SUNSHINE COAST REGIONAL DISTRICT 10-YEAR WATER STRATEGY (2025–2035)

Introduction

The Sunshine Coast Regional District (SCRD) is located on the traditional territories of the shíshálh Nation and the Skwxwú7mesh Úxwumixw and serves residents from Port Mellon to Egmont on the lower Sunshine Coast. The SCRD delivers treated drinking water to over 24,000 people in the region, and additional seasonal population over the summer months.

SCRD drinking water is used for residential, commercial, institutional, light industrial, agricultural, and public safety. The SCRD has three Water Service Areas made up of seven water systems, including:

- Regional Water Service Area: Chapman, Langdale, Eastbourne, Cove Cay and Egmont
- South Pender Harbour Water Service Area
- North Pender Harbour Water Service Area

Properties not served by the SCRD get drinking water from the Town of Gibsons, private community water systems or private sources (e.g. private well, surface water).

Purpose of the Water Strategy

The Water Strategy is a drinking water strategic plan for the SCRD Water Services. It identifies strategic priorities, objectives, and actions that will guide the future planning and delivery of SCRD Water Services, and acts as a workplan for SCRD staff. The Water Strategy is aligned with the 2023-2027 Board Strategic Plan, provides context for policy making, strategic planning, and aligns with other SCRD strategies and management plans. The Water Strategy should be reviewed and updated every five (5) years with a planning horizon of 25 years

While previous long-term water plans have focused on physical infrastructure upgrades, the purpose of this 10-Year Water Strategy is to communicate objectives related to using water efficiently, protecting water sources, securing water sources, thinking ahead for major infrastructure investments, and advancing collaboration with the shíshálh Nation, Skwxwú7mesh Úxwumixw, Town of Gibsons and District of Sechelt on all these aspects.

Challenges

The SCRD water systems are facing the following challenges:

Aging infrastructure affects the performance and funding of the region's water systems. There is a high cost per capita to upgrade infrastructure due to the region's large geographic area and relatively small population.

Climate change projections predict changes to historical weather patterns, with longer, drier, and hotter summers, and autumns, and warmer and wetter winter seasons with decreased snowpack, and more frequent and extreme weather events year-round.

Development across the region increases pressure on existing SCRD water infrastructure.

Land use pressures from upstream development and industrial activities can impact water quality and groundwater recharge rates.

Unique geography has water systems spread out across the region, delivering water across a large area.

Regulatory complexities in the management and administration of water and land resources due to the involvement of multiple agencies and departments in the provincial and federal government, as well as member municipalities and shíshálh Nation and Skwxwú7mesh Úxwumixw.

Roles and Responsibilities

Several authorities and decision makers are involved in land and water management that influence the health and sustainability of freshwater resources.

Sunshine Coast Regional District owns and operates <u>water treatment</u> and distribution systems that deliver water to customers.

The **Government of Canada** sets out the water quality parameters and characteristics through Health Canada's Guidelines for Canadian Drinking Water Quality.

The **Province of British Columbia**'s *Public Health Act* outlines the role of Health Officials and requirements for planning, reporting, and regulating the provision of drinking water as it relates to public health. The *Public Health Act* and the *Drinking Water Protection Act* regulate drinking water requirements.

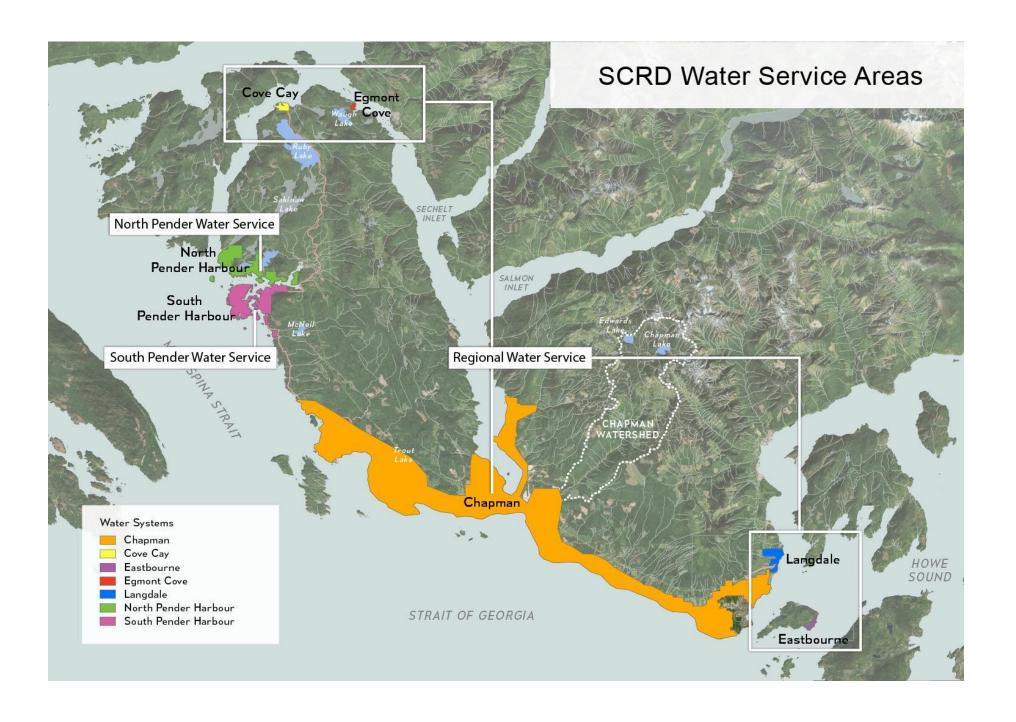
The *Water Sustainability Act* has requirements for water licencing, ensuring sustainable access to fresh <u>water sources</u>.

BC Parks Act protects provincial parks where the SCRD's main drinking water sources, Chapman and Edwards Lakes are located.

First Nations and the Province share the responsibility for broader land-use planning, including the planning of watersheds. Free and informed consent is a requirement prior to the approval of any project affecting First Nation lands, territories, and other resources, including water.

Vancouver Coastal Health administers and enforces the provincial legislation to ensure safe drinking water through operating permits. The SCRD reports drinking water quality information to Vancouver Coastal Health.

The **community** uses water year-round and is responsible for following SCRD Water Conservation Regulations. Property owners maintain waterlines on their property and fix leaks when they arise.



Shared Water Vision

The SCRD has committed to a **Shared Water Values** and **Vision** with the shíshálh Nation, Skwxwú7mesh Úxwumixw, District of Sechelt and Town of Gibsons:

Values

- Collaboration: We must strengthen collaboration through honesty, trust and transparency. We know we are stronger and can be faster working together. We recognize the decisions we make have long-term impacts and will seek youth involvement in the implementation of these values.
- Sustainability, protection resiliency and a respect for nature: Together we seek to protect the environment, growing sustainably through planning that is respectful for the natural world while providing sustainable service delivery.
- Reconciliation, upholding UNDRIP, and recognition of Title and Rights: Reconciliation requires we work together in new ways to implement UNDRIP, develop decision-making frameworks and incorporate Indigenous values.

Vision

The shíshálh Nation, Skwxwú7mesh Úxwumixw, Sunshine Coast Regional District, Town of Gibsons, and District of Sechelt share a deep commitment to cooperatively manage water resources sustainably while respecting and connecting with nature. Our collaborative goal is to create vibrant neighbourhoods and economies while taking a multi-generational approach to protecting watersheds and other natural resources for future generations.

We acknowledge that achieving our collective water conservation goals require a fundamental shift in the ways we utilize water. We recognize a collective responsibility to care for drinking water and that we must build off each other's strengths, leveraging shared resources to make transformative shifts. We advocate for transformative shifts by empowering our communities to preserve this scarce resource through education, innovation and collaboration. We strive to foster a sustainable future where water is utilized responsibly for the benefit of both present and future generations.

Reconciliation, upholding UNDRIP and the recognition of shíshálh Nation and Skwxwú7mesh Úxwumixw Title and Rights are important parts of these significant changes. Changing mindsets and ways of using water will require monumental efforts by each of our governments. Our governments must each take monumental steps towards shifting perspectives on individual and commercial water use practices, adopting innovative technologies and effective solutions as we navigate climate change and evolving communities. Living this vision requires that we consistently engage in dialogue, respect our shared values, and seek a mutual path forward.

The *shishálh Nation* and SCRD have a further Memorandum of Understanding (2023) guided by these Values and Vision, through which the parties dedicate themselves to collaboratively "improving and maintaining the safety and quality of their potable water supply to ensure long-term supply of water for all residents within their jurisdiction.

2023-2027 SCRD Strategic Plan

The SCRD's 2023–2027 Strategic Plan identifies water as one of the two services our organization must urgently focus on. The Board's introduction to our Strategic Plan states: "Prolonged summer droughts and the resulting water shortages have challenged our residents. We must develop new supply sources and increase efficiency, while repairing and renewing our aging infrastructure."

The 10-Year Water Strategy advances the SCRD's 2023-2027 Strategic Plan's Strategic Focus Area of "Water Stewardship": *Continue to secure reliable and diverse water sources across the Sunshine Coast and support efficient water use, while fostering responsible stewardship of this critical resource.*

Why Is Water Stewardship Important?

- We need sufficient water for people, food production, firefighting and the environment.
- Water is critical to sustaining delivery of our services.
- Our climate is changing, leading to changing weather patterns and significant drought.
- Sustainable water supply is critical to planning for and managing growth, in coordination with the relevant municipalities and First Nations.

The actions outlined in the 10-Year Water Strategy will help achieve the SCRD's Board's Water Stewardship Objectives.

Water Strategy Framework

The framework contains the overarching Guiding Principles, Commitment Statement, and Strategic Priorities that provide the basis for the Initiatives contained in the 10-Year Water Strategy.

Guiding Principles

The Water Strategy Guiding Principles are the values upon which the Strategy has been developed.

These Guiding Principles are inclusive of the principles endorsed by all Local Governments and First Nations at the Water Summits.

The connections to these Guiding Principles are highlighted throughout the Strategy.



Action Oriented: Make decisions to achieve goals and solve problems.

Partnership Based: The SCRD will continue working together with First Nations to implement UNDRIP and recognition of Rights and Title. Partnerships with residents, businesses, governing authorities, and other organizations in the community are essential to deliver water services in a coordinated and collaborative manner.

Resilience: Reduce vulnerability from external factors contributing to uncertainties, such as increased pressures on water systems with climate change and continued environmental stewardship.

Cost-effective: Plan to maintain and upgrade infrastructure, assess and compare long-term source options, set appropriate rates for long-term cost recovery, and avoid excessive debt to achieve sustainable service levels.

Think and Act like a Region: Make decisions about water system planning and policy that are in the best interest of the Sunshine Coast communities and all member jurisdictions as a whole.

Commitment Statement

The Commitment Statement provides direction for the 10-Year Water Strategy and what the SCRD aims to achieve.

The Sunshine Coast Regional District is committed to providing a safe and reliable water supply.



Strategic Priorities

There are four Strategic Priorities that the SCRD would like to focus on to achieve the Commitment Statement. **These areas are Water Supply, Water Infrastructure, Water Efficiency,** and **Source Water Protection**. It is expected these priorities will remain unchanged as the 10-Year Water Strategy is reviewed and updated over time.



Water Supply

Goal: Explore, enhance and develop diverse groundwater and surface water sources across the region for year-round reliability and resilience.

Existing water sources are not sufficient to provide reliable drinking water supply through extended periods of drought or emergencies. By identifying current and future water supply needs and understanding the impacts of climate change on water supply, the SCRD will work towards providing a safe and reliable water supply all year round.

| Objectives | Actions |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Achieve water supply objectives | Ensure the Langdale, Chapman, South Pender, North Pender, Egmont and Cove Cay Water Systems can provide, at minimum, an average daily amount of 750 litres of water per residential water service connection during an extended dry summer (May 1 – November 31) with only Stage 1 or Stage 2 Water Conservation Regulations being implemented. |
| | Ensure the Langdale, Chapman, South Pender Harbour and North Pender Harbour Water System can provide, at a minimum, an emergency water supply capacity based on an average demand of 350 litres per day, per residential water service connection; |
| | Ensure that there is adequate water supply capacity and operations of the Chapman Water System to maintain regulatory compliance with the Environmental Flow Needs (EFN) requirements for Chapman Creek and Soames Creek. |
| Diversify water supply sources | Conduct water source studies to identify, prioritize and publicly communicate potential new long-term drinking water sources in different locations across the region. |
| | Collaborate in partnership with the shíshálh Nation on confirming the feasibility of developing up to two raw water reservoirs to create raw water storage capacity for the Chapman Water System. |
| Improve existing water supply sources | Collaborate with the Town of Gibsons on optimization of the water exchange between systems, including confirming the feasibility of a new Mt. Elphinstone water service area. |
| | Seek long-term approval for the safe and sustainable deployment of the emergency siphon systems in Chapman Lake and Edwards Lake for the primary purpose of supporting ecosystem values in Chapman Creek. |

| | Implement opportunities to optimize Environmental Flow Needs to scientifically supported levels in support of our ecosystems. |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Plan and prepare for future water supply | Estimate future water supply needs, incorporating the best available Climate Risk Assessment. |
| | Ensure we have sufficient redundancy and back-up supply, including by considering connections between water systems operated by the SCRD and others. |
| | Review and update emergency response plans, alternative water sources and assess readiness to respond for all water systems. |
| | Consider a sustainable water supply in all growth planning by the SCRD and encourage municipalities to do so. |

Water Infrastructure

Goal: Maintain, replace and upgrade infrastructure to continually improve the operations of all the Regional District's aging water systems.

Managing existing infrastructure proactively can ensure a cost-effective and reliable water supply. It is necessary to also plan for new infrastructure related to water treatment, supply, and distribution. An asset management program helps account for the required cost of infrastructure replacement and upgrades over its service life.

| Objectives | Actions |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Enhancement of existing infrastructure | Confirm and/or review levels of service to prioritize investments. |
| | Develop or update five-year Water Infrastructure Master Plans for all water systems. |
| | Develop plans to meet fire flow targets in all water systems within a Fire Protection Service. |
| | Optimize the operation of water systems with multiple sources to increase efficiency. |
| Sustainable and equitable infrastructure investment and funding | Continue to update long-term Water Capital Plans. |
| | Set minimum capital reserve levels through policy. |
| | Identify life cycle costs of new infrastructure and asset replacement to estimate the complete cost of delivering water services. |

| | Update bylaws to ensure cost recovery and to fund future infrastructure improvements. |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Continue pursuing grant funding opportunities to fund infrastructure improvements. |
| Effectively manage risk and enhance emergency response capabilities | Complete a risk assessment of critical infrastructure assets such as dams, intakes, pumps, valves and water mains. |
| | Confirm the feasibility for an emergency water supply connection between the North Pender Harbour and South Pender Harbour Water Systems and advance the development of such connection if such feasibility was confirmed. |



Water Efficiency

Goal: Improve water demand management and increase the efficiency of drinking water use through water meter installation, volumetric billing, community education, water data analysis, and program and policy development.

Water efficiency is a cost-effective approach to water supply management as it optimizes the existing water supply. This defers the need to increase water supply, treatment and distribution capacity in the water systems. With longer, drier summers, SCRD will continue to ensure and encourage the efficient use of drinking water year-round.

| Objective | Action |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Reduce use of drinking water outdoors | Continue Water Conservation Regulations and community outreach. |
| | Escalate enforcement of known instances of repeat non-compliance and |
| | high-water use, including shut offs of properties with significant and/or chronically unaddressed leaks. |
| | Continue providing residential rebates to reduce reliance on drinking water for non-potable uses such as gardening. |
| Measure water use | Complete the installation of water meters on all SCRD water service connections. |
| | Review, improve and standardize water data management practices. |
| | Review user rates to increase fairness and encourage efficient water use by introducing volumetric billing. |
| | Promote year-round leak resolution to reduce the loss of drinking water. |
| Increase community water literacy | Continue to deliver education focusing on efficient and mindful use of water in the home and in the garden. |
| | Share water use data with metered property owners to increase water use awareness |
| | Support tourism sector by sharing regulations and best water use practices with visitors and associated businesses. |
| | Communicate directly with high users to raise awareness of conservation importance. |
| Optimize Regional District operations | Encourage increased efficient water use at SCRD facilities. |
| | Reconsider the use of SCRD drinking water for purposes such as irrigation and ice operations, where non-potable water could be used instead. |
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| Integrate water efficiency in policy and | Improve non-revenue water management, such as water used in utility operations, bulk water supply, and repairable watermain leaks. |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| planning | Update Official Community Plans, bylaws, and development permits to |
| | encourage efficient water use in new developments. |
| | Develop, review, and update water efficiency targets for different types of |
| | water use. |
| | Evaluate the uses of SCRD drinking water for purposes such as irrigation, |
| | outdoor cleaning, commercial, institutional and agricultural use where non- |
| | potable water could be used instead. |



Source Water Protection

Goal: Collaborate with the Province of BC, shíshálh Nation, Skwxwú7mesh Úxwumixw, District of Sechelt and Town of Gibsons on the protection of watersheds used as a drinking water source on the Sunshine Coast.

Watersheds provide the foundation for our drinking water supply. Protecting freshwater lakes, streams, and aquifers that the SCRD uses for drinking water sources ensures the SCRD can provide safe and reliable drinking water to the region and can also lower treatment costs. While respecting the jurisdictions of each of these parties, collaboration with the shíshálh Nation, Skwx_wú7mesh Úxwumixw and member municipalities will be critical to improve the Source Water Protection with provincial government support and guidance.

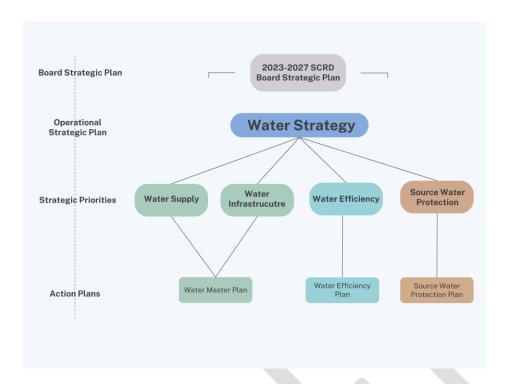
| Objectives | Action |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protect community drinking water sources through policy, planning and education | Safeguard identified watersheds and aquifer recharge areas used for SCRD drinking water supplies and maintain their quality and quantity through advocacy, policy and land use planning. |
| | Improve public awareness of where their drinking water comes from, and why it is important to protect watersheds and aquifers. |
| Advance watershed protection in the region through partnership and advocacy | Advocate to Nations, title and right holders and the Province for improved stormwater management to maintain the integrity of drinking water watersheds. |
| | Continue advocating to the Nations, title and right holders and the Province to end or transition to more sustainable industrial activities in watersheds used for drinking water. |
| | Collaboration with partners on planning, regulatory frameworks, use monitoring of the aquifers and watersheds supporting the water supply sources. |
| | Work with governing authorities to achieve a coordinated approach to drought resiliency and watershed protection. |
| Improve data collection and management to inform decision making and public knowledge | Expand and maintain accurate and reliable environmental data sets that meet Provincial Best Practices and Guidelines. |
| | Establish regional programs for data collection and sharing through collaboration. |
| | Complete watershed assessments, aquifer mapping and groundwater recharge-potential mapping to better understand current hydrology, hydrogeology and impacts of climate change. |

Implementing the 10-Year Water Strategy

For the implementation of this 10-Year Water Strategy, three Action Plans focused on the initiatives outlined above in each of the Strategic Priorities will be developed. The objectives of the Action Plans will be to prioritize initiatives, provide increased detail and step-by-step actions to ensure the 10-Year Water Strategy's implementation over the next several years. The Action Plans will be presented and monitored in a transparent way and include information such as action priorities, start dates, timelines, project details, staffing needs, and funding requirements.

| 10-Year Water Strategy Strategic Priority | Associated Action Plan |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water Supply | Water Infrastructure Master Plan which will detail the technical, |
| Water Infrastructure | operational, and financial actions and practices required to meet the water needs for SCRD Water Services over the next 10 Years. The Water Infrastructure Master Plan will update the Comprehensive Regional Water Plan (2013), Area A Master Plan (2011), North Pender Harbour 10-Year Waterworks Upgrading Plan (2012), and the Pender Harbour 10-Year Waterworks Upgrading Plan (2011). The SCRD is currently completing multiple studies which will inform the new Water Infrastructure Master Plan, including water system capacity modelling for all water systems. |
| Water Efficiency | Water Efficiency Plan will describe programs and initiatives to promote efficient use of drinking water supply. This is an opportunity to evaluate and improve various water conservation and water efficiency initiatives, such as rebate programs, education and outreach, and increasing understanding about water use across the region. |
| Source Water Protection | Source Water Protection Plan will build upon the 2021 Watershed Business Case and will focus on watersheds that we depend on as drinking water sources. |

The graph below shows the relation between the 10-Year Water Strategy and Action Plans.



Reporting and Adaptive Management

The SCRD Water Strategy will undergo a transparent and adaptive management reporting process to ensure its relevance and effectiveness in meeting the Commitment Statement and broader SCRD organizational goals. Using an adaptive management approach, reporting will focus on achieved milestones and incorporate adjustments and insights gathered throughout the year in its annual work planning for the implementation of the strategy. A full review and update of the strategy will be completed by the end of 2030.