LUND'S WATER CROSSROADS

VCH's Role, the Current Situation, & What Comes Next

May 26, 2026

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INTRODUCTION

- Drinking water in the qRD: a major decision looms in Lund.

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The qathet Regional District (qRD)

The end of the road is not without quirks!

- Traditional territory of the **Tla'Amin Nation**.
- **Area ~5000 km²** - From Lund to Saltery Bay.
- Includes the City of Powell River, and Texada, Savary and Lasqueti Islands.
- Limited land use regulation and a unique lack of local bylaw.

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Water Systems in the qRD

Population of just 20,000 people

- Served by roughly 153 distinct regulated drinking water supply systems
- Only two are RD or municipal run local government systems.
- Many discovered by the infamous Dan Glover, DWO

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DRINKING WATER LEGISLATION

- How is drinking water regulated in BC?

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Drinking Water Regulatory Streams

Health Canada
- Sets the Guidelines for Canadian Drinking Water Quality
- MACs, treatment standards etc.

Ministry of Health & Health Authorities
- Drinking water quality and public health protection
- Drinking water supply system approvals and oversight

Ministry of Water, Land and Resource Stewardship
- Water licensing and allocation
- Water-use approvals
- Dams, streams, groundwater, and wells

Ministry of Environment and Parks
- Source water quality
- Contamination and spill response
- Waste discharge and environmental impacts

Health Canada

BRITISH COLUMBIA Ministry of Health

BRITISH COLUMBIA Ministry of Water, Land and Resource Stewardship

BRITISH COLUMBIA Ministry of Environment and Parks

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What is a Drinking Water Supply System?

Defined under the Drinking Water Protection Act as:

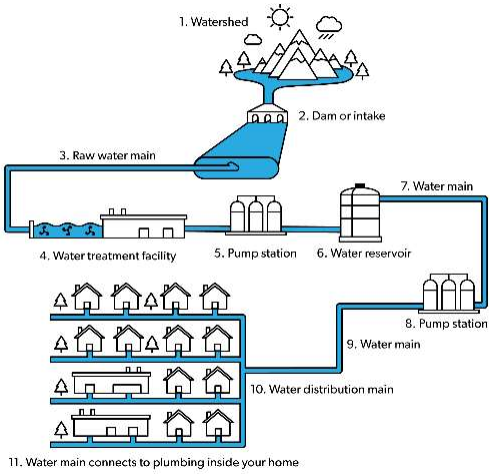
- A domestic water system serving more than one single-family home

Provides water for domestic purposes:

- Drinking
- Food preparation or sanitation
- Household use

Includes any or all shared system components:

- Well
- Surface water intake
- Water Treatment
- Storage
- Distribution lines



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What is a Water Supplier?

Defined under the Drinking Water Protection Act as:

- The person, persons or organization responsible for the water system
- Includes the owner of the system, or the person responsible for operating or managing it.

Water suppliers must:

- Supply potable water.
- Meets requirement of operating permit and legislation.

Lund's Water Supplier

- Frances Ladret dba The Lund Waterworks District (LWD)

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Potable Water Standards for Ground & Surface Water

GARP - Surface Water / Shallow Wells	Non-GARP - Drilled Wells [deep + confined]
Higher pathogen risk	Lower pathogen risk
Includes surface water and groundwater at risk of pathogens	Groundwater assessed as lower risk for pathogens
Must meet BC's 4-3-2-1-0 objectives	Does not automatically require disinfection
Usually requires filtration + two levels of disinfection treatment	Less stringent disinfection expectations
Treatment targets viruses, Giardia, Cryptosporidium, turbidity, and bacteria	Treatment may address storage/distribution risk, arsenic, manganese, taste, odour, etc.

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GARP = Ground water at risk of containing pathogens

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Water System Ownership Types

1. **Local Government Systems**
   - Municipal
   - Regional District
   - Improvement District
2. **Comptroller-Regulated Systems**
   - Utilities
   - Water Users' Communities
3. **Independent Systems**
   - Private Owner / Individual – Unincorporated Sole Proprietorships or Partnership
   - Private Corporation / Registered Business – Corporation, Sole proprietorship, or Partnership
   - Strata Corporation
   - Joint User Ownership – Corporation, Society or Cooperative
   - Joint User Ownership – Good Neighbour
4. **Stand-Alone Facility Systems**
   - Industrial/Commercial Facilities
   - Recreational Facilities
   - Public Health Facilities
   - Schools
   - Civic and Community Facilities and Institutions

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Local Government Systems

Municipal, Regional District, and Improvement District Systems

- Governed by the Local Government Act and Community Charter.
- Oversight by the Ministry of Housing and Municipal Affairs (HMA).
- Regional districts seen as the most effective model for delivering broad rural services.
- Improvement districts are small, semi-independent providers with no direct access to grant funding

City of Powell River – UV reactors

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Why Governance Matters

BC has about 5,000 regulated drinking water systems.

- ~4000 are "small systems" serving fewer than 500 people.
- Yet most of the population is served by large regional systems.

Small systems face disproportionate challenges:

1. Limited funding
2. Aging infrastructure
3. Volunteer fatigue
4. Operator capacity
5. Repeated advisories
6. Deferred upgrades

Failures often trace back to governance and financial capacity.

- The DWPA sets drinking water obligations – but it does not solve failed governance.

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LUND WATERWORKS DISTRICT

- Dissolution & conversion?

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Lund Waterworks District (LWD)

Source & Infrastructure
- Licensed surface water intake
- Lund and Thulin Lakes
- Two dams
- Sodium hypochlorite disinfection only
- Three storage sites and two booster stations
- 108 service connections

Key Issues
- Infrastructure is old and reflects its age
- Leaks and water loss are common (even under the sea)
- Large salvaged steel storage tanks are beyond repair
- THM exceed GCDWQ MAC
- Does not meet 4-3-2-1-0 treatment objective

Upgrades Needed
- Filtration and UV disinfection
- Dam upgrades
- Distribution system
- Storage

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Improvement District - Governance

LWD is a Waterworks District

- Functionally an Improvement District under Local Government Act.

Improvement Districts

- Provide limited services such as water or fire protection
- Funded through property taxes, user fees, and local borrowing
- Governed by an elected board of landowner trustees
- Borrowing bylaws require landowner and Inspector approval
- Cannot borrow through the Municipal Finance Authority – pay commercial interest rates instead

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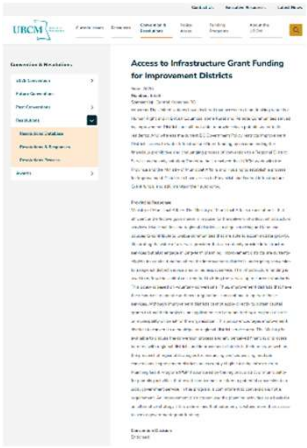
Improvement District – Access to Grant Funding

Provincial grants limited to regional district and municipal systems

- Improvement districts are not normally eligible
- Can access planning grants if sponsored by a local government
- Can access capital grants only when converting to LG service
- Conversion = Order in Council transferring assets to LG
- Policy goal – encourage voluntary conversions make regional districts or municipalities the main provider of rural water services.



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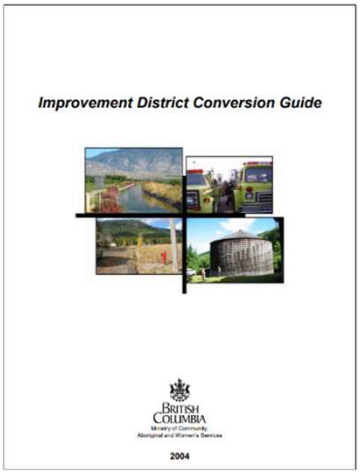
Improvement Districts – Conversion Challenges

Conversion seen as complicated and expensive

- Regional districts hesitant to absorb failing systems
- Deferred maintenance and aging infrastructure deter uptake
- Local users often resist loss of control and higher taxes
- They want simple fixes, not "Cadillac-level" systems
- Long-term benefits clear – grants, oversight, stability – but politically and financially it's a hard sell
- Lund is a prime example



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Lund Waterworks District – Dissolution & Receivership

Conversion Timeline

- Talks with qRD on conversion since 2007
- Feasibility studies date back to the early 1980s
- 2018 – board voted unanimously to dissolve and seek qRD takeover
- 2019 – joint grant application unsuccessful
- 2020 – trustees resigned, leaving no quorum
- Inspector of Municipalities can order elections or Cabinet can appoint a receiver when quorum fails
- 2022 – Province appointed receiver to manage system and pursue funding for upgrades
- April 2022 – qRD adopted Utility Acquisition Policy stating it would not assume the system until it met provincial standards

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Lund Waterworks District – Grant Success?

- **Feb 2022 – qRD grant application**
  - ICIP funding application for LWD
- **2022 – Dueling engineering assessments:**
  - Oct 2022 - McElhanney "Cadillac" Estimate - $26M
  - July 2022 - "MSR Solutions "Toyota" Estimate - $15M
  - Proposed upgrades: supply, pump stations & treatment, storage, and distribution
- **Mar 2024 – VCH WQA Issued**
  - High disinfection byproducts & no second level of treatment.
- **Mar 22, 2024 – ICIP grant approved**
  - Covers roughly 75% of eligible project costs up to $15 million
  - Lund to pay remaining 25%
  - Deadline March 31 2028.

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Lund Waterworks District – Lund Decides

Spring 2025 – LWD AGM
- First sneak-peak at tax impacts

Fall 2025 – Additional Grant Funding Pursued
- Disaster Resilience and Innovation Funding (DRIF) - Thulin & Lund dams
- Canada Community-Building Strategic Priorities Fund (up to $7M)

Winter 2026 - qRD Resolves Conversion Details
- Confirms scope of upgrade

Spring 2026 - LWD Open House
- Updated Taxation Projections – rough average – $4800/parcel/year

Final decision will come down to a petition: Lund residents must decide if they'll pay more for better water.

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LUND WATERWORKS DISTRICT
- The big “what ifs…?” before the petition.

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Why is this more than improving treatment?

Treatment is the obvious public health fix

- Filtration + improved disinfection would be a major improvement.

But treatment is only part of the cost

- ~15% of projected project cost ~$2.3 million

The rest is whole-system risk

- Storage + Distribution
- Dams + Aging infrastructure
- Future liability

Those costs do not disappear if deferred

- Only the grant does.

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Why is the grant-conversion project all or nothing?

VCH normally supports progressive compliance:

1. Improved chlorination
2. Gradual storage tank replacement
3. Ongoing monitoring
4. Water quality advisory
5. Continued pressure toward treatment upgrades

But the grant creates a different reality.

1. One major funding window
2. Project completion deadline – March 31, 2028
3. Conversion required
4. Borrowing required

qRD is being asked to own the whole works.

1. RD sets the conditions for acquisition
2. RD inherits the future costs and liabilities.

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What if the petition fails?

Ultimate decision then rests with the qRD

qRD could try again

1. Revised proposal
2. Revised petition
3. Reduced scope
4. Extension request

or qRD could walk away

1. Current pathway fails
2. Conversion does not proceed
3. Current and future grant funding disappears

Major constraints

- Grant tied to health outcomes
- Completion deadline: March 31, 2028
- qRD support still required
- No guarantee funding survives

qathet REGIONAL DISTRICT

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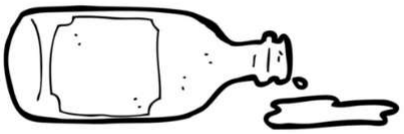
What if conversion ultimately fails?

Possible long-term paths:

1. Return to functioning improvement district with elected trustees – unprecedented.
2. Continued receivership – if exploring dissolution or renewed conversion
3. Dissolution / decommissioning / <sale?>

A lot disappears:

- No borrowing approval
- No qRD acquisition
- No current grant-supported project
- No second chance at a grant



What remains:

- Health requirements
- Dam safety obligations
- Infrastructure costs
- Future liability

The problems do not disappear.

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What about alternative groundwater sources?

VCH is not theoretically opposed but:

1. It's a gamble given current grant pathway
2. Has its own costs and takes time.

Reduced treatment complexity. But…

Does not erase upfront infrastructure costs:

1. Storage
2. Distribution system
3. Dam safety,
4. Valves, hydrants, engineering, labour etc.

Must demonstrate:

1. Sustainable yield
2. Water quality
3. Non-GARP status
4. Engineering feasibility
5. Legal access over land

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How does VCH approve Water systems?

VCH does not approve one specific technology.

Approval considers the entire system and is outcome based.

1. Construction Permit (CP)

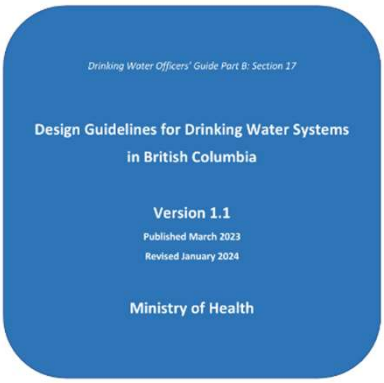
Can the proposed system be safely built?

- Source quality + quantity
- Engineering design
- Treatment approach
- Storage + distribution
- Site-specific risks

2. Operating Permit (OP)

Can the system reliably provide safe water over time?

- Monitoring + operations
- Operator training
- Emergency planning
- Maintenance + record keeping
- Long-term reliability



Design Guidelines are guidance – not automatic approval standards.

"Design Guidelines are not intended to be a comprehensive resource for waterworks design; instead, the Design Guidelines build on existing industry best practices and standards "

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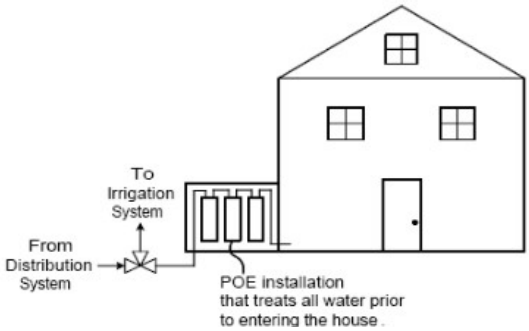
What about point-of-entry (POE) treatment?

If POE is part of the approved system, the supplier must control:

1. Installation
2. Access
3. Monitoring
4. Maintenance
5. Servicing
6. Replacement

Not a simple off-ramp.

- Rare outside strata-like settings.
- 100% community buy in is required …imagine that in Lund.



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CONCLUSION! THOUGHTS? & THANKS ☺

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> *When water supply infrastructure programs are self-funding, costs are borne by the ratepayers or service users through normal water billing. While government 'special funding' for water infrastructure is occasionally available and is important, the user-pay model may better relate the true value of water to consumers. Self-sufficiency is the only guaranteed method for communities to ensure sufficient funds are available when required."* ~Source to Tap: Guidance on the Multi-Barrier Approach to Safe Drinking Water – Canadian Council of Ministers of the Environment, 2004

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