2025 DRAFT STRATEGIC PLAN OUTLINE

MISSION STATEMENT:

"Together we provide reliable, high-quality drinkable water to help ensure the health and sustainability of the growing communities we serve today and in the future."

GUIDING PRINCIPLES:

Empowering Staff For Sustainable Water Management

Our staff are the cornerstone of our operations, essential for maintaining the reliability and efficiency of our water supply service. Through strategic investments in training, retention, recruitment, and safety protocols, we cultivate a supportive environment where our team can thrive. Prioritizing their well-being and fostering a culture of innovation ensures the continued success and resilience of our water management efforts and our service.

Supporting A Growing Region With Reliable Service

Our commitment to the region is to provide clean, reliable water to our customers now and into the future. We achieve this through forward-thinking planning to ensure we are preparing for the future demands on our water system. We carefully balance internal and external pressures, costs, and investments over time to meet the changing needs.

Respecting And Adapting To The Changing Environment

We foster a culture of respect and stewardship of the watershed lands to supply high quality source water, while also protecting biodiversity and forest sustainability. This involves adapting our infrastructure and operational practices to enhance resilience against extreme weather events and other climate and environmental changes.

Managing Our Resources Effectively And Efficiently

The sustainability and longevity of the water supply cannot be achieved through infrastructure investments alone. Implementing strategies to manage, maximize and optimize utilization of existing resources is at the heart of preparing for the future. We are improving efficiency by equipping staff with the tools they need to do their jobs and with data to make better informed decisions.

Proactively Managing Internal And External Risks – Balancing

The implementation of a comprehensive risk management strategy is integral to all aspects of our work serving the region. This involves balancing the consideration of opportunities and risks, with a focus on allocating resources effectively to maintain and enhance current operations. We continue to prioritize the identification and mitigation of risks to our water supply system and water quality, particularly those related to climate change impacts, service reliability, and associated health and safety concerns for both staff and the communities we serve.

Fostering Collaborative Relationships With Customers And Partners To Improve Our Service

We must demonstrate the value of and effort behind the water supply service to foster appreciation and respect for this essential resource. We advance this by openly sharing information about the water supply system and its operations to the public, while actively seeking feedback on our service. We also collaborate with municipal staff to continue improving and aligning our services to the needs of the region's residents. We build strong partnerships and create opportunities for collaboration so we can continue to improve.

COMMITMENT 1:
PROVIDE HIGH QUALITY, SAFE DRINKABLE WATER

PRIORITY:

1. Protect and Manage the Greater Victoria Water Supply Area for the protection of long-term sustainable high-quality source water.

ACTIONS:

Near-Term Actions
• Protect water supply and ecosystems from contaminants and invasive plants, animals, and pathogens. Example Initiatives: a. Complete study to document biosecurity risk and revise or implement new biosecurity protection measures
• Continue to monitor the watershed and implement climate adaptation and mitigation initiatives to reduce the impacts associated with the magnitude and rate of projected climate change on ecosystems, water quality and infrastructure in the Greater Victoria Water Supply Area and update strategies where needed. Example Initiatives: a. Undertake a feasibility study to determine optimal siting and operating procedure to access cooler deep northern Sooke Lake Basin water. (3 to 5yrs informed by model inflow model) b. Develop a forest management strategy or plan to prioritize and guide forest management treatments and activities
Medium-Term Actions
• Continue to enhance capabilities in wildfire prevention, preparedness, early detection, suppression, forest fuel reduction and post-wildfire emergency rehabilitation measures to reduce and mitigate the potential impacts of a large-scale wildfire in the Greater Victoria Water Supply Area on water quality and supply. Example Initiatives: a. Increased use of infrared and drone technology and monitoring software to provide early detection and monitoring b. Develop post wildfire response plans to protect water quality c. Trial the use of prescribed burning and other techniques to manage forest fuel build up.
• Expand opportunities for traditional knowledge and First Nations input in stewardship of watershed lands.
• Continue to seek ownership, management, or influence of watershed lands and watershed buffer lands in aligned with Greater Victoria Water Supply Area land prioritization.
Longer-Term Actions
• Explore opportunities for integrating First Nations traditional ecological knowledge and perspectives in the protection and stewardship of the Greater Victoria Water Supply Area • Develop a management strategy specific to non-catchment lands • Develop a policy that defines the parameters and requirements for consideration of renewable energy or environmentally sustainable enterprises in the Greater Victoria Watershed Area

COMMITMENT 1:
PROVIDE HIGH QUALITY, SAFE DRINKABLE WATER

PRIORITY:

2. Ensure drinking water quality with a multi-barrier risk-based approach.

ACTIONS:

Near-Term Actions
• Continue to update and expand the drinking water safety plan
• Refine the schedule and delivery strategy for the implementation of filtration and other related infrastructure improvements. Include consideration for predecessors, successor and triggers for each task and step.
• Continue baseline water sampling and data collection projects which support future infrastructure design.
• Ongoing water quality monitoring program in source and treated water to verify proper system operations and identify potential water quality risks. This also includes research and studies into contaminates of emerging concern (e.g. Per- and polyfluoroalkyl substances (PFAS), microplastics, 6PPD (a common rubber antiozonant, with major application in vehicle tires) etc.)
• Maintain, enhance the cross-connection program.
Medium-Term Actions
• Commence water filtration pilots to refine the design parameters for future water treatment processes and cost estimate, to inform preliminary design
• Maintenance of ISO 17025 Laboratory accreditation and Provincial Health Officer certification
Longer-Term Actions
• Enhance/expand network monitoring. Remote continuous lake monitoring.

COMMITMENT 1:
PROVIDE HIGH QUALITY, SAFE DRINKABLE WATER

PRIORITY:

3. Advance our understanding of the water supply area and source water to prepare for the future.

ACTIONS:

Near-Term Actions
• Complete modelling of climate change effect on forests and effectiveness of fuel reduction treatments to help guide management of the Greater Victoria Water Supply Area forests into the future.
Medium-Term Actions
• Develop reservoir inflow and circulation models and conduct analyses to improve the understanding of these linkages and how they affect drinking water quality and the health of aquatic ecosystems.
• Enhance, expand, and integrate the monitoring of watershed hydrology and water quality in the Greater Victoria Water Supply Area to improve understanding of the linkages among weather, stream flows, reservoir circulation and water quality.
• Continue to partner with the Province, Canadian Forest Service, University of Victoria, the forWater Network and others to better understand the water supply area forested and aquatic ecosystems, risks from insects, diseases, and invasive species; to inform best management for water supply and congruent natural values.
• Assess forest management trials (thinning, juvenile spacing, prescribed burning) in terms of the impact of the treatment on forest fuel, tree and stand growth and health, microclimate
Longer-Term Actions
• Undertake post-wildfire and sediment delivery modelling to inform water treatment and water quality preparedness plans and filtration design prior to and after the introduction of alternate water sources. (Link hydrodynamic model and water quality model.)
• Leveraging Internet of Things, create a digital ‘dashboard’ with real time reporting on key weather, stream flow, reservoir level, reservoir release and other water quality and supply data to facilitate internal awareness and decision-making and communication with outside regulators and stakeholders. Links to public engagement.

COMMITMENT 2:
PROVIDE AN ADEQUATE, RELIABLE, LONG-TERM SUPPLY OF DRINKABLE WATER

PRIORITY:

1. Continuously plan and prepare for future water supply needs.

ACTIONS:

Near-Term Actions
• On a prescribed timeframe, routinely update assumptions and future growth projection as it is related to the Master Plan and Development Cost Charge Programs.
Medium-Term Actions
• Define a strategy to increase additional water resources, building on alternatives outlined in Master Plan **a.** Refine strategy and infrastructure needs to access additional capacity within existing CRD land to meet 2050 projected demands **b.** Define ultimate water resources capacity within existing CRD owned watershed lands
• In collaboration with municipal partners, develop a regional strategy and standards regarding storage capacity (reservoirs) within the transmission and municipal distribution systems.
• Work collaboratively with Municipal partners to clarify and define service level related to water supply and lines of demarcation.
Longer-Term Actions
• If required, develop a land acquisition strategy to expand long term water supply to meet the needs beyond 2050.

COMMITMENT 2:
PROVIDE AN ADEQUATE, RELIABLE, LONG-TERM SUPPLY OF DRINKABLE WATER

PRIORITY:

2. Enhance public connection to, confidence in and responsibility for water supply and value of water.

ACTIONS:

Near-Term Actions
• Continue to evolve and promote public tours of the watershed
• Develop and promote curriculum within school on drinking water.
• Develop an ongoing virtual speaker series that would include presentations by third party experts on emerging topics concerning water.
• Continue with public engagement through official channels like the Water Advisory Committee.
Medium-Term Actions
• Develop a long -term media/communication strategy that engages the public on efforts to protect and improve the resilience of drinking water treatment and supply.
• Assess opportunities to receive two-way communication with existing customers related to the quality of service provided.
Longer-Term Actions
• Develop Live Data stream/website or App on water system – outages, fun facts, and construction.

COMMITMENT 2:
PROVIDE AN ADEQUATE, RELIABLE, LONG-TERM SUPPLY OF DRINKABLE WATER

PRIORITY:

3. Optimize our available water supply through adaptive demand management strategies.

ACTIONS:

Near-Term Actions
• Define the “by sector” demand baseline and define long term targets.
Medium-Term Actions
• Leverage baseline and targets to define a multi-year demand management strategy • Develop and evolve policy and bylaws to support effective demand management and maximizing water supply. • Investigate opportunities for creating shared and consistent data sets with municipalities to facilitate efficient trending.
Longer-Term Actions
• Continuous refinement of policy and practices to facilitate optimal supply and demand management.

COMMITMENT 2:
PROVIDE AN ADEQUATE, RELIABLE, LONG-TERM SUPPLY OF DRINKABLE WATER

PRIORITY:

4. Implement a sustainable and equitable long-term financial plan.

ACTIONS:

Near-Term Actions
• Implement a development cost charge (DCC) program and Bylaw for the Regional Water Supply
• Continue to engage First Nations and put in place Bulk Water Agreements supporting development of stronger government to government relationships
Medium-Term Actions
• Continue to refine the long-term financial plan
• **Investigate the introduction of a framework that measures the investment in climate adaptation and mitigation vs. the cost of inaction.**
• Identify grant and partnership opportunities to fund future filtration infrastructure needs
Longer-Term Actions
• Continue to assess opportunities to streamline or strengthen utility governance

COMMITMENT 3:
PROVIDE EFFICIENT, EFFECTIVE AND INNOVATIVE OPERATIONS OF WATER SYSTEM INFRASTRUCTURE

PRIORITY:

1. Make evidence-based and community-responsive infrastructure decisions to ensure reliable system performance and long-term sustainability.

ACTIONS:

Near-Term Actions
• Continue to develop and consolidate various risk registries to prioritize expenditures based on risk.
Medium-Term Actions
• Mature our asset and maintenance management processes to maximize data driven decision making. Example Initiatives: a. Align our work management tools and business processes to improve maintenance management practices, efficiency, and reliability. b. Define data standards and Key Performance Indicators (KPIs) related to maintenance and asset management and develop dashboards to track and identify trends. c. Refine the comprehensive asset management plan to prioritize maintenance and capital projects.
• Refine asset class specific maintenance plans to optimize and extend asset life
• Continue to develop and improve our SCADA system to inform operational decision making
Longer-Term Actions
• Create and automate integrated process narrative for the transmission system to optimize system performance and improve energy efficiency.
• Expand critical spares program to continue to reduce system downtime or service interruptions.
• Invest in technology for decision-making support and reporting.

COMMITMENT 3:
PROVIDE EFFICIENT, EFFECTIVE AND INNOVATIVE OPERATIONS OF WATER SYSTEM INFRASTRUCTURE

PRIORITY:

2. Assure long-term sustainability and capacity of water management operations through sufficient resources, robust processes, strategic partnerships, effective tools, and continuous innovation.

ACTIONS:

Near-Term Actions
• Continuously assess and improve internal processes and procedures to streamline operations, reduce costs and increase efficiency. Example Initiatives: a. Align our work management system and Maintenance Management process
• Modernize contract and project management tools, to support more efficient and effective project delivery and budgeting.
• Participate in industry associations to leverage applicable operational experience and best practices that can add value to our system.
Medium-Term Actions
• Continuously evaluate and integrate innovative solutions, such as smart meters, leak detection technologies, and renewable energy sources, to enhance system resilience, sustainability **and support our corporate energy efficiency and emissions reduction goals as outlined in the CRD Climate Action Strategy.**
• Cultivate strategic partnerships with skilled contractors and consultants through long-term agreements ensuring access to expertise and resources for timely responses to procurement opportunities to meet capital needs.
• Foster partnerships with technology providers and research institutions to stay at the forefront of innovation in water management.
• Create agreements with municipalities for shared capital delivery of contracts.
• Explore opportunities for Mutual Aid Agreements
Longer-Term Actions
• Develop educational initiatives (workshops, webinars, etc.) to assist potential vendors understand and navigate the procurement process effectively.
• Explore the technology, tools and sensors that can further inform and enhance specific asset class maintenance plans.

COMMITMENT 3:
PROVIDE EFFICIENT, EFFECTIVE AND INNOVATIVE OPERATIONS OF WATER SYSTEM INFRASTRUCTURE

PRIORITY:

3. Enhance the security and sustainability of the water supply by effectively managing risks and enhancing emergency response capabilities.

ACTIONS:

Near-Term Actions
• Foster partnerships with municipalities and First Nations to develop a robust integrated drinking water plan for emergency response and natural disasters **and in alignment with the evolving requirements of the Emergency and Disaster Mitigation Act.**
• Continue regular safety training and drills for employees focusing on WorkSafeBC requirements, best practices for handling hazardous materials, operating equipment safely, and responding to emergencies effectively.
• Continue to actively protect the Greater Victoria Water Supply Area and water supply infrastructure from unauthorized physical activities or access. Examples of Initiatives would include: a. Considering opportunities to acquire ownership and control of the remaining catchment lands and critical adjacent lands to act as a buffer. b. Explore the potential for partnerships with other CRD departments, not for profit organizations, and First Nations in the acquisition and management of important buffer lands adjacent to the GVWSA. • Identify and mitigate risks to our digital environmental to safeguard against cyber threats and data breaches.
• Continue to develop and resource the dam safety program, while fostering strong relationship with British Columbia Dam Safety Office (group)
• Develop and implement Dam Safety Public Engagement and Communication plans, including a public-facing webpage with dam safety and emergency preparedness information.
• Construct the Instrumentation System Improvements at Sooke Lake Dam, including integrating instrumentation data to SCADA system, to improve dam safety, warning time, and emergency preparedness.
Medium-Term Actions
• Enhance risk register with physical and cyber security concerns to guide mitigation measures.
• Implement Dam Safety Instrumentation improvements at large dams. Work to be prioritized based on each dam's Dam Failure Consequence Classification.
• Engage consulting industry to identify at innovative delivery alternatives to expedite the delivery of the backlog of dam upgrades to meet regulatory requirements.
• Reassess large risks to dam portfolio, including regional seismic risk, flood risk, and plan for capital improvements.
Longer-Term Actions
• Formalize and document the dam safety management system
• Design and implement seismic rehabilitation and capital improvements at higher consequence dams, including Sooke Lake Dam and Deception Gulch Dam.
• Complete legislated Dam Safety Reviews with support of expert consultants to reassess dam safety issues and planned capital improvements.

COMMITMENT 3:
PROVIDE EFFICIENT, EFFECTIVE AND INNOVATIVE OPERATIONS OF WATER SYSTEM INFRASTRUCTURE

PRIORITY:

4. Attract, develop, and retain a diverse, knowledgeable and empowered workforce.

ACTIONS:

Near-Term Actions
• Continue IWS Utility Operator cross training program within each Environmental Operator Certification Program discipline.
• Support and encourage staff to participate in industry associations such as BCWWA, CWWA or AWWA or others.
• Continue to partner with post-secondary Co-op programs to consider cooperative education opportunities.
• Ongoing evaluation and success of the CRD's Utility Operator Program, this is an internal program designed to provide career development and progression as utility staff gain additional experience and related British Columbia Environmental Operators Certificate Program certifications.
• Continue to partner with CRD Human Resources and Corporate Safety on related training opportunities, including personal and professional development.
• Continue to explore formal and informal opportunities for development, through temporary assignments, senior pay opportunities, as well as through auxiliary posted opportunities.
Medium-Term Actions
• Enhance personal and professional development opportunities to better support career advancement, including formal and informal mentorship opportunities.
• **Develop a long-term resource strategy and succession planning program for the service that considers the strategic priorities, as well as the changing infrastructure landscape within the service.**
• Ongoing training for Management through the CRD's iLead program in partnership with Royal Roads University.
Longer-Term Actions
• Provide training to management, team leads and supervisors on Effective Utility Management or equivalent.