

REPORT TO REGIONAL WATER SUPPLY COMMISSION MEETING OF SEPTEMBER 17, 2025

SUBJECT Master Plan Implementation Framework

ISSUE SUMMARY

To provide an update on the Capital Regional District's ongoing *Regional Water Supply Master Plan Implementation* project and seek the Regional Water Supply Commission's direction and endorsement of the Guiding Principles for the Master Plan Program.

BACKGROUND

In 2022, Stantec delivered the Regional Water Supply (RWS) 2022 Master Plan, which was endorsed by the Regional Water Supply Commission (Commission) in July 2022, and subsequently by the Capital Regional District (CRD) Board in August 2022.

The Master Plan includes a recommended capital improvement program consisting of 21 projects that accommodates population growth and mitigates risks to the drinking water quality and supply from climate change, wildfires, earthquakes and water quality events. Proposed projects include a water filtration plant, bringing the Leech watershed online, a second deep lake intake at Sooke Lake Reservoir, a new balancing storage tank within the system, and various water transmission main installations and upgrades throughout the system.

Since 2022, the CRD has proceeded with early-works items in the RWS 5-year capital plans, such as North Basin Intake Siting Studies, Reservoir Hydrodynamic Modelling, Sooke Lake Drawdown Study, the Development Cost Charge Program (growth funding), Transmission Main Upgrades and other related studies and tasks recommended by the Master Plan.

Among the budgeted initiatives was the Project Delivery Strategy (Master Plan Implementation Project). The scope of this project was to develop a strategy on how to deliver the complex and interdependent projects that were identified as part of the RWS Master Plan. The scope includes developing a comprehensive roadmap to guide the CRD over the coming years, addressing key areas such as service-level planning, risk mitigation, project prioritization, integrated work breakdown structures and scheduling, delivery strategies, governance frameworks, resource allocation, funding mechanisms, stakeholder communications and regulatory compliance.

The CRD issued a Request for Proposal (RFP) in late-2024 for this assignment and received four bids. Based on the review of both the technical and financial proposals, Carollo Engineers Canada (Carollo) were the preferred bidder. The CRD formally engaged Carollo in early 2025 to assist in the Master Plan Implementation Project. Carollo demonstrated extensive organizational expertise, supported by a network of subject matter specialists located throughout North America.

The assignment is structured around five key tasks:

 <u>Task 1 – Orientation and Visioning:</u> Establishing a shared understanding of objectives and long-term goals of the program, identifying risks and opportunities and establishing strategic goals to guide future decision making.

- <u>Task 2 Program Refinement and Risk Review:</u> Evaluating and refining program elements, including project sequencing, while identifying and assessing potential risks.
- <u>Task 3 Project Scope Definition:</u> Clarifying the scope and requirements of individual projects within the program, including prerequisite activities to inform the overall program road map.
- <u>Task 4 Program Delivery Review:</u> Analyzing program delivery models and strategies to optimize program delivery.
- <u>Task 5 Program Implementation Plan:</u> Developing a comprehensive Program Implementation Plan using the four previous tasks and including the Program Governance Framework, Long-Term Resourcing Plan, Funding and Grant Strategy, Permits and Regulatory Management Plan and a Communications Plan

A key component of this initiative is the early-stage internal engagement within the CRD, complemented by the technical expertise of the Carollo team. This assignment has put particular emphasis on cross departmental engagement. This collaboration is designed to incorporate diverse perspectives from a broad range of departments and interested parties across the organization, aiming at building common understanding and strengthening the resulting implementation plan. The following engagement activities are completed, underway or scheduled to occur:

Task #	Activity	Status
1	Site tours, staff questionnaire, one-on-one interviews with CRD staff	Complete
1	Full-day visioning workshop with CRD staff from various	Complete
	departments	
1	Political, Economic, Social, Technological, Legal and Environmental	Complete
	(PESTLE) exercises (with CRD Staff and the Water Advisory	
	Committee)	
2	Level of service goal setting workshop with CRD staff	Complete
2	Risk framework workshop with CRD staff	Complete
2	Subject matter expert meetings to review Master Plan project scopes	Complete
3	Risk mitigation workshop with CRD staff	Complete
4	Contractor outreach and high-level market sounding	Underway
4	Project delivery framework and procurement workshop with CRD	Pending
	staff	
5	Implementation review workshop with CRD staff	Pending

The main deliverable of *Task 1 – Orientation and Vision* is a draft "Tabletop Document", which will be used to communicate the purpose, vision and goals of the Master Plan to the public, staff and elected officials over the life of the program. The final Tabletop Document may also include background information on the Master Plan projects, high-level schedule, funding projections.

A draft Tabletop Document is attached as Appendix A for the Commission's consideration. The Tabletop Document will continue to be refined through the course of the Master Plan Implementation Plan development, and a final Tabletop Document will be brought forward at project completion.

The draft Tabletop Document includes five Guiding Principles that establish the high-level direction and goals for delivering the Master Plan Program over its life cycle. These principles will support the CRD in prioritizing the projects and related tasks required to achieve the vision and strategic goals of the Program. Serving as a foundational framework for decision making, they will also help maintain alignment throughout the multidecade implementation that will likely involve many different teams of contractors and consultants over time.

Additionally, the Tabletop Document and its guiding principles will provide a level of transparency to the public on how the CRD is making decisions related to these significant investments. The Guiding Principles of large programs of this nature need to reflect the unique values of the community they are serving, and can be reviewed and adjusted over the life of the program, although changes, additions or deletions should be done in a judicious way as they can have significant impacts on the delivery strategy and prioritization of projects or design alternatives.

The early Task 1 activities (i.e., site tours, staff questionnaire and interviews) helped develop an understanding of the existing RWS system and assets, organizational structure, and potential priorities and goals for the program delivery. Pairing this orientation work with Carollo's industry expertise, an initial set of Guiding Principles was brought forward to the visioning workshop, where a diverse group of CRD staff provided input and refinement in a workshop setting.

This visioning workshop resulted in a draft set of Guiding Principles, which has been further refined and now presented for the Commission's consideration below.

Guiding Principles

1. Proactive, Risk-Informed Program Delivery

Projects are planned with foresight, early risk management, and flexibility to minimize disruption and stay on track.

The Master Plan Program will be delivered with a culture of preparedness and anticipating challenges before they arise. This includes pre-planning and early risk mitigation to reduce disruption, maintain momentum, and ensure continuity of service throughout construction. Contingency planning, schedule resilience, and clear decision checkpoints will be embedded in the delivery methodology to keep the program adaptive, efficient, and on track.

2. Purposeful Design for Resilience and Operations

Infrastructure is designed to be safe, durable, cost-effective, and easy to maintain while meeting future needs.

The infrastructure that is designed will be resilient, safe, and built to last without overbuilding or creating long-term operational burdens. The design approach will integrate value engineering, lessons learned from similar projects, and input from operators to ensure practical, maintainable, and cost-effective systems. Design decisions will balance capital and lifecycle costs, support safety and efficiency, and reflect both the needs of today and the challenges of tomorrow.

3. Organizational Readiness and Execution Excellence

Careful sequencing, strong internal capacity, and long-term planning ensure smooth and dependable implementation.

The Master Plan Program delivery will ensure a balanced integration of internal talent in key roles alongside targeted third-party industry support. As internal staffing capacity is developed, succession planning and preservation of institutional knowledge will be prioritized to safeguard long term service continuity and uphold delivery excellence.

4. Financial Responsibility and Affordability

Reliable service is maintained through right-sized projects, diverse funding, and long-term financial planning.

Infrastructure investments will be right-sized to match validated demand projections, balancing capital and long-term operating costs to avoid unnecessary rate burdens. Diverse funding sources, alignment with regional and municipal growth strategies, and transparent decision-making will help maintain affordability while safeguarding long-term system resilience

5. Strong and Inclusive Partnerships

Collaboration with First Nations, governments, regulators, and the public builds trust and shared success.

Collaboration with First Nations, governments, regulators, the public, technical experts, and contractors is essential to build trust, align priorities, and achieve shared success. Engagement with First Nations reflects reconciliation and shared stewardship, ensuring cultural values and opportunities are respected. Partnerships with governing bodies align outcomes with regional strategies and streamline approvals. Working closely with technical experts and contractors applies best practices, value engineering, and lessons learned from others for efficient delivery. Transparent communication with the public builds understanding, encourages conservation, and strengthens investment in the program's long-term success.

In addition to the internal workshops, the CRD met with other utility owners who had delivered programs of similar scope and size. Some of these programs prioritized such items such as local procurement to simulate the local economy and potential revenue generating opportunities, as two examples. Although not specifically identified in the internal engagement work the CRD has undertaken, examples of how these priorities could translate into Guiding Principles are provided below as examples for the Commission's consideration.

6. Inclusive and Lasting Community Benefit (OPTIONAL)

Investment creates added value by supporting local businesses, Indigenous enterprises, and training opportunities.

Guiding Principle 6 may require projects to be packaged into smaller scopes where local contractors could bid the work. This may require unique procurement policies, processes and contract language to prioritize supporting local or indigenous companies. This would require additional up-front effort and could increase project costs, limit expertise related to more complex work and extend program timelines but has the potential to support local

economies and improve public support of the projects.

7. Revenue-Generating Strategic Partnerships (OPTIONAL)

Innovative partnerships such as green energy or water reuse help generate revenue and strengthen system resilience.

Guiding Principle 7 would require additional scope be added to the Master Plan projects, for example an energy recovery system at the proposed filtration plant. This principle would increase up-front capital costs (feasibility, design, construction), but has the potential to provide ongoing revenue, for which a cost-benefit analysis would be required. This Guiding Principle also has the potential to lower ongoing greenhouse gas emissions and reduce waste from the system but may also conflict with Watershed Protection initiatives.

The implications of including the two optional Guiding Principles (6 and 7) are discussed further below. By not including items such as the examples noted above it does not preclude these types of initiatives from being considered on a case-by-case basis, but they would not be a foundational driver across all the program delivery.

Next Steps

With the visioning finalized, the project team will use the guiding principles to finalize the Master Plan Implementation Project details. Upcoming work will refine and validate project details, risks, and sequencing; develop comprehensive scope, cost, and scheduling information; and evaluate delivery strategies through market engagement to recommend the most effective approaches. We anticipate presenting a draft of this implementation plan to the Commission for input in Q1 2026.

<u>ALTERNATIVES</u>

Alternative 1

That the Regional Water Supply Commission directs staff to proceed with the Master Plan Implementation Project using the 5 Guiding Principles as shown on the draft Tabletop Document.

Alternative 2

That the Regional Water Supply Commission directs staff to proceed with the Master Plan Implementation Project using amended Guiding Principles as directed.

Alternative 3

That this report be referred back to staff for additional information.

<u>IMPLICATIONS</u>

Alignment with Board & Corporate Priorities

The implementation of the proposed Master Plan program aligns with the CRD 2023-2026 Corporate Plan, and the updated 2025 RWS Strategic Plan. The RWS strategic and corporate plans and their goals were a major consideration in determining the proposed guiding principles.

Alignment with Existing Plans & Strategies

The draft Tabletop Document highlights the connection between the RWS 2025 Strategic Plan and the delivery of the RWS 2022 Master Plan program. The 2022 Master Plan was developed with the commitments of the Strategic Plan in mind, and the delivery of the program will be in alignment with these commitments.

Climate and Environmental Implications

One of the key goals of the implementation of the proposed Master Plan program is to reduce the potential impacts and mitigate risks of Climate Change. In addition, there are potential opportunities to look at innovative technologies or partnerships to look at energy recovery, reducing future greenhouse gases and reducing water waste.

Financial Implications

Several of the guiding principles emphasize the importance of financial sustainability, cost efficiency and long-term affordability for RWS customers. These principles collectively aim to ensure reliable service delivery while balancing short-term expenditures with long-term economic benefits.

Having a policy that considers innovative technologies, energy saving opportunities, and greenhouse gas reduction may enhance access to external funding opportunities. Having policies related to inclusive and lasting community benefit may also stimulate local economic development and foster public support; however, these benefits may be offset by increased planning and administrative requirements, extended implementation timelines, and higher capital or operational costs over time.

Overall, the financial implications of these guiding principles reflect a trade-off between upfront investment and long-term value, requiring careful consideration to align with both fiscal responsibility and strategic community outcomes

First Nations Implications

Numerous local First Nations have expressed a strong interest in providing input throughout the Master Plan program. The proposed Guiding Principles are designed to foster meaningful collaboration, emphasizing inclusive engagement and creating pathways for economic empowerment throughout program delivery.

Service Delivery Implications

The RWS Master Plan, implemented using the guiding principles, seeks to enhance system performance by improving service levels, increasing reliability, reducing risks, proactively responding to climate change and supporting future growth.

CONCLUSION

Following its release, the Regional Water Supply (RWS) 2022 Master Plan was formally endorsed by both the Regional Water Supply Commission (Commission) and the Capital Regional District (CRD) Board. The plan sets out a recommended capital improvement program comprising of 21 infrastructure projects designed to address critical risks to the region's ability to deliver clean,

reliable drinking water including climate change, population growth, and seismic vulnerabilities.

To advance the Master Plan Projects, the CRD has partnered with Carollo Engineers Canada to lead the Master Plan Implementation Project and develop a strategic roadmap for delivering this multi-decade capital program. As part of this effort, a draft Tabletop Document has been introduced, featuring a set of proposed Guiding Principles for consideration by the Commission.

These Guiding Principles are essential as they provide a clear framework for decision making, help prioritize investments, and ensure alignment across diverse teams and stakeholders over the life of the program. By anchoring the implementation in shared values and long-term objectives, the principles also promote transparency and accountability and reinforce public trust in how the CRD is stewarding these significant infrastructure investments.

We anticipate returning to the Commission to present the draft Master Plan Implementation Plan for input in Q1 2026. This plan will include comprehensive scope for the program, cost, and scheduling information; and proposed delivery strategies.

RECOMMENDATION

That the Regional Water Supply Commission directs staff to proceed with the Master Plan Implementation Project using the 5 Guiding Principles as shown on the draft Tabletop Document.

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ATTACHMENT(S)

Appendix A: Draft Tabletop Document