in the McDougall Creek Watershed	$ 30,000.00
8	Univeristy of British Columbia	Removal of Microplastics and Heavy Metals Using a Novel Reactive Barrier Technology	$ 20,000.00
9	Okanagan Similkameen Stewardship Society	A Community Lens on Wetland Restoration	$ 20,000.00
10	Kelowna Yacht Club	Okanagan Lake Marine Spill Risk Reduction Program	$ 5,000.00
11	Vaseux Water User Community	Vaseux Creek Sustainable Agricultural Groundwater Plan	$ 30,000.00
12	Westbank First Nation	IR#9 Water System Capacity, Monitoring, and Demand Management Initiative	$ 25,000.00
13	Westbank First Nation	WFN Sensitive Habitat Inventory Mapping Update	$ 20,000.00
14	City of Kelowna	Piloting Climate Resilient Okanagan Green Infrastructure standards	$ 10,000.00
15	City of Kelowna	Okanagan Hydrometeorological Information Network – Review and Expansion	$ 30,000.00
16	Osoyoos Lake Water Quaity Society	Osoyoos Lake Water Quality Monitoring	$ 9,000.00
17	RDNO	Sncematqtn Agricultural Park Hog's Gulch – Infill and mortality replacement planting	$ 5,000.00
18	Town of Oliver	Educational Public FireSmart Xeriscape Gardens	$ 10,000.00
19	RDCO	Leak Detection Program	$ 10,000.00
			$ 380,000.00

"

CARRIED

10. CORRESPONDENCE

No correspondences

11. NEXT MEETING

11.1 The next meeting of the Okanagan Basin Water Board will be an abbreviated meeting on Tuesday, May 5, 2026 at 9 a.m. at the Manteo at Eldorado Resort, 3762 Lakeshore Rd, Kelowna, B.C., followed by a joint Board-Okanagan Water Stewardship Council meeting.

***NOTE:** *Meetings of the Okanagan Basin Water Board are open to the public, and only closed for in-camera sessions as set out in the B.C. Community Charter. From time-to-time, the board will be holding its meeting online. If you are interested in attending an online meeting, please contact Communications@OBWB.ca for further details.*

12. ADJOURNMENT

"THAT there being no further business, the regular meeting of the Okanagan Basin Water Board of April 7, 2026 be adjourned at 1:38 p.m."

CARRIED

_____ _____

Blair Ireland, OBWB Chairperson Melissa Tesche, OBWB Executive Director

Okanagan Basin
WATER BOARD
1450 KLO Road, Kelowna, B.C. V1W 3Z4
P 250-469-6271 F 250-762-7011
www.obwb.ca

MEMORANDUM

To: OBWB Directors
From: Melissa Tesche, Executive Director
Date: April 28, 2026
Subject: Executive Director's Report

Okanagan Basin Water Board
Regular meeting
May 5, 2026
Agenda No: 7.1

Joint Board and Council Meeting Scheduled for May 5, 2026

Every year, the OBWB and the Okanagan Water Stewardship Council hold a joint meeting, to share priorities and build relationships. Council members will be giving short presentations on committee activities, and board directors are encouraged to come prepared with their thoughts about top water issues in their jurisdictions. As this is a large gathering, and a special event, we will be holding the meeting at the Manteo Resort in Kelowna.

Annual Financial Audit Underway

We are working with the finance department on our fiscal year-end as the OBWB audit begins this week. We anticipate draft financial statements will be prepared and distributed prior to our regular June meeting for the board to review and approve. Our auditors from BDO will be at the June meeting to present the financial statements and answer any questions.

OBWB Continues Provincial and Federal Advocacy Efforts

OBWB Makes Invited Appearance in Front of Committee for Bill M216

I appeared before the legislative committee reviewing Bill M216 to present the Okanagan Basin Water Board's perspective, focusing on the potential unintended consequences for watershed protection and local government responsibility. I emphasized that while the intent to streamline approvals is understood, the proposed legislation would remove important risk management tools from local governments, limiting their ability to conduct due diligence on professional submissions — particularly where errors, even in good faith, could carry significant consequences for drinking water and environmental protection. I highlighted that while liability can be reassigned in legislation, responsibility ultimately remains with local governments when issues arise on the ground. I recommended that the Province set the bill aside and proceed instead with a more thorough, consultative process involving municipalities, First Nations, and professional associations.

Following the presentations, the committee voted to recommend that Bill not proceed further. This recommendation was sent to the Legislative Assembly in their *Report on Bill M216* on Apr. 18, 2026. The Legislature accepted the committee's recommendation that Bill M216 not proceed, and the bill was concurred in at report stage on April 20, 2026.

Minister Boyle, in her statement notifying that MLA Anderson would be recommending to the committee that they not continue consideration of the bill, indicated that the Ministry of Housing and Municipal Affairs will be looking at ways to reduce permitting timelines. Staff will be monitoring for future consultations on the topic.

OBWB Board to Receive Discussion Paper on Septic Regulations and Risks to Drinking Water from the Policy Committee of the Okanagan Water Stewardship Council (OWSC).

The Board will receive a discussion paper prepared by the OWSC Policy Committee examining the Sewerage System Regulation (SSR) and its effectiveness in protecting drinking water sources. The paper identifies a number of structural gaps in the current framework — particularly related to cumulative impacts, fragmented oversight, and the limitations of the professional reliance model — and highlights the growing risks these pose with increasing development pressures in sensitive watersheds. It also outlines a series of potential pathways for improvement, including regulatory modernization, enhanced oversight, and better integration with land use planning. While the paper is provided as technical advisory input and does not represent a Board position, it raises issues that are directly aligned with the Board's mandate around source water protection.

Recommended Motions

"THAT the Board direct staff to send a letter to the Province outlining the challenges associated with the SSR and expressing the Board's willingness to work collaboratively on potential changes and improvements; and further,

THAT staff be directed to explore and, where appropriate, advance the recommendations set out in the discussion paper."

OBWB to Advocate for Federal Investment in Invasive Mussel Prevention, National Water Security, and Water Infrastructure

OBWB will be participating in the federal pre-budget consultation process through the House of Commons Standing Committee on Finance, with the submission deadline recently extended to May 22, 2026. Our submission will focus on advocating for increased federal investment and stronger, coordinated national efforts to prevent the introduction and spread of invasive mussels, while also advancing the broader case for sustained, long-term funding to support a National Water Security Strategy. This includes reinforcing the need to recognize investment in water infrastructure as a foundational component of water security, essential to supporting community safety, economic development, and long-term resilience in the face of both climate and political instability.

Okanagan Basin WATER BOARD
1450 KLO Road, Kelowna, B.C. V1W 3Z4
P 250-469-6271 F 250-762-7011
www.obwb.ca

MEMORANDUM

To: OBWB Directors
From: James Littley, COO
Date: April 27, 2026
Subject: Chief Operating Officer's Report

Okanagan Basin Water Board
Regular meeting
May 5, 2026
Agenda No: 7.2

OBWB presents on infrastructure vulnerability assessment guide at Pend Orielle Basin Invasive Freshwater Mussel Prevention and Readiness Summit

I attended the Pend Oreille Basin Invasive Mussel Prevention and Readiness Summit in April, where I was invited by the organizing committee to present the Okanagan Basin Water Board's Vulnerability Assessment Guide for Raw Water Infrastructure. The summit brought together federal, state/provincial, Tribal, and local agencies from across the U.S.–Canada border to align on prevention, early detection, and rapid response planning for invasive mussels in a highly connected river–lake system. These are the key takeaways:

1. **"Rapid response" includes built-in delays**
   A waterbody is not formally considered infested until two positive laboratory samples are confirmed. With each sample typically taking a minimum of one week to process, there is an inherent delay of at least two weeks before formal response thresholds are reached.
2. **Outbound watercraft risk must be addressed immediately**
   Early response is not limited to preventing boats from entering an infested waterbody; it must also prevent potentially contaminated watercraft from leaving it.
3. **Authority and enforcement must be clear on day one**
   The scenario raised critical questions about who has the legal authority and operational capacity to:
   - Close boat launches
   - Require mandatory decontamination
   - Enforce restrictions at scale (e.g., on a large system like Okanagan Lake)
4. **Delimiting surveys are essential, as spread can be rapid**
   Immediate delimiting surveys are critical to determine the extent of infestation, particularly given concerns about how quickly mussel larvae (veligers) could disperse through connected rivers and downstream waterbodies.

5. **Jurisdictional coordination is unavoidable**
   Effective response requires coordination across local, provincial/state, federal, and Indigenous/Tribal governments, including across the Canada–U.S. border.
6. **Enforcement capacity is uneven but not absent**
   Summit participants confirmed that watercraft inspections are not consistently enforced by either Canadian or US customs officials. However, upon returning to Canada, the CBSA agent at my crossing was aware of the issue and stated, "That's why I inspect every kayak." Well-educated border agents recognize the urgency and severity of the risk and are acting appropriately, indicating that more federal training will make this prevention measure more effective.
7. **Emerging eDNA tools could materially improve response timelines**
   Expanding Dr. Russello's eDNA detection work from watercraft sampling to direct waterbody detection could reduce confirmation times from weeks to hours, significantly strengthening early response effectiveness.
8. **Preparedness is fundamentally a governance issue**
   The exercise reinforced that successful invasive mussel response depends as much on pre-established authority, coordination, and practiced decision-making as it does on detection technology.

Next steps for invasive mussel preparation in the Okanagan

The Pend Oreille Basin summit underscored the need for the Okanagan to have a clear, exercised Rapid and Extended Response Plan for invasive mussels. Staff will be developing this plan in conjunction with the Okanagan-Interior Invasive Mussel Working Group, with two complementary objectives:

1. Produce a practical, Okanagan-specific Rapid and Extended Response Plan, and
2. Create a replicable "how-to" framework that other regions can use to develop similar plans.

By clearly separating Okanagan-specific content from general response processes, this work will also serve as a practical guide for other regions seeking to build their own rapid and extended response plans — helping standardize response expectations across British Columbia and beyond. This guide will also help raise awareness of the threats posed by invasive mussels, aiding in prevention.

Okanagan Basin WATER BOARD
1450 KLO Road, Kelowna, B.C. V1W 3Z4
P 250-469-6271 F 250-762-7011
www.obwb.ca

MEMORANDUM

To: OBWB Directors

From: Nelson Jatel, Water Stewardship Director

Date: April 28, 2026

Subject: Water Stewardship Director's Report

Okanagan Basin Water Board
Regular meeting
May 5, 2026
Agenda No: 7.3

Water Stewardship Updates

2026 Okanagan Water Supply Webinar Scheduled for Friday, May 8

The annual Okanagan Water Supply Webinar will be held this Friday, May 8, 2026, from 11:00 a.m. to 12:00 p.m. With the Okanagan entering a fourth consecutive drought year, the one-hour session will provide a snapshot of supply conditions heading into the 2026 irrigation season, covering reservoir levels, snowpack, groundwater, and the seasonal weather forecast, followed by audience Q&A. The webinar is open to local government, the agricultural community, water managers, and the public; registration details have been distributed through OBWB channels. (poster attached).

Hydrometric Program – New Fiscal Year, Building 2026 Partner Contract Portfolio

With the start of the new fiscal year, staff are developing the portfolio of partner contracts required to deliver the 2026 Okanagan Hydrometric Monitoring Program. This includes ongoing arrangements with the Okanagan Nation Alliance for field operations across the network and continued coordination with the Province's Thompson Okanagan Hydrology Program (Saskia Kowallik) for technical oversight and quality assurance. Contracts are being scoped to ensure full station coverage through the spring freshet and the summer low-flow period, when data demands from operational decision-makers are highest.

The Hydrometric Program continues to be a foundational piece of regional water management. The streamflow, lake level, and water-balance data it generates underpin drought-stage decisions by local governments and water purveyors, environmental flow needs assessments, reservoir operations, agricultural water planning, and fisheries management across the basin. As the Okanagan enters a fourth consecutive year of drought, the importance of consistent, defensible, and locally collected hydrometric data, delivered in near real-time to the communities that rely on it, has never been more evident. Sustaining and growing this network remains a shared priority with our partners and the communities we serve.

Updates from the Okanagan Water Stewardship Council, Technical Advisory Body to the OBWB

April OWSC Meeting Examines Probabilistic Climate Projections for Water Planning

The April 9, 2026, Okanagan Water Stewardship Council meeting was held at the Coast Capri Hotel in Kelowna. The feature presentation was delivered by Dr. Jeremy Fyke, climate scientist with Environment and Climate Change Canada, OWSC member, and former OWSC Chair. Dr. Fyke presented his recently published work in Earth's Future (Fyke, Swart and Huard, 2026) demonstrating a new approach to climate projection that addresses a long-standing gap for adaptation planning: scenario-based climate projections (such as the Shared Socioeconomic Pathways from the Intergovernmental Panel on Climate Change reports) are not associated with probabilities, which makes risk-based decision-making difficult.

The implications for Okanagan water planning are substantive. Probabilistic projections are now possible for risk-relevant climate impact drivers: snowpack, extreme precipitation, summer low flows, drought duration. These can support more defensible drought trigger thresholds, reservoir operating rules, environmental flow needs assessments, and long-range supply-and-demand planning. Dr. Fyke explained that his published study used just one computer model to show how the method works. To use it for real water planning decisions, scientists would need to run several models together and compare the results. Even so, the approach can be applied to local water questions right away, and it's a useful step toward helping communities plan for future risks. Council discussion focused on how this approach could complement the OBWB's existing climate and hydrologic modelling work and inform future updates to regional drought and supply planning tools.

References

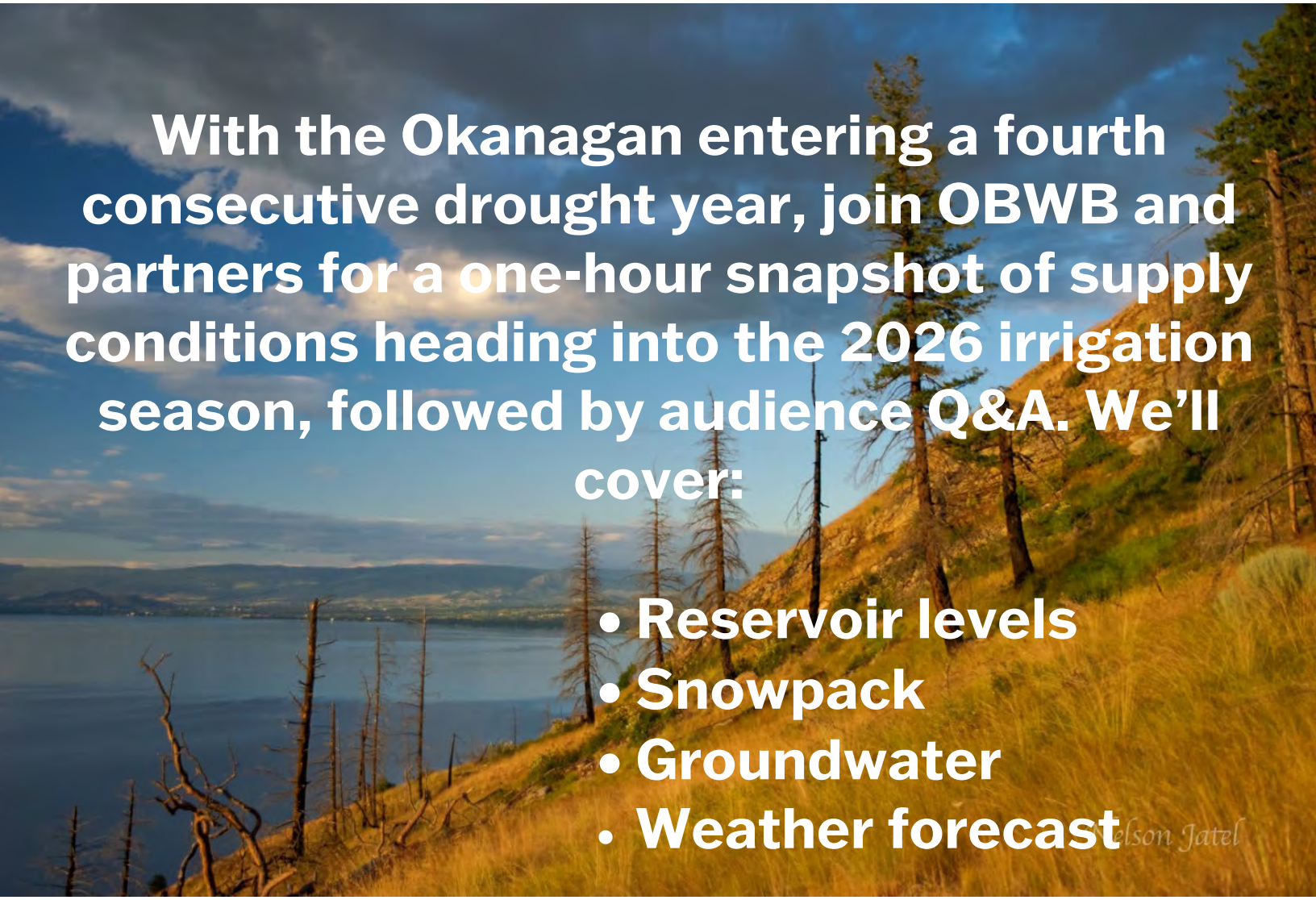
Fyke, J., Swart, N. C., & Huard, D. (2026). An Earth System Model ensemble forced with probabilistic emissions: Demonstration and prospects for climate risk assessment. *Earth's Future, 14*(2), e2025EF007289. https://doi.org/10.1029/2025EF007289

Annual Joint Board and OWSC Meeting – May 5, 2026, Manteo Resort

Following the regular Board meeting on May 5, 2026, the annual Joint Board and Okanagan Water Stewardship Council meeting will be held from 10:15 a.m. to 2:00 p.m. at the Manteo Resort in Kelowna. The annual joint session provides Directors and Council members an opportunity to align on shared priorities, review progress on OWSC workplan items, and discuss emerging issues facing Okanagan water management. A detailed agenda will be circulated in advance of the meeting.

2026 Okanagan Water Supply Webinar

Friday, May 8th **11:00 am – 12:00 pm**



Zoom webinar link:

https://us02web.zoom.us/j/89828745746

For more info contact Nelson at:
nelson.jatel@obwb.ca | (250) 469.6295

Okanagan Basin WATER BOARD

Okanagan Basin WATER BOARD
1450 KLO Road, Kelowna, B.C. V1W 3Z4
P 250-469-6271 F 250-762-7011
www.obwb.ca

MEMORANDUM

To: OBWB Directors

From: Carmen Weld, Communications Manager

Date: April 27, 2026

Subject: Communications Report

Okanagan Basin Water Board
Regular meeting
May 5, 2026
Agenda No: 7.4

Weed 'Em and Reap: Help Name the Okanagan's New Milfoil Harvester

We officially launched our naming contest of the new custom-built 2025 Aquarius HM620.

Name submissions will be accepted **until May 21, 2026** at communications@obwb.ca. A prize will be awarded to the winning entry which includes a ride on the new harvester and a chance to cut some milfoil.

As of April 27, 2026, we have more than 270 entries. They are some creative ones in the mix and a lot of duplicates as well. For example, there are dozens of entries for Millie, Milly or Millie Muncher.

The public and media are encouraged to stay tuned for launch details later this spring to see the new harvester up close and learn more about the OBWB's milfoil control program.

The winner will be selected by an internal judging panel including the Board by June 5, 2026.

Make Water Work launch scheduled for May 20, 2026 in Osoyoos

We're in the final planning stages for this year's Make Water Work campaign launch event.

We are partnering with FireSmartBC ™ again this year and tying in the FireSmart™ name with being Water Smart.

As noted by the Board and many of our partners up and down the valley, the campaign needed a prize boost, so we will be increasing the prize this year for those that take the pledge to Make Water Work. Details to come!

An official invite to the launch event will be sent in the weeks ahead but it is scheduled for the later morning of May 20, 2026 in Osoyoos.

As the winning Community Champion community, the Town of Osoyoos gets to host the launch event this year. They are working with us to get ready for the event.

Don't Move a Mussel gets a new tagline this year

Following internal discussions and feedback from our partners, we are dropping the Share Memories, Not Mussels tagline. While the finalized campaign is still in the works, this year will focus more on protecting what matters most to each of us.

Community Support Grows for Rapid Invasive Mussel-Detection Research

We were excited to share that the City of Kelowna UBC Okanagan Research Alliance Collaborative Research Fund will contribute $100,000 to the eDNA project ($50,000 per year for two years).

With initial investments by the OBWB, The Colin & Lois Pritchard Foundation, Mitacs and strong community support spearheaded by Rotarians across the Thompson/Okanagan, the City of Kelowna also joined the initiative through the City of Kelowna UBC Okanagan Research Alliance Collaborative Research Fund.

With key funding pieces now in place, the project is getting started. However, continued community support will help strengthen and expand the project's impact. Residents,

businesses, and community groups are encouraged to contribute and be part of a proactive, locally-driven solution to keep Okanagan waters mussel free for generations to come.

Drought bulletins starting up again

Multiple Okanagan communities are starting off the gardening season under watering restrictions. That combined with the low snowpack and early melt means we will start sending our Drought Bulletins out at the end of April.

Key communications since last report

- April 22, 2026: Community Support Grows for Rapid Invasive Mussel-Detection Research
- April 20, 2026: Weed 'Em and Reap: Help Name the Okanagan's New Milfoil Harvester
- April 14, 2026: Two Decades of Collaboration Protecting Okanagan's Water
- April 10, 2026: OBWB Applauds The End of Bill M 216, Professional Reliance Act
- April 9, 2026: April Board Report
- Key presentations;
    - March 31, 2026: James Littley presented to BC Wildlife Federation
    - April 13, 2026: James Littley presented to the Pend Oreille Basin Invasive Freshwater Mussel Prevention and Readiness Summit in Idaho
    - April 15, 2026: Melissa Tesche presented to the Select Standing Committee on Private Members' Bill M216.
    - April 15, 2026: James Littley presented to the Rotary Club of the Rivers on the eDNA project and invasive mussels.
- Key social media posts with the most engagement since the last report include:
    - What if invasive mussels could be detected in minutes — right at inspection stations? – April 22, 2026.
    - Harvesty McHarvestface is available, but we think you can do better – April 20, 2026.
    - The next generation of Okanagan Lake stewardship just showed up — and they came with receipts. – April 10, 2026.

Media Tracking

Please find monthly media tracking below, listing articles from March 30, 2026 to April 27, 2026, in reverse chronological order.

Date	Source	Headline	Link
April 26, 2026	Castanet	Coldstream council to get updates on several ongoing projects	https://www.castanet.net/news/Vernon/610805/Coldstream-council-to-get-updates-on-several-ongoing-projects
April 26, 2026	Kelowna Cap News and other Okanagan Black Press publications	Okanagan Lake weed eater needs a name	https://kelownacapnews.com/2026/04/26/okanagan-lake-weed-eater-needs-a-name/
April 22, 2026	Vernon Matters	Funding grows for UBCO invasive mussel detection project	https://vernonmatters.ca/2026/04/22/funding-grows-for-ubco-invasive-mussel-detection-project/
April 22, 2026	Castanet and All for Gardening	OXA can help you create a thriving garden with less water	https://www.castanet.net/news/Gardening-with-nature/610104/OXA-can-help-you-create-a-thriving-garden-with-less-water#610104
April 22, 2026	Beach Radio Kelowna	Funding grows for UBCO invasive mussel detection project	https://www.beachradiokelowna.ca/2026/04/22/funding-grows-for-ubco-invasive-mussel-detection-project/
April 22, 2026	Kelowna Courier and Penticton Herald	Water in Short	Print editions
April 21, 2026	InfoNews	Drought conditions and water restrictions in Okanagan, Kamloops	https://infonews.ca/inhome/news/8132/drought-conditions-and-water-restrictions-in-okanagan-kamloops/
April 20, 2026	KelownaNow	Okanagan's new milfoil harvester a 'major upgrade' after nearly 50 years	https://www.kelownanow.com/watercooler/news/news/Okanagan/Okanagan_s_new_milfoil_harvester_a_major_upgrade_after_nearly_50_years
April 20, 2026	Castanet	Harvesty McHarvestface? Okanagan Basin Water Board launches contest to name new milfoil harvester	https://www.castanet.net/news/Kelowna/609857/Harvesty-McHarvestface-Okanagan-Basin-Water-Board-launches-contest-to-name-new-milfoil-harvester

April 20, 2026	Vernon Matters	Contest running to name a new milfoil harvester	https://vernonmatters.ca/2026/04/20/contest-running-to-name-a-new-milfoil-harvester/
April 18, 2026	Kelowna Cap News and other Okanagan Black Press publications	19 Okanagan water board projects to advance after $380K grant	https://kelownacapnews.com/2026/04/18/19-okanagan-water-board-projects-to-advance-after-380k-grant/
April 17, 2026	Penticton Herald, Times Chronicle and CP	Osoyoos to enter Stage 2 water restrictions on May 1	https://www.pentictonherald.ca/spare_news/article_b611cd85-d130-532b-bebf-315ffa236527.html
April 16, 2026	Castanet	Town of Osoyoos soon goes on Stage Two water restrictions	https://www.castanet.net/news/Oliver-Osoyoos/609239/Town-of-Osoyoos-soon-goes-on-Stage-Two-water-restrictions
April 15, 2026	Vernon Matters	RDNO Agricultural Park restoration work supported by water group grant	https://vernonmatters.ca/2026/04/15/rdno-agricultural-park-restoration-work-supported-by-water-group-grant/
April 15, 2026	Kelowna Courier and Penticton Herald	Managing Fish in the Semi-Arid Okanagan	Print editions
April 11, 2026	InfoNews	What's happening downstream of low snowpack in the Okanagan	https://infonews.ca/news/7610761/whats-happening-downstream-of-low-snowpack-in-the-okanagan/
April 10, 2026	Global News	Okanagan snowpack at lowest in 40 years as drought fears ramp up	https://globalnews.ca/news/11774303/okanagan-snowpack-lowest-40-years-drought-fears/
April 10, 2026	Vernon Matters	OBWB wanting municipalities to be consistent with drought messaging	https://vernonmatters.ca/2026/04/10/obwb-wanting-municipalities-to-be-consistent-with-drought-messaging/
April 9, 2026	Castanet	Okanagan snowpack falls to historic low, raising drought concerns	https://www.castanet.net/news/Kelowna/607930/Okanagan-snowpack-falls-to-historic-low-raising-drought-concerns#607930
April 9, 2026	Castanet	58% of usual snowpack in the Okanagan, the River Forecast Centre says	https://www.castanet.net/news/Kelowna/607930/58-of-usual-snowpack-in-the-

			Okanagan-the-River-Forecast-Centre-says
April 8, 2026	Castanet and All for Gardening	**Prune, don't butcher, your trees and shrubs**	https://www.castanet.net/edition/news-story-607557-1152-.htm#607557
April 8, 2026	The Times Chronicle	**Town of Osoyoos boat ramps not ready to launch**	https://www.timeschronicle.ca/town-of-osoyoos-boat-ramps-not-ready-to-launch/
April 5, 2026	The Penticton Herald	**Chemical treatments cut mussel spread**	https://www.pentictonherald.ca/news/article_3c71fc02-bf92-41f8-8647-c049c98c9c00.html
April 4, 2026	Castanet	**Flotilla in 1976 near Kelowna protested use of chemicals on milfoil in Okanagan Lake**	https://www.castanet.net/news/Vernon/606980/Flotilla-in-1976-near-Kelowna-protested-use-of-chemicals-on-milfoil-in-Okanagan-Lake#606980
April 4, 2026	Kelowna Courier and Penticton Herald	**Chemical offensive vs. mussels showing promise in Idaho**	Print editions
April 3, 2026	Castanet	**U.S. invasive mussel treatments cut population nearly in half: report**	https://www.castanet.net/news/Kelowna/606860/U-S-invasive-mussel-treatments-cut-population-nearly-in-half-report#606860
April 2, 2026	The Kelowna Courier	**Idaho's chemical offensive against mussels shows promise**	https://www.kelownadailycourier.ca/news/article_98ee93fd-9583-4989-89e5-effc8fdcc29c.html

The Stats: March 30, 2026 – April 27, 2026

Total individual articles mentioning OBWB work, projects etc. (includes multiple listings of the same article)	*Total Estimated Views**	*Total Reach**
55	**45,773**	20M

Total Estimated Views is pulled from our media monitoring service Meltwater. According to Meltwater, Estimated Views is a metric that approximates the number of times an average article from a publication has been viewed. This is accomplished by dividing a publication's monthly page views by the number of articles it published in a given month.

Total Reach is pulled from our media monitoring service Meltwater. It's important to note that in Meltwater, "reach" is inflated as it represents the potential number of unique visitors who could have seen a specific article or piece of content. It's calculated based on the monthly unique visitors to the source publication, not the number of times the content was displayed. This metric helps organizations understand the potential audience size and reach of their content across various platforms.

Okanagan Basin
WATER BOARD

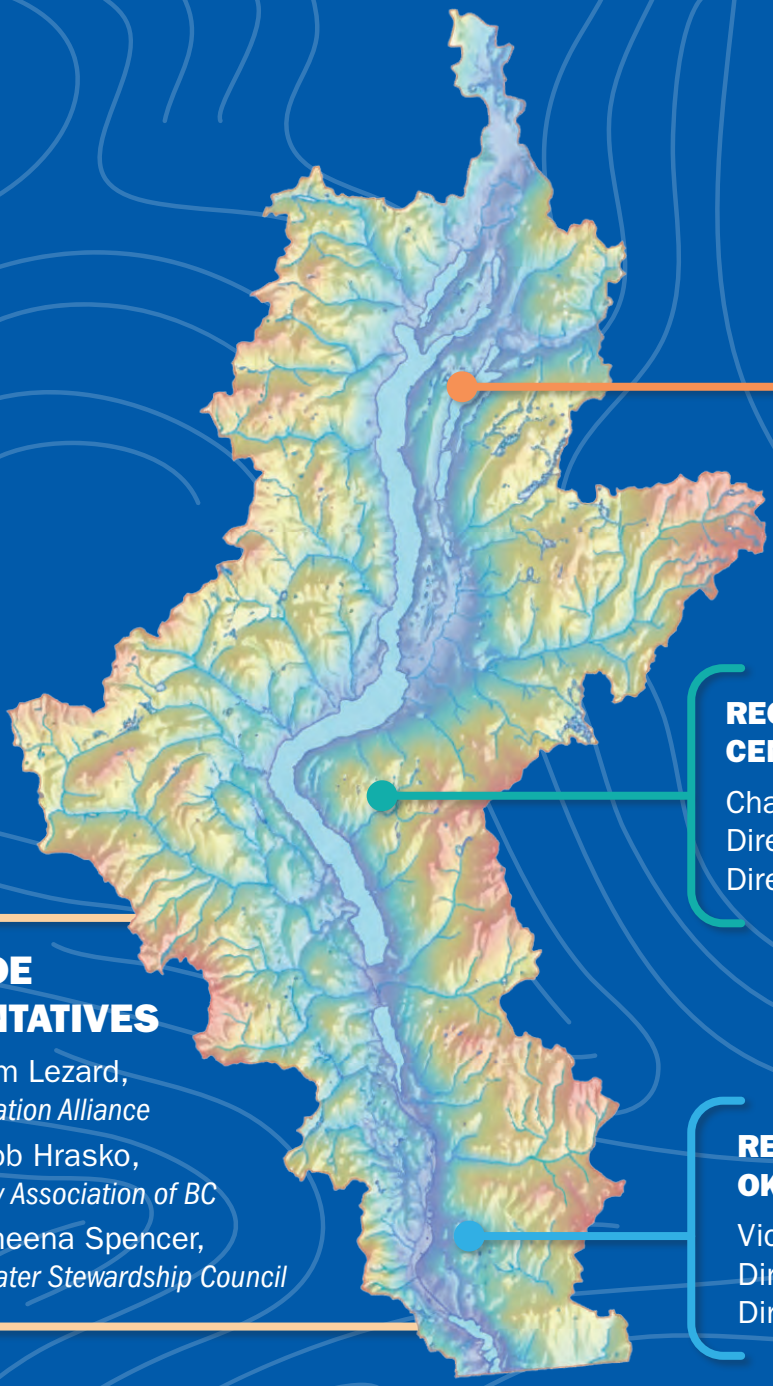
5 Year STRATEGIC DIRECTION

2026–2030

DRAFT

Providing Local Government Leadership to Steward Shared Water

2026 BOARD OF DIRECTORS



REGIONAL DISTRICT OF NORTH OKANAGAN

Director Brian Guy
Director Bob Fleming
Director Rick Fairbairn

REGIONAL DISTRICT OF CENTRAL OKANAGAN

Chair Blair Ireland
Director Kevin Kraft
Director Ron Cannan

BASIN-WIDE REPRESENTATIVES

- Director Tim Lezard, *Okanagan Nation Alliance*
- Director Bob Hrasko, *Water Supply Association of BC*
- Director Sheena Spencer, *Okanagan Water Stewardship Council*

REGIONAL DISTRICT OF OKANAGAN-SIMILKAMEEN

Vice Chair Doug Holmes
Director Subrina Monteith
Director Sue McKortoff

LAND ACKNOWLEDGEMENT

We acknowledge that we work on the traditional, ancestral, and unceded tmx̌ʷúlaʔxʷ land of the syilx Okanagan people who have resided here since time immemorial. We honour and respect this land and the siwɬk water which flows through the valley and connects us all.

MESSAGE FROM THE BOARD

Water is key to life in the Okanagan. It connects our communities, sustains the ecosystems that define this region, and underpins our economy.

The context for water in the Okanagan is changing rapidly. Climate variability and population growth are increasing the pressure on our watershed, a region already challenged with water quantity and quality concerns. At the same time, budget pressures and costs are increasing. This makes coordination, efficiencies, shared understanding, and a valley-wide perspective more important than ever.

The Okanagan Basin Water Board (OBWB) exists to support local governments through that work. We are not a regulatory or decision-making body. Our role is to convene, to support, to provide credible information, to advise, and to advocate. Over nearly six decades, the OBWB has built a strong track record in this role — bringing communities together, advancing science, and supporting a coordinated, valley-wide approach to water. This 2026–2030 Strategic Direction provides a framework for future projects, programs, and partnerships, reflecting the OBWB's strengths and focusing on where it will have the greatest impact.

Collectively, our current Board brings many decades of experience with government, water science, and the OBWB, and we have seen firsthand the value the organization provides. Local government election cycles bring transition every four years, but the challenges facing our watershed are ongoing. Meeting these challenges to protect water for generations to come requires continuity, long-term and valley-wide thinking, and working together on proactive, sustained actions. These are the demonstrated strengths of the OBWB.

It has been our pleasure to work together to develop this Strategic Direction. The OBWB remains committed to supporting our communities as they navigate water challenges in the years ahead.

> **"It's our communities that are on the front lines of water in the Okanagan. The OBWB's role is to support them — by convening partners, advancing science, and helping ensure a coordinated, long-term, valley-wide approach to water — an approach we have built and strengthened over decades."**
>
> - Chair Blair Ireland

Chair Blair Ireland | *Director Rick Fairbairn* | *Director Sue McKortoff* | *Vice Chair Doug Holmes*

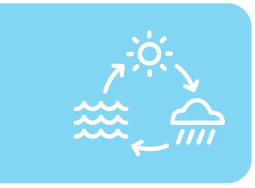
Director Kevin Kraft | *Director Tim Lezard* | *Director Brian Guy* | *Director Ron Cannan*

Director Bob Hrasko | *Director Bob Fleming* | *Director Subrina Monteith* | *Director Sheena Spencer*

UNDERSTANDING THE CURRENT REALITY OF OUR REGION

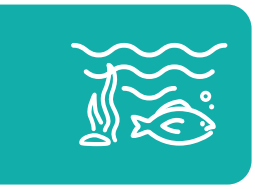
OUR LANDSCAPE IS NATURALLY DRY:

The Okanagan is one of the most water-stressed regions in Canada. It has a semi-arid climate, the lowest average annual precipitation in southern Canada, and the lowest per person water availability in Canada.



WE EXPERIENCE SEVERE WEATHER WHIPLASH:

We can move from droughts to floods to wildfires in rapid succession. Historically, winter snowpack functioned as natural water storage, accumulating in the mountains and melting gradually through the spring and early summer to feed our creeks and recharge our aquifers. We are seeing a shift from snow to rain that is reducing natural storage and increasing variability in water supply.



OKANAGAN SALMON HAVE RETURNED HOME:

Prior to channelization and damming, the Okanagan River system supported significant populations of large-bodied salmon like Sockeye and Chinook. Through sustained leadership by the Okanagan Nation Alliance and its partners, salmon are once again returning to Okanagan lakes and tributaries. Their continued recovery depends on careful water management to ensure adequate flows and suitable temperatures during key migration and spawning periods.

OUR POPULATION IS INCREASING QUICKLY:

The Okanagan is a highly desirable place to live, and its population has grown from approximately 115,000 residents in 1970 to more than 400,000 today. Continued growth is projected, with estimates suggesting an increase of 30–50% over the next two decades. This expansion will increase demand on water supplies and infrastructure, requiring thoughtful land-use planning to accommodate new residents while protecting environmental systems.

THE OKANAGAN IS A TOP VACATION DESTINATION:

Long recognized for its beaches and agricultural production, the Okanagan has evolved into a four-season destination: skiing, wineries, farm-to-table dining, golf, arts and cultural events, and outdoor recreation. Tourism is a multi-billion dollar sector that depends on the health and beauty of the watershed. Maintaining clean, reliable water is essential to sustaining both the visitor economy and the quality of life that supports it.

WE HAVE SOME OF THE BEST SOILS AND GROWING CONDITIONS IN CANADA:

The Okanagan has a long history of agricultural production, made possible through irrigation. The Agricultural Land Reserve protects the land base required to sustain local food production. The agricultural landscape also contributes significantly to the character of the valley, attracting residents and visitors who value its orchards, vineyards, and open spaces.

INVASIVE MUSSELS THREATEN EVERYTHING:

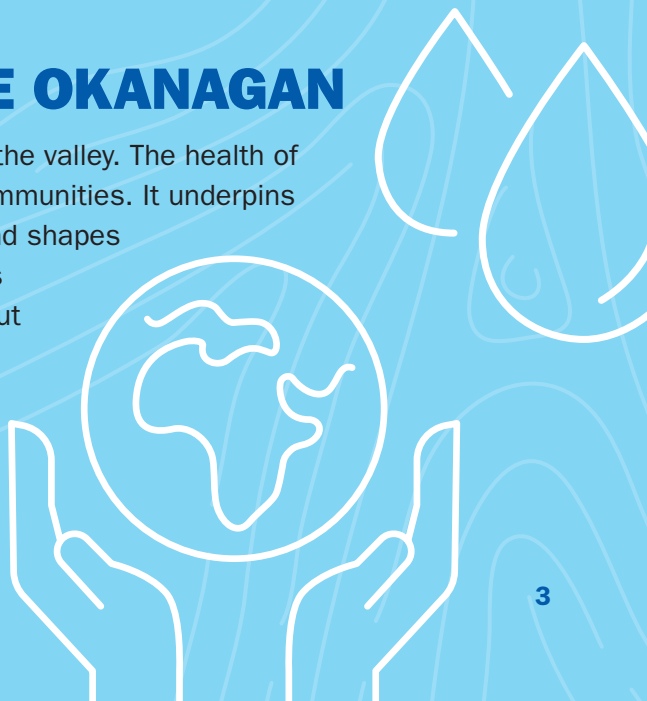
The impacts of invasive mussels are well documented in Eastern Canada and the US. Invasive mussels fill beaches with razor-sharp shells, drastically change water chemistry, and rapidly colonize water intake pipes and damage infrastructure. Maintenance requirements and costs can reach millions of dollars annually. Because eradication is not feasible once established, prevention through coordinated inspection, monitoring, and public awareness is essential to safeguarding the Okanagan's water systems.

OUR HEADWATERS HELP STORE AND RELEASE WATER — AND THEY'RE CHANGING:

The hillsides surrounding the valley's lakes and creeks form the headwaters of the streams that supply water to our communities. These upland landscapes — including forests, grasslands, and shrub-steppe — act as natural reservoirs, storing snowpack and rainfall before slowly releasing water into creeks, lakes, and aquifers. Over the past two decades, large wildfires, mountain pine beetle outbreaks, recreation, and forestry have altered many of these areas. These changes can affect how quickly water moves through the system and may influence both water quantity and water quality.

WATER IS KEY TO LIFE IN THE OKANAGAN

Okanagan shared water connects everyone and everything in the valley. The health of the watershed cannot be separated from the health of our communities. It underpins our economy, protects our communities from flood and fire, and shapes the beauty of the landscape that defines this valley. Decisions made in one part of the watershed affect conditions throughout the valley, reinforcing the need for coordination and collaboration. The choices we make today will determine the resilience of our valley tomorrow.



IMAGINING A FUTURE WHERE...

From the headwaters to the lakeshores and Okanagan River, every Okanagan resident understands that Okanagan water sustains everyone of us and acts with care to protect it.

VISION

The Vision of the OBWB is a future where all Okanagan communities unite around a shared water ethic to ensure healthy water for generations to come, supporting thriving ecosystems, vibrant communities, and sustainable local food production.

MISSION

The OBWB's mission is to provide leadership to protect and enhance quality of life in the Okanagan Basin by advising on and supporting sustainable water management.

OUR FOUNDATIONS

The foundation of OBWB's 2026-2030 Strategic Direction is built on:

- **Our legislated mandate**
- **Our core values and their corresponding operating principles, and**
- **Our commitment to reconciliation.**

OBWB's Legislated Mandate

The OBWB was founded in 1970 as a collaborative, inter-regional local government agency to identify and resolve critical water issues in the Okanagan. We bring people and ideas together — catalyzing water initiatives throughout the valley.

The OBWB's mandate was established in legislation in 1969 through the Municipalities Enabling and Validating Act, with Supplementary Letters Patent to the Okanagan regional districts to:

- Organize or receive proposals from private interests, organizations or agencies and all levels of governments regarding best practices for water use and management;
- Define water problems and priorities, economic feasibility of solutions, responsibility, necessary legislation and required action;
- Communicate and coordinate between levels of government and their agencies about water use and management;
- Present proposals and recommendations to local or senior governments, according to jurisdiction and responsibility;
- Participate financially or otherwise, in surveys, investigations or projects on behalf of Okanagan local governments;
- Coordinate implementation of the **Okanagan Basin Study Plan** (1974) – for water management activities that affect the Valley as a whole;
- Advise local or senior government agencies when proposed actions, regulations or bylaws are contrary to the Okanagan Basin Study or OBWB recommendations; and
- Participate in an aquatic weed control program for Okanagan lakes.

OBWB'S COMMITMENT TO RECONCILIATION

The Okanagan Valley — and the watershed that sustains every community within it — lies within the traditional and unceded territory of the Syilx/Okanagan People. For the Syilx Nation, siwɬkʷ water is a living relative that connects generations. As expressed in the *Syilx siwɬkʷ Strategy: We Will Protect the Water* published by the Okanagan Nation Alliance in 2021:

"The Syilx Okanagan People flow with siwɬkʷ as it connects us to one another and our ancestors… This ancient and inherent bond has sustained our People for countless generations and is a cornerstone of our material, cultural, and spiritual identity."

The document goes on to invite "everyone who shares our remarkable Territory to recognize the essential role that siwɬkʷ plays in all of our lives. Non-indigenous stakeholders and governments must build capacity to learn how to work respectfully with the Syilx Okanagan Nation and understand our own governance."

From our locally driven and funded origins in 1968, the OBWB has recognized that water is key to life in the Okanagan. Yet our institutional history reflects the colonial framework within which we were created. Indigenous voices were not included in the federal and provincial 1974 Basin Study* that guided our work, and meaningful inclusion and partnership have evolved slowly over time. We acknowledge that reconciliation requires honesty about our own history, and that trust is built through consistent, respectful action.

As a local government organization with an advisory mandate, our role is to convene, to support, to provide credible information, to advise, and to advocate. In that role, we commit to continue:

- Recognizing the essential role that siwɬkʷ water holds for the Syilx Okanagan Nation — ecologically, culturally, spiritually, and economically, across the Territory;
- Building our own capacity to understand Indigenous water relations, laws, and rights, consistent with the Truth and Reconciliation Commission's Calls to Action and the principles affirmed in UNDRIP;
- Learning how to work respectfully with the Syilx Okanagan Nation, taking responsibility for our own education and intercultural competencies;
- Valuing Indigenous knowledge systems as autonomous and legitimate, supporting collaborations with Western science in ways that acknowledge power imbalances and respect differing world views; and
- Supporting collaborative governance approaches between Indigenous and non-Indigenous decision-making parties where priorities align, recognizing that progress will occur at the pace of relationship and trust.

* Canada-British Columbia Consultative Board. (1974). Main report of the Consultative Board: March 1974. Prepared under the Canada-British Columbia Okanagan Basin Agreement. Office of the Study Director. https://www.obwb.ca/library/1974-okanagan-basin-study/

To equate the word 'siwɬkʷ' with 'water' is to greatly oversimplify the meaning.

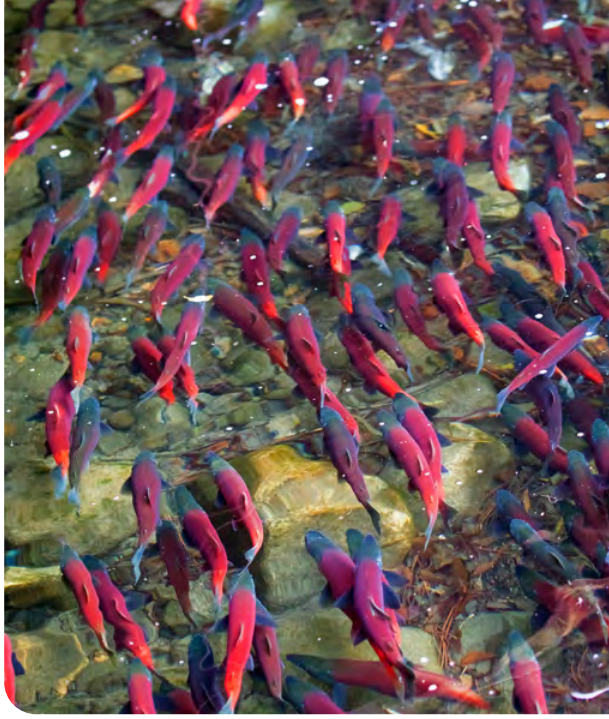
"siwɬkʷ comes from siw and ɬkʷ

siw comes from the word for when a human drinks — siwɬkʷ: to sip

ɬkʷ comes from the word for when an animal drinks — ɬkʷitkw: to lap

Together, the two parts form siwɬkʷ — embedding within the word itself the Syilx ethic that the right to water is equal for humans and animals."

- From the *Syilx siwɬkʷ Strategy: We Will Protect the Water* (Okanagan Nation Alliance, 2021)



OBWB's Journey to Date

OBWB recognizes that reconciliation is not a destination, it is an ongoing commitment that must be advanced through continuous learning and re-learning, relationship-building, and consistent action. The OBWB has been working to deepen its relationships with the Okanagan Nation Alliance and individual Syilx member Bands, and to embed the spirit of reconciliation into how the organization operates.

A significant milestone came in 2021, when the OBWB and Okanagan Nation Alliance jointly developed *Advancing the OBWB* and *Okanagan Nation Alliance Relationship*, which outlined concrete ways to strengthen the partnership and begin reflecting the principles of UNDRIP in the Board's work. Since then, meaningful steps have been taken: the ONA Director's voting authority has been made equal to that of local government Directors, and all Syilx member Bands and the ONA have been invited to appoint representatives as members of the Okanagan Water Stewardship Council, with financial support available to enable their participation.

Building internal capacity for reconciliation has been a priority. Staff and Board members have engaged in a range of learning opportunities, including kinSHIFT's Elements of Truth, the Indigenous Engagement Institute's workshops, the nsyilxcən beginner language course at the Sncəwips Heritage Museum, and university courses at UBC Okanagan and the University of Alberta. Additionally, the Okanagan Water Stewardship Council has established a subcommittee grounded in Gwen Bridge's Ethical Space framework, and the Board and Council have hosted presentations on Indigenous water law, perspectives, and ethical space.

In practice, partnership with the Okanagan Nation Alliance continues to shape the OBWB's work. This includes co-leading the Okanagan Hydrometric Program; supporting Syilx-led salmon restoration through grants; advancing the science of environmental flow needs and fish habitat; and working together on issues of shared concern, including chemical use in lakes and invasive mussels.

While progress has been made, this remains ongoing work that will require sustained efforts, humility, and a willingness to learn and adapt. Both the Board and staff are committed to advancing this work, and the OBWB looks forward to continuing to strengthen its relationships with the Okanagan Nation Alliance, Syilx member Bands, and their communities.

OBWB'S CORE VALUES

Three core values guide the OBWB's work and define our role in strengthening water sustainability across the Okanagan: **ONE VALLEY, ONE WATER**; **CREDIBILITY**; and **ACCOUNTABILITY**. Our operating principles describe how we put these values into action.

One Valley, One Water.

We recognize that all water in the Okanagan is shared and connecting all who live in the valley.

- **WHOLE-WATERSHED THINKING.** OBWB projects and programs focus on activities with a broad geographic scope.
- **COLLABORATION.** We seek collaborative solutions to water concerns, coordinating resources and efforts, and working to build relationships and shared understandings.
- **LONG-TERM STEWARDSHIP.** We look ahead to protect water for future generations, considering the needs of our children and grandchildren as we consider the needs of today.

Credibility.

We are a trusted source of water science and information, grounded in expertise and committed to thoughtful, balanced approaches.

- **INFORMED ACTION.** We are guided by the best available science and community expertise.
- **BALANCE.** We take a balanced approach, recognizing the environmental, social, cultural, and economic dimensions of water management.
- **NON-PARTISAN.** We support best practices and sound policies in the long-term interest of the watershed, independent of political affiliation.

Accountability.

We are responsible stewards of our mandate and resources, and we communicate clearly about our progress.

- **TRANSPARENCY.** Our actions and decisions will be transparent and open.
- **SHARING.** We share the knowledge and data generated through our publicly funded work so that communities across the valley can benefit.
- **INNOVATION.** We are committed to continuously improving our work, seeking new ideas and approaches while respecting experience and established knowledge.

WE REAFFIRM OUR COMMITMENT TO ONGOING GOALS

For more than 55 years, the Okanagan Basin Water Board has adapted to meet the evolving needs of the region. The goals set out in previous strategic plans remain foundational to our work. This Strategic Direction does not replace those commitments; it reinforces them and clarifies how OBWB will continue advancing them over the next five years.

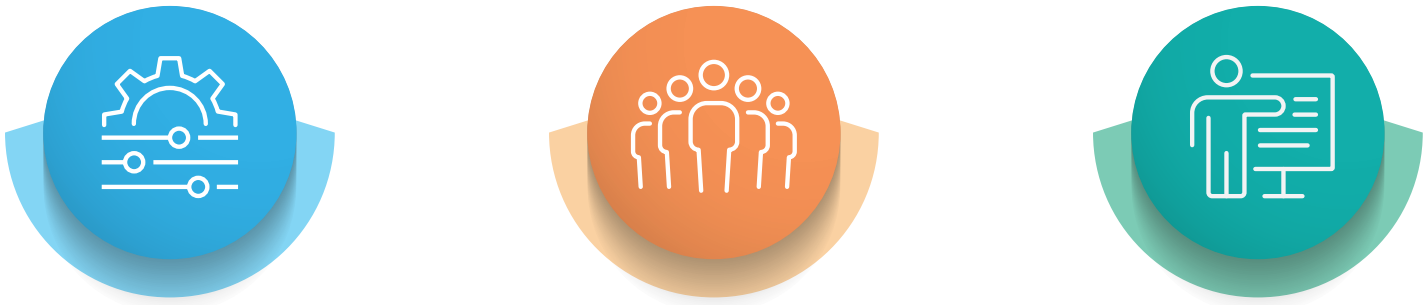
1) **DELIVERING OUR MANDATE ACROSS ALL PROJECTS AND PROGRAMS**
   As the Okanagan grows and changes, OBWB must remain both stable and adaptable while providing organizational excellence. We will continue to anticipate emerging trends while providing the consistency and credibility our communities depend on.
2) **WATER MANAGED FOR ALL NEEDS UNDER ALL CONDITIONS**
   The Okanagan faces increasing variability: drought, flood, and changing snowpack patterns. Many conflicts over water quantity concerns can be avoided through careful management and planning.
3) **MAINTAINING EXCELLENT WATER QUALITY**
   Water quality protection requires vigilance across upper watersheds, agricultural lands, and urban areas. Healthy riparian areas, wetlands, invasive species prevention, and source protection remain critical.
4) **ADVANCING PARTNERSHIPS WITH OKANAGAN INDIGENOUS COMMUNITIES**
   OBWB remains committed to building respectful relationships with the Okanagan Nation Alliance and individual Syilx Bands and to supporting collaborative approaches to water planning and management across the basin.

OBWB'S STRATEGIC PRIORITIES 2026-2030

Over the past two decades, there has been increasing recognition of the watershed's importance and a corresponding growth in the number of organizations working for the betterment of the watershed. This is both positive and necessary in our rapidly changing region. However, increased activity makes coordination, clear communication, and alignment more important than ever to ensure efforts are complementary rather than fragmented or duplicative.

The 2026–2030 Strategic Direction outlines how OBWB can best contribute within its legislated mandate in this evolving landscape. It builds on OBWB's demonstrated strengths and successes and provides a clear framework to guide the use of time and resources. This is not a detailed work plan, but a strategic framework that enables flexibility to respond to emerging needs, partner readiness, and funding opportunities.

These Strategic Priorities build on OBWB's strengths and guide our work over the next five years:



Advancing Science, Environmental Monitoring, and Information Management

Building Partnerships and Capacity in the Watershed

Educating, Advocating, and Advising on Good Policy

Strategic Priority 1:

Advancing Science, Environmental Monitoring, and Information Management

OBWB invests in research, monitoring, modelling, and data stewardship to ensure the Okanagan has the knowledge and tools needed to adapt to climate variability, population growth, and economic change. These investments provide decision-makers with credible evidence to assess risk and inform water quantity and quality decisions.

STRENGTHEN OKANAGAN-BASED RESEARCH

Identify knowledge gaps, build partnerships with post-secondary institutions and research partners to advance applied research that responds to real-world water challenges in the basin.

EXPAND BASIN-WIDE MONITORING AND MODELLING

Invest in hydrometrics, groundwater monitoring, and modelling tools to ensure the Okanagan has the science needed to adapt to climate variability, economic shifts, and population growth.

PROTECT AND RESPONSIBLY MANAGE WATER DATA

Safeguard long-term water data and ensure information generated through OBWB initiatives is preserved, responsibly managed, and accessible to partners and the public.

ADVANCE INNOVATION AND CONTINUOUS LEARNING

Identify and evaluate solutions and technologies from other water-stressed regions, as well as locally developed innovations, to determine their relevance and applicability in the Okanagan.

Elinor McGrath and team working on the Environmental Flow Needs (EFN) Project

Strategic Priority 2:

Building Partnerships and Capacity in the Watershed

Strong water management depends on strong relationships. OBWB builds partnerships, strengthens local capacity, and supports and coordinates collective action across governments, Indigenous communities, water suppliers, researchers, and community partners.

STRENGTHEN THE WATER STEWARDSHIP COUNCIL

Continue to invest in the Water Stewardship Council as the Board's independent technical advisory body and as a respected forum for learning and collaboration. Evolve Council structures and practices to ensure both technical expertise and community perspectives are reflected and effectively connected to the Board.

LEVERAGE AND SECURE FUNDING

Attract and leverage provincial, federal, and other funding to support water initiatives in the Okanagan, using OBWB's convening power and grant programs to maximize regional impact, create economies of scale, and reduce financial pressure on local communities.

BUILD CAPACITY ACROSS THE WATERSHED

Support local governments, Indigenous governments, water suppliers, and place-based groups by coordinating efforts, sharing expertise, and strengthening the collective capacity to address complex water challenges.

The Environmental Flows Conference 2024 held March 13-15, 2024 in Kelowna, B.C.

ADVANCE RECONCILIATION THROUGH RELATIONSHIP

Build respectful, ongoing relationships with the Okanagan Nation Alliance and individual Syilx Bands. Work collaboratively to support coordinated approaches to watershed planning and water management and serve as a resource to evolving co-governance efforts in the basin.

Strategic Priority 3:

Educating, Advocating, and Advising on Good Policy

Water sustainability depends on informed communities and effective public policy. OBWB works to strengthen water literacy, provides evidence-based policy advice, and elevates Okanagan water priorities with senior governments.

FOSTER A SHARED WATER ETHIC

Strengthen public understanding of the Okanagan's water reality and cultivate a shared water ethic that supports responsible water use, long-term stewardship and restoration.

ELEVATE OKANAGAN WATER ISSUES

Increase OBWB's influence with provincial and federal governments, raise the profile of Okanagan water priorities, and invest in dedicated government relations capacity to advance regional interests.

TRANSLATE SCIENCE INTO POLICY ADVICE

Monitor emerging legislation and consultations that affect the watershed, translate science and local knowledge into practical policy advice, and provide informed, non-partisan recommendations to support sound water management.

STRENGTHEN REGIONAL WATER COMMUNICATIONS

Provide clear, credible, and timely communication about the state of water in the Okanagan, reinforcing OBWB's role as a trusted regional voice and helping communities understand risks, trade-offs, and solutions.

TOP: Make Water Work, Plant FireSmart™ campaign launch on May 21, 2025 in Armstrong, B.C. BOTTOM: Second-annual meeting of the Okanagan-Interior Invasive Mussel Working Group held Nov. 14, 2025 in Kelowna.

250-469-6271
www.OBWB.ca

1450 KLO Road
Kelowna B.C. V1W 3Z4

Okanagan Basin
WATER BOARD

Okanagan Basin
WATER BOARD

1450 KLO Road, Kelowna, B.C. V1W 3Z4
P 250-469-6271 F 250-762-7011
www.obwb.ca

April 15, 2026

Chief yilmixʷm Robert Louie
Westbank First Nation
515 Hwy 97, Westbank, B.C., V1Z 3J2
clouie@wfn.ca

Councillor Tricia Brett
District of Lake Country
10150 Bottom Wood Lake Rd., Lake Country, B.C. V4V 2M1
brett@lakecountry.bc.ca

Re: Invitation to Connect – OBWB and Collaborative Leadership Table

Dear Co-Chairs of the Collaborative Leadership Team,

On behalf of the Okanagan Basin Water Board (OBWB), I would like to invite you to connect for a conversation between the OBWB and the Collaborative Leadership Table (CLT) to explore opportunities for alignment moving forward.

The Board recently had the opportunity to consider a Water Conservation and Quality Improvement grant application in support of the CLT. In doing so, Directors had a thoughtful discussion about the initiative and its long-term importance. With five OBWB Directors also holding seats at the CLT, there is strong respect at our Board table for the CLT's vision of advancing collaborative, government-to-government approaches to water in the Okanagan and Similkameen.

Through this discussion, our Board concluded that the CLT initiative is broader in scale and scope than what the annual small grants program is designed to support. As such, they felt it would be more appropriate to consider potential support through mechanisms better aligned with the significance and potential impact of the work.

The OBWB Board would like to open a conversation with the CLT in a more direct and intentional way. The intent is to build shared understanding, explore areas of alignment, and consider how OBWB may be able to support this work in a manner that respects the CLT's Indigenous leadership, while remaining consistent with OBWB's mandate.

I would welcome the opportunity to meet with you in the coming weeks. We acknowledge the leadership being provided in this important space and look forward to further discussion.

Sincerely,

Blair Ireland, Chair, Okanagan Basin Water Board

Okanagan Similkameen Collaborative Leadership Table

ks_kəɬqayxʷntimiʔ siwɬkʷ We will protect the water.

April 22, 2026

Okanagan Basin Water Board
1450 KLO Road
Kelowna, B.C. V1W 3Z4

Dear Chair Ireland,

Thank you for your April 15 letter and for the Okanagan Basin Water Board's thoughtful consideration of the Okanagan Similkameen Collaborative Leadership Table (CLT) and its work.

We appreciate the Board's recognition of the scale, significance, and long-term importance of this initiative, as well as your openness to exploring approaches that are better aligned with the scope and potential impact of the CLT. We also value the shared leadership reflected through OBWB Directors who participate at the CLT table and the respect expressed for advancing collaborative, government-to-government approaches to water stewardship in the Okanagan and Similkameen.

We welcome the opportunity to meet in person in the coming weeks to build shared understanding, explore alignment, and discuss how we can work together in a way that honours Syilx leadership and supports watershed security across the region.

To support a productive and well-informed discussion, we would also like to invite members of the CLT Coordination Team, Tessa Terbasket and Scott Boswell, as well the OBWB Executive Director Melissa Tesche, to join the meeting.

Our offices will follow up shortly with availability.

Thank you again for reaching out. We look forward to continuing this important conversation together.

Sincerely,

Chief Robert Louie
Westbank First Nation

Councillor Tricia Brett
District of Lake Country

Discussion Paper

Sewerage System Regulation and the Protection of Drinking Water Sources

Version 6

Policy Committee
Okanagan Water Stewardship Council - Term 12
Submitted April 28, 2026.

Document Title

Sewerage System Regulation and the Protection of Drinking Water Sources

Discussion Paper – Version 6

Prepared by

Policy Committee

Okanagan Water Stewardship Council

Prepared for

Okanagan Basin Water Board

Date Submitted

April 28, 2026

Disclaimer

This discussion paper has been prepared by the Policy Committee of the Okanagan Water Stewardship Council in its role as a technical advisory body. The content is intended to inform discussion and does not constitute direction or an approved position of the Okanagan Basin Water Board.

Suggested Citation

Okanagan Water Stewardship Council Policy Committee. (2026). *Sewerage System Regulation and the Protection of Drinking Water Sources* (Discussion Paper, Version 6). Prepared for the Okanagan Basin Water Board.

Use of This Document

This paper is intended to inform discussion and support consideration of policy and regulatory matters related to drinking water protection. It does not constitute OBWB Board-approved policy or direction.

1.0 Introduction

This discussion paper examines the regulatory framework governing onsite wastewater systems, identifies significant gaps that pose risks to public health and the environment, and proposes necessary reforms to provincial oversight. The central issue is the inadequacy of the current Sewerage System Regulation (SSR), enacted under the BC Public Health Act, to protect water quality from the cumulative impacts of accelerating rural development. Originally designed to manage small-scale systems for single-family homes and duplexes, the regulation's scope has not evolved to address the pressures of larger, higher-density developments now common in sensitive watersheds. Because the SSR only regulates small onsite sewage systems and does not coordinate with the rules governing land use, water protection, or larger wastewater systems, it leaves important responsibilities split among several ministries and agencies. This 'fragmentation' means no single authority is responsible for assessing whether development decisions, septic density, and watershed protection are working together to keep drinking water safe.

The purpose of this paper is to critically review the existing legislation and its dependence on a professional reliance model, analyze its shortcomings through an Okanagan Basin case study, and present a series of well-reasoned recommendations for regulatory changes. By

Septic Systems – A Primer

A septic system treats household wastewater underground.

1. Water from toilets, showers, and sinks flows into a septic tank, where solids settle.
2. Liquid wastewater (effluent) from the tank then flows into perforated pipes in a drain field where soil filters out contaminants.
3. For the system to work safely, soil needs space and time to break down pollutants.
4. When too many systems are built too close together, or soil conditions are poor, contaminants—including bacteria and nutrients—can travel into streams, lakes, or drinking water wells.
5. Depending on the type of septic system, it will require inspection and maintenance every 1-3 years to function properly.

Septic systems fail when tanks leak, pipes clog, or drain fields become saturated. Failures often occur underground and may not be visible even when contamination is reaching water sources.

highlighting the disconnect among land-use decisions, wastewater management, and water protection, we aim to make a clear case for provincial action.

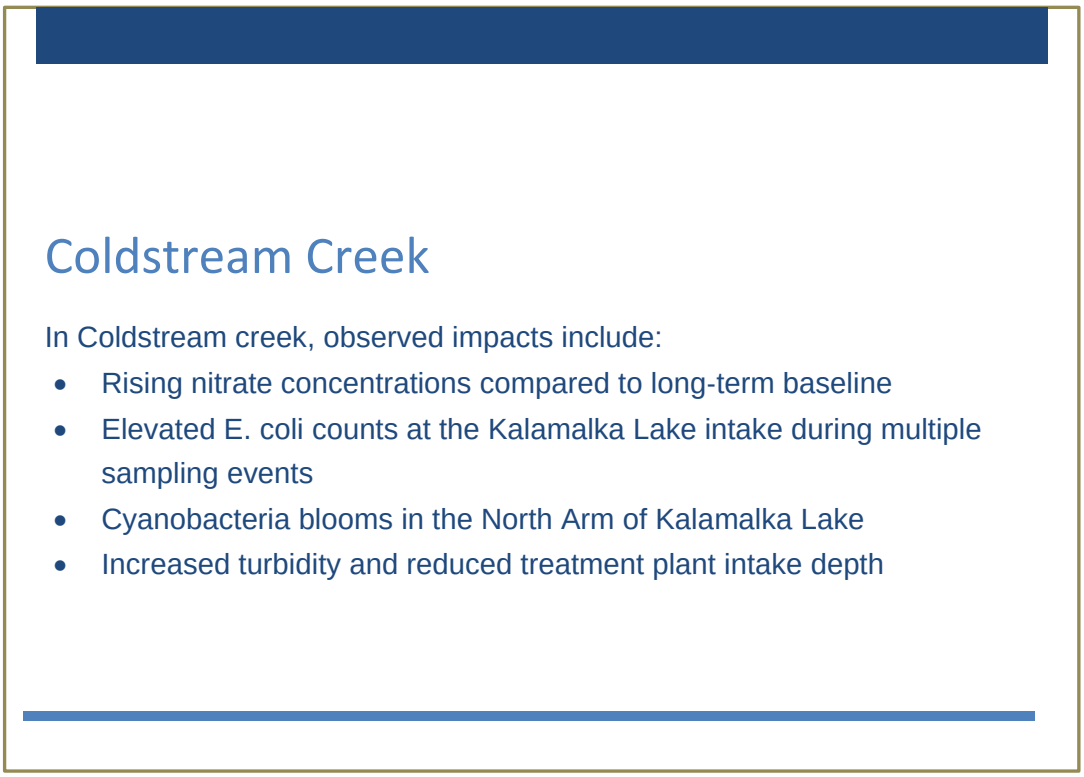
The Okanagan Basin Water Board's '*One Valley, One Water'* [1] principle emphasizes that water flows across political boundaries and that protecting drinking water requires coordinated decisions about land use, wastewater and watershed health.

2.0 A Case Study in Cumulative Impacts

The Coldstream Creek watershed serves as a compelling case study, demonstrating how the current regulations appear to be failing to protect a vital community drinking water source from the cumulative effects of development. Kalamalka Lake is the primary water source for over 59,000 residents and businesses in the Greater Vernon area. Coldstream Creek is the major tributary, providing 80% of Kalamalka Lake's annual inflow. Over the past five years, several water quality parameters in the North Bay of Kalamalka Lake have been in decline. Common sources of microbial contaminants from Coldstream Creek into Kalamalka Lake have long been recognized as including wild and domestic animal feces and seepage from septic systems[2]. These bacteria often enter surface waters via non-point sources. This degradation coincides with the proliferation of numerous large-scale, septic-serviced developments directly adjacent to Coldstream Creek and its tributaries. These approved developments can pose a direct threat to both the creek and the adjacent creek-connected alluvial aquifer, which provides a clear hydrogeological pathway for contamination. This potential risk to public health has been identified by the local water purveyor, who has been unable to get the regional health authority (Interior Health) or the Ministry of Environment and Parks to address the resulting risk to their customers and the environment. Both government agencies have indicated that they lack the legislative tools to prevent the installation of these potentially risky systems, nor the authority to require a higher level of assessment or monitoring from the proponent.

[1] https://obwb.ca/

[2] BC Ministry of Environment (2009). Coldstream Creek Water Quality Monitoring:2008-2009. Final Report.. Environmental Protection Division, Penticton, BC.25pp.



In addition to pathogens, sewage effluent contains nutrients, specifically nitrogen and phosphorus components. In 2024, nutrient contributions from Coldstream Creek to Kalamalka Lake were substantial, with annual average total phosphorus concentrations greatly exceeding those in the lake[3]. Elevated nutrient levels in water bodies that supply drinking water can cause eutrophication and have serious health impacts. Although dilution does occur, cumulative nutrient inputs from Coldstream Creek have likely contributed to increasing eutrophication and recent cyanobacterial and algal blooms in Kalamalka and Okanagan Lakes (Figure 1).

[3] Larratt Aquatic 2024. Kalamalka Lake Water Quality Study. Larratt Aquatic Consulting Ltd. West Kelowna, BC. 86 pp. https://www.rdno.ca/sites/default/files/2025-07/240601_RPT_LAC_Kal_Lk_2023_Annual_FNL.pdf

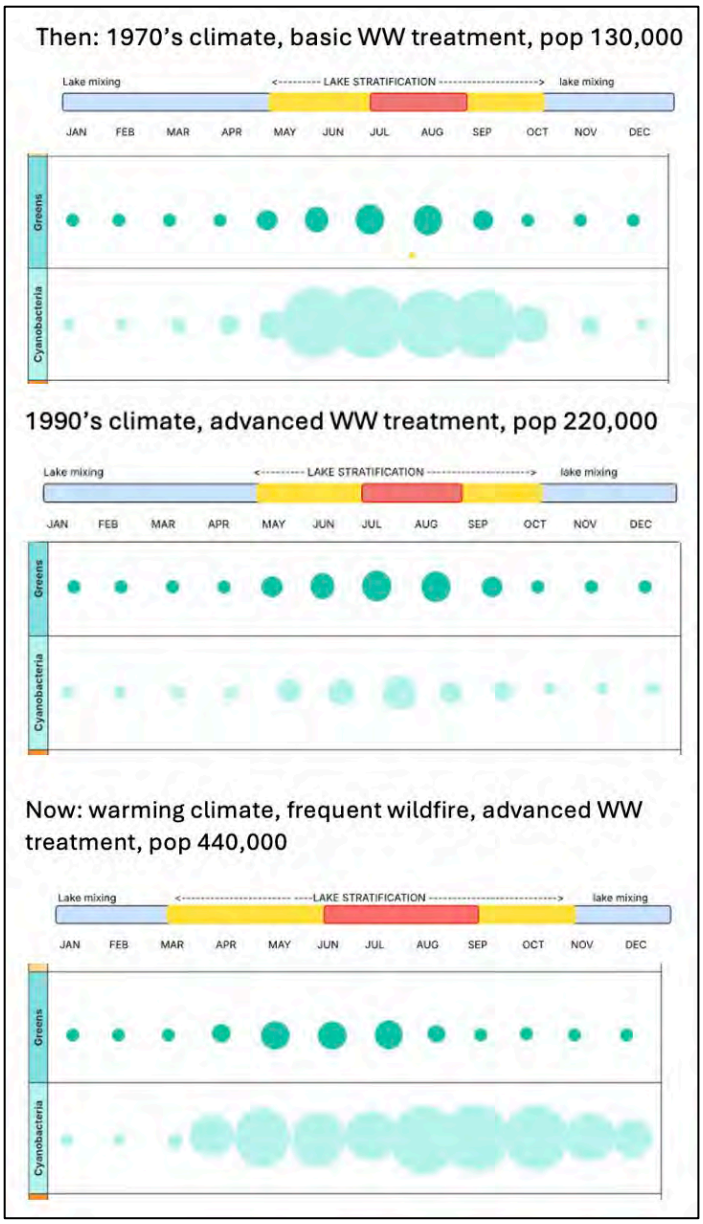


Figure 1. Changes in algae(greens) and cyanobacteria densities in the mainstem lakes of the Okanagan Basin in the 1970s, 1990s and 2020s. This figure shows degraded conditions in the 1970's prior to tertiary wastewater treatment, then recovery in the 1990s. The adverse change in the 2020s results from increasing population-driven eutrophication and apparent climate-driven factors including water column warming, an extended period of lake stratification and wildfire (source: H. Larratt, Larratt Aquatic Consulting Ltd).

Cyanobacteria pose health risks—particularly for vulnerable populations—while eutrophication can trigger toxic algal blooms, promote the growth of invasive aquatic plants, cause water stagnation, impair recreational opportunities, and create challenges for drinking water systems. The consequences of contamination are far-reaching.

The core problem revealed by this case study is that the negative impact on drinking water is not the result of a single failing system, but rather the *cumulative impact* of many onsite wastewater systems and associated land use activities. The SSR, with its parcel-by-parcel, system-by-system approach, is fundamentally ill-equipped to assess or mitigate these

combined, watershed-level effects. The observed environmental impacts in the Coldstream Creek watershed are a direct consequence of a regulatory framework that has permitted them.

RDNO Guilty of Water Negligence in 2013

Judge McKimm firmly stated that the Regional District of North Okanagan (RDNO) had ample warning since 1999 about a serious issue with its water system and that cross-contamination was unavoidable. He concluded that the RDNO failed to fulfill their responsibilities under the Water Act and Drinking Water Protection Act.
The 2010 incident took place at Pan-O-Ramic Farms, where the owner instructed an employee to cover a snow-packed field with manure in early January. By January 10, temperatures had risen quickly, and heavy rain melted the snow, washing the effluent into an allegedly unknown culvert. This culvert led directly to three wells operated by the district and owned by the RDNO. From there, the contamination went directly to residents' faucets.**

**As reported on the Water Supply Association of BC website, Sept 27, 2013
https://wsabc.ca/rdno-guilty-of-not-protecting-water/#:~:text=Operating%20a%20well%20in%20a,and%20Drinking%20Water%20Protectio

3.0 Critical Analysis of the Sewerage System Regulation (SSR) Framework

The shortcomings evident in the Coldstream Creek case study are not anomalies but symptoms of systemic weaknesses within the Sewerage System Regulation (SSR). A critical examination reveals a framework defined by delegated risk, fragmented jurisdiction, and critical gaps in oversight. Many jurisdictions use the precautionary principle in human health and environmental legislation. The precautionary principle is a guideline for decision-making, especially in public health and environmental policy, that states when there's a threat of serious or irreversible harm, lack of full scientific certainty should not be a reason to delay cost-effective measures to prevent that harm. It promotes taking preventative action ("better safe than sorry") even when scientific evidence isn't conclusive, shifting the burden of proof to those proposing potentially risky activities. The precautionary principle is

central to many environmental laws and international treaties, including the Canadian Environmental Protection Act. [4]

While there were minor amendments in 2010, the SSR has not undergone a significant revision since its inception in 2005, despite evolving environmental standards, new technologies, and increasing development pressures in sensitive areas. The following sections detail the specific mechanisms through which this framework has failed.

3.1 The SSR and the Professional Reliance Model: A Paradigm of Delegated Risk

The fundamental premise of the SSR is to regulate onsite sewerage systems that receive less than 22,700 litres of effluent per day. The regulation operates on a professional reliance model, where an Authorized Person (AP)—either a professional engineer (P.Eng.) registered with Engineers and Geoscientists British Columbia (EGBC) or a Registered Onsite Wastewater Practitioner (ROWP) registered with the Applied Science Technologists & Technicians of British Columbia (ASTTBC)—is responsible for designing and certifying a system. A filing is submitted to the local health authority, and following installation, the AP submits a final Letter of Certification and Maintenance Plan. The role of the health authority (in the Okanagan Basin, this is Interior Health) is largely administrative, with no initial review upon submission. This professional reliance model, implemented in 2005 to replace the more hands-on Sewage Disposal Regulation, effectively outsources the government's regulatory responsibilities.

- **Weak Oversight:** Under the SSR, practitioners are given broad discretion in how they design systems. The Sewerage System Standard Practice Manual (SPM) is the primary reference for onsite wastewater design in B.C., but engineers may depart from it using their professional judgment, as the SPM provides guidance rather than a mandatory code[5]. When an Authorized Person (AP) files a design with the Health Authority, they are only required to submit the basic forms—not the underlying data or calculations. Although APs typically complete site and soil assessments, permeability

[4] While CEPA sets national environmental protection principles, including the precautionary principle, onsite wastewater systems fall under the BC Public Health Act and its regulations; this paper references CEPA only to illustrate accepted standards of preventive decision-making.[4]

[5] Section 1.2.3 in Engineers and Geoscientists BC. Onsite Sewerage Systems. Version 1.3. Published May 2018. https://www.egbc.ca/getmedia/b69496e9-79bc-41b7-a28f-522f9b92957b/V1-3-Onsite-Sewerage-Systems.pdf.aspx

tests, system drawings, and maintenance plans, none of this technical information must be provided in the filing package. Health Authorities do not review or approve designs, so there is no formal mechanism for them to reject a design—even if it appears risky or poorly supported. Their role is limited to confirming that a filing has been submitted, meaning that oversight occurs only after a system is built and a health hazard becomes evident.

- **Parallels to Other Failed Models:** The Office of the BC Ombudsperson conducted an in-depth review of a similar professional reliance model used for the former Riparian Areas Regulation. The Office found significant gaps in oversight and compliance. This led to a complete regulatory overhaul in 2019 and the introduction of the new Riparian Areas Protection Regulation, with its significantly enhanced requirement for provincial oversight. The SSR regulation, which presents similar challenges, has undergone no such review.
- **Ineffective Complaint Process:** The sole recourse for addressing poor work is to file a complaint with the AP's regulatory body—a slow, private process focused on professional ethics rather than environmental harm.

3.2 Systemic Gaps in Oversight and Enforcement

As previously described in section 3.1, under the Regulation, IH's review is administrative, confirming that forms are filed and fees are paid. This passive role, combined with limitations in the Regulation's scope, creates a series of critical gaps.

- **No Environmental Impact Assessment Required:** While the SSR mandates standard setbacks, it does not require any form of environmental impact study for the systems it governs, regardless of their proximity to sensitive water bodies.
- **No Cumulative Impact Review:** There is no formal process to trigger a comprehensive review of the cumulative effects a project may have on drinking water sources. This stands in stark contrast to the Municipal Wastewater Regulation (MWR), which specifically identifies the Okanagan Basin as a 'sensitive' watershed and requires a larger minimum setback distance for effluent discharge. The SSR, which governs thousands of systems within this same sensitive basin, contains no such designation and no corresponding increase in protective standards. This inconsistency highlights a failure in regulatory coherence. The SSR assesses each system in isolation. It fails to consider the combined effect of multiple systems on a

single parcel or the aggregate impact of numerous developments within a single watershed. This gap is particularly critical in rural agricultural holdings where nutrient loading through fertilizer and manure use is amplified by the addition of large volumes or multiple onsite sewage systems.

- **Complaint-Driven Investigations:** Site investigations are reactive, not proactive. Because septic systems are underground and typically only inspected when first installed, most failures that occur below ground (e.g., leaking into groundwater) go undetected. Action is typically initiated only after a formal complaint is made to the Health Authority and is often limited to cases where a system failure is visibly evident through surface flow[6]
- **Limited Definition of Failure:** The standard for determining system failure is overly simplistic, focusing only on visible surface effluent. Yet the system can fail in many ways, including septic tank cracks and leaks, field drains being clogged, the distribution box filling with sediment, and the outlet baffle becoming clogged[7]. Studies across North America consistently show that groundwater (not surface overflow) is the main transport route for nutrients and pathogens from septic systems, especially in gravel or sandy soils. Groundwater interaction and the transport of pathogens and nutrients are not considered, ignoring a primary pathway for contaminating drinking water sources.
- **Misaligned Volume Threshold:** The upper limit of 22,700 L/day represents the effluent from approximately 100 people. This is misaligned with the regulation's intended scope of managing systems for single-family dwellings, duplexes or strata units on a single parcel. This high threshold allows large or multi-unit developments to be approved under a regulatory model designed with minimal oversight.

[6] Section 2.1(1) of the Sewerage System Regulation defines a health hazard as the discharge of sewage or effluent into a source of drinking water, any other surface water or onto land.

[7] BC Centre for Disease Control 2017. Onsite Sewage Inspection Industry Background. Prepared by Coast Mountain Earth Sciences. 17 pp. https://www.bccdc.ca/search?k=onsite%20septic%20systems

3.3 The Jurisdictional Overlap and Divide

Responsibility for wastewater management, land use planning, and environmental protection in British Columbia is fragmented across multiple provincial ministries and pieces of legislation (Table 1). This siloed approach prevents an integrated assessment of development proposals and diffuses accountability. The consequence of this jurisdictional divide is that Ministries approve applications within their specific mandates without regard to the broader picture.

Although the SSR falls under the Public Health Act administered by the Ministry of Health, the Water Sustainability Act, administered by the Ministry of Land, Water and Resource Stewardship also addresses impacts to water quality. Section 46 of the WSA prohibits the introduction of human waste materials into or adjacent to a stream channel, as well as into an aquifer that is hydraulically connected to the stream. There appears to be a gap: the SSR makes no mention of groundwater contamination from onsite systems. However, engineering guidelines and professional practice documents for onsite systems explicitly reference the WSA, alongside the SSR, the Drinking Water Protection Act, and the Environmental Management Act, as overlapping authorities for protecting water quality, including groundwater[8].

[8] Personal communication with Bryer Manwell, Caulwell Engineering and Geoscience Ltd. March 26, 2026.

Table 1: Provincial Ministries and key legislation as they apply to onsite wastewater management in British Columbia.

Ministry	Act	Regulation/Plan	Function
Health	Public Health Act	Sewerage System Regulation	Provides regulation for septic systems generating <22,700 L/day of effluent
Health	Drinking Water Protection Act	Drinking Water Protection Regulation Groundwater Protection Regulation	Provides regulation of drinking water purveyors and their water sources
Environment*	Environmental Management Act	Municipal Wastewater Regulation	Provides regulation of wastewater systems including septic systems that generate >22,700 L/day effluent
Environment*	Environmental Management Act	Liquid Waste Management Plans	Allow municipalities to develop community-specific solutions for wastewater management that meet or exceed existing regulations.
Water Land and Resources Stewardship	Water Sustainability Act	Section 46 Prohibition of introducing foreign matter into streams	Controls introduction of foreign materials, including human waste, into or adjacent to streams
Agricultural Land Commision	Agricultural Land Commission Act	Section 58. Land Use Regulation	Outlines accepted uses and activities on land within the ALR

* full name of the Ministry is Environment and Parks

4.0 Pathways to Reform: Leveraging Local Action and Strategic Planning

Despite the SSR's shortcomings, several local governments have already developed effective interim measures. These precedents demonstrate what is possible—and, critically, what provincial action could achieve at scale. It must be emphasized, however, that downloading regulatory responsibility to local governments is not a sustainable solution. Provincial reform remains essential.

4.1 Local Government Interventions

In the absence of robust provincial oversight, several local governments across British Columbia have begun using their own legislative tools to address the SSR's shortcomings. These initiatives serve as important precedents, demonstrating how municipal and regional authorities can take a more proactive role in managing the risks from onsite sewerage

systems, while acknowledging that strong provincial oversight remains essential. These initiatives serve as both precedents and a blueprint for future provincial standards.

- **Mandatory Maintenance Schedules:** The Capital Regional District adopted Bylaw 3479, which regulates the maintenance of onsite systems by specifying schedules for pump-outs and inspections by APs. This directly addresses the SSR's failure to provide for any post-installation oversight.
- **Accelerated Sewer Connection:** The City of Kelowna uses a combination of sanitary sewer-specified areas and a targeted bylaw (Bylaw 12343) to accelerate the elimination of septic systems in urbanized zones. By shifting funding models, the City of Kelowna has incentivized residents to connect to the municipal sewer system, significantly improving uptake.
- **Environmental Protection via Land Use Planning:** Thompson-Nicola, Columbia Shuswap and Kootenay Boundary Regional Districts utilize Development Permit Areas (DPAs), pursuant to section 488(1)(a) of the B.C. Local Government Act, for the protection of the natural environment, allowing for greater scrutiny of development in sensitive areas.
- **Environmental Protection via Building Permit Application:** RDNO Bylaw 2670 - 2015, Section 612, requires that a site plan showing the location of the septic tank and drain field be submitted with any site plan. The District of Coldstream building bylaw includes, under section 11.1(e), an approval process for onsite sewage. If the parcel that is the subject of the building permit application is not intended to be connected to the District's sewage disposal system, the owner must apply for and obtain approval from the District and other applicable public authorities for an alternate private sewage disposal system. However, it has been the experience of local government utility managers that leaving environmental decisions to land use planners and building inspectors generally doesn't work.
- **Promoting Responsible Density:** In their sewage grant program, The Okanagan Basin Water Board employs the province's *One Hectare Policy*,[9] a set of guidelines that discourages the creation of small, septic-serviced lots. The 1-hectare minimum reflects the area of soil typically required to safely absorb wastewater without overwhelming the soil's natural treatment capacity. Both the BC Ministry of Municipal Affairs and the OBWB encourage its adoption by withholding infrastructure grants from areas that do not implement the policy.

[9] https://obwb.ca/wp-content/uploads/2024-08-08-MA-One-Hectare-Policy-Presentation.pdf

4.2 Liquid Waste Management Plans (LWMPs)

Liquid Waste Management Plans (LWMPs), governed by the Municipal Wastewater Regulation, are a comprehensive, Ministry-approved framework for integrated wastewater and land use planning[10]. It is a requirement under the MWR for systems with a maximum daily flow over 50,000 L/day. LWMPs are uniquely positioned to bridge the existing regulatory gaps. They enable local governments to:

- Assess the existing and projected cumulative impacts of wastewater discharges on receiving environments, such as lakes, streams, and aquifers.
- Map sensitive areas, including source water protection zones, and align zoning and subdivision approvals with the environment's capacity to treat wastewater.
- Establish local bylaws under the Environmental Management Act to mandate septic system maintenance, inspections, and monitoring in high-risk areas.

Despite these strengths, the LWMP process raises significant concerns about the "downloading" of provincial responsibilities onto local governments. Developing and implementing an LWMP requires substantial financial resources and technical expertise, placing a heavy administrative burden on municipalities and Regional Districts. The LWMP development process also requires significant public input and is a far broader and more comprehensive plan than required to address the shortcomings of the SSR. LWMP development and approval are intended to take 2-3 years, and once approved, it is difficult to amend without another long, broad, and expensive process.
Local adoption of an LWMP can also blur lines of accountability, making it unclear whether oversight failures rest with the province that approves the plan or the local government that implements it.

5.0 Consequences of continuing with the current regulation

The health consequences of inadequate wastewater regulation are well understood. Regulators recognize that raw sewage can cause acute health impacts due to pathogens and excess nutrients. The effluent from onsite sewage systems can impact both nearby drinking water wells and surface water supplies. Viruses can cause acute sickness, nitrogen

[10] https://www2.gov.bc.ca/gov/content/environment/waste-management/sewage/liquid-waste-management-plans

causes blue baby syndrome, and phosphorus feeds cyanobacteria and algae blooms. These impacts make lake water increasingly costly over time to treat for use as drinking water. The current SSR provides no meaningful protection against any of these outcomes. Continued inaction will drive up costs for water utilities that rely on clean source water, threaten the region's tourism economy, and risk the health of the communities these systems are meant to serve.

Under the existing system, the province is deferring environmental impacts and costs to future residents of BC, which are only becoming more damaging and costly over time. What will be the environmental impact to our drinking water sources in another 20+ years, when these SSR systems begin to age and fail, causing much larger issues than what we are already witnessing?

6.0 Consolidated Recommendations for Provincial Action

Given the SSR's shortcomings and the potential for local and regional interventions, this section presents a consolidated set of recommendations. These recommendations are directed to the Province of British Columbia to modernize its regulatory framework, enhance oversight, and empower local governments to ensure the robust protection of community drinking water sources.

A. Regulatory Reform and Modernization

1. The Province of British Columbia must undertake a comprehensive review and modernization of the MWR and the SSR to ensure alignment with current environmental pressures, technological advancements, and land use planning needs[11] .
2. The SSR Standard Practice Manual should be revised to explicitly address practitioner liability and incorporate stronger, more prescriptive standards for the protection of drinking water resources, with consideration of cumulative impacts and environmental risk assessment considered as a demonstration of professional due diligence.

[11] Recommendation based on resolution EB49: Modernization of Municipal Wastewater Regulations and Sewerage System Regulation. 2025 UBCM Annual Convention - Resolutions Disposition. https://www.ubcm.ca/sites/default/files/2025-10/2025%20UBCM%20Resolutions%20Disposition.pdf

3. The province should consider a substantial reduction of the SSR's upper volume threshold (currently 22,700 L/day) to align the regulation with its intended scope of managing effluent from single-family residences and duplexes.
4. The Province should review the SSR to ensure that system design requirements, setback distances from surface water, and soil infiltration and evaporative capacity are adequately evaluated for all high-occupancy or high-risk uses, including seasonal worker dwellings on agricultural lands.

B. Enhanced Oversight and Accountability

1. The Ministry of Environment be required to review all permit applications for onsite sewerage systems when the combined septic effluent from a parcel exceeds 80% of the Municipal Wastewater Regulation threshold of 22,700 litres per day and a septic system malfunction could contaminate a municipal water source.[12]
2. Regional Health Authorities should implement a 'sliding scale of risk assessment' under the SSR, ensuring the level of due diligence and environmental review matches the environmental risk of a proposed system, regardless of jurisdictional divide.
3. APs must be required to carry Liability and Errors and Omissions Insurance to ensure accountability is integrated into the system planning and certification process.
4. A clearly documented, publicly accessible process must be established for local governments and/or citizens to raise concerns or file complaints about the operation of the SSR itself, in addition to reporting individual professionals to their respective associations.

C. Empowering Local Government and Practitioners

1. The province must provide dedicated technical assistance, baseline data, and funding mechanisms to support the development and implementation of Liquid Waste Management Plans, thereby mitigating the burden of regulatory downloading.
2. Okanagan Regional Districts and municipalities should be supported in examining and adopting local bylaws mandating the maintenance of onsite systems, modelled on successful examples from other regions of the province.

[12] Recommendation based on Unendorsed resolution titled 'Ministerial Oversight of Proposed Sewerage Systems' sponsored by Coldstream District Municipality at the Southern Interior Local Government Association 2025. https://silga.ca/wp-content/uploads/2025/04/2025-SILGA-Resolutions-Book.pdf

3. Building permit processes should be streamlined to grant municipalities the authority to review, check, or reject improper sewerage installations, potentially through a fee-based system that funds independent, third-party peer reviews for high-risk proposals.
4. Develop a provincially supported set of pre-approved bylaw best practices that local governments can adopt to fill gaps in the SSR. These bylaws would enable municipalities and regional districts to oversee system design, ongoing operation, and maintenance of onsite sewage systems, and to require securities—such as covenants or performance bonds—to ensure compliance. Establishing a shared, regionally coordinated framework would reduce duplication, align with existing structures such as the OBWB, and ease the financial and administrative burden on individual local governments.

7.0 Acknowledgements

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Scott Smith, co-chair	Renee Clark	Christina White
Marta Green, co-chair	James Littley	Tricia Brett
Zee Marcolin	Rod McLean	

Additional review comments were received from:
Bryer Manwell, Rob Birtles, Melissa Tesche, Heather Larratt, Jonathon McLuskie, Hans Buchler, Bob Hrasko and Kiel Wilkie

Scott Smith compiled and edited the reviewer comments. Jonathan McLuskie authored the table in the Appendix. Google NotebookLM was used to develop some text for this document. This text was edited/modified to improve context and style.

8.0 Appendix - Comparison of Onsite Wastewater System Flows by Province

Province	Low Flow (L/day)	High Flow (L/d)	Notes & Requirements
BC (SSR)	< 9,100	9,100 – 22,700	ROWP (Type 1 & 2 DDF < 9,100 L/d) P.Eng (Type 1-3, DDF <22,700 L/d) >22,700 L/d = MWR approval No minimum lot size
BC (SDR) *OLD*	1,136 – 4,318	4,318 – 22,700	*Minimum Lot Size = 10 acres Code of Good Practice
AB	< 25,000	N/A	Site, Soil, Perc. Test Evaluation required
SK	1,514 – 5,978	N/A	Follows NSF/ANSI 40 (400–1,500 IGPD) 457m [1,500 ft] from water. Cumulative
MB	< 10,000	N/A	If soil is > 85% sand/gravel – field must be lined & Pressure Dist. System
ON	< 10,000	N/A	> 10,000 L/d = MECP approval
PQ	< 3,240	N/A	6 Bedroom House Maximum *Only domestic wastewater, grey water or toilet effluent is carried to the domestic wastewater discharge, collection or disposal system
NB	< 5,460	> 5,460	Conventional: < 5,460 L/d Unconventional: P.Eng Design + CSA
NS	1,000 – 1,500	> 1,500	Conventional: < 1,500 L/d Cluster System: P.Eng Design *Only sewage that is composed primarily of human waste and grey water from bathrooms, sinks and kitchens but does not include any significant volume of wastewater from an industrial source.
PEI	900 – 6,810	N/A	
NL & Lab	< 4,546	> 4,546	Low Flow: Category 1 System Only High Flow: Engineered System Site, Soil, Perc. Test Evaluation required
Yukon	1,364 – 5,455	6,990 – 7,800	Low Flow Residential: 1 - 6 Bdrms Mid Flow Res. & Non-Res: 7 - 10 Bdrms Large Capacity: 20 – 50 PERSONS (system sized 2x Peak flow) *Written permit from Health Officer required. *Photographic Record of all installation stages required.

*Any system that flows above the maximum defined values (above) will fall under the applicable Provincial regulations for municipal/community wastewater systems.

DDF – Daily Design Flow (L/day)
ROWP – Registered Onsite Wastewater Practitioner
MWR – (BC) Municipal Wastewater Regulation
MECP – (Ontario) Ministry of the Environment, Conservation & Parks
NSF/ANSI 40 & 245 – (**40**): for residential on-site system standards. (**245**): for nitrogen reduction of 50%