

Introduction

This document presents draft strategies and actions being considered for Metro Vancouver's next Drinking Water Management Plan. These proposed strategies and actions have been developed to address the region's biggest challenges including the impacts of climate change on water quality, supply, and infrastructure, and risks from seismic events, aging water infrastructure, and population growth.

All strategies and actions are in draft form and open for feedback. Your input will help shape the final plan.

What is the Drinking Water Management Plan?

The Drinking Water Management Plan is the region's 10-year guiding document for protecting, managing, and investing in the drinking water system

How to use this document

This document provides a quick reference to the draft strategies and actions grouped under five priority areas that reflect the biggest challenges and opportunities facing our drinking water system today. Each priority area is colour-coded throughout this document to help you quickly navigate and track related strategies and actions.



Priority Area 1: Resilient Water System

Preparing for climate change, natural hazards, and aging infrastructure.



Priority Area 2: Water Supply Quantity and Quality

Safeguarding water sources and planning for future needs.



Priority Area 3: Environmental Protection

Supporting ecological health and reducing greenhouse gas emissions.



Priority Area 4: Conservation and Efficiency

Using water wisely to extend supply and avoid unnecessary infrastructure.



Priority Area 5: Operational Workforce Development

Making sure the right people, tools, and funding are in place to support current and future needs of the system.

Drinking Water Management PlanDraft Strategies and Actions



Priority Area 1: Resilient Water System

Preparing our system to handle emergencies like earthquakes, floods, and power outages by upgrading infrastructure, improving backup power, and building in more system flexibility.

Draft Strategy: Advance Planning and Designing for Resilience to Natural Hazards and Climate Change Impacts

Potential Actions

Increase the resilience of the water system to the impacts of natural hazards, extreme temperatures, and other emerging hazards

Advance water system redundancies to prepare for the possibility of infrastructure failures

Improve power resilience through a diverse portfolio of energy sources, energy efficiency, and capacity management opportunities, including potential storage options

Define supply commitments and identify system redundancy requirements

Advance design requirements such that new infrastructure is resilient to climate change

Draft Strategy: Respond and Recover from Emergencies

Potential Actions

Support access to drinking water at critical locations in the region for essential uses in the event of an emergency

Prepare to execute an adaptive emergency response plan

Coordinate emergency response with member jurisdictions

Promote disaster preparation with respect to drinking water (for residents and businesses)

Draft Strategy: Proactively Manage Existing Infrastructure for Longevity

Potential Actions

Ensure assets remain in good condition to deliver water reliably throughout the region

Continue incorporating asset management into resource planning

Ensure spare parts for critical infrastructure are readily available when needed

Further reduce risks to Metro Vancouver infrastructure from third-party proximal works



Priority Area 2: Water Supply Quantity and Quality

Protecting our water at every stage, from mountain reservoirs to your tap. This includes ongoing testing, water supply area protection, and planning for changes in climate and population.

Draft Strategy: Prepare for Water Quality Changes Due to Climate Change and Natural Hazards

Potential Actions

Understand and mitigate the risks from climate change and natural hazards in the water supply areas

Enhance the utility's operational ability to respond to rapid changes in source water quality

Continue to prepare for the impacts of increased water temperatures on source and treated water quality

Draft Strategy: Protect and Manage Water Quality

Potential Actions

Continue to maintain protected water supply areas

Protect water quality at transmission reservoirs

Minimize the amount of time water spends (water age) in the transmission system

Include water quality considerations during the planning and design of new infrastructure

Reduce the risk of contamination from treatment to tap

Draft Strategy: Prepare for Future Drinking Water Supply and Demands

Potential Actions

Plan infrastructure using an adaptive approach

Prepare for and manage the impacts of drought on water supply and demand



Priority Area 3: Environmental Protection

Protecting local ecosystems by supporting healthy forests, fish habitats, and streamflows, especially in areas that help supply our drinking water.

Draft Strategy: Reduce GHG Emissions and Implement Energy Efficiency Measures

Potential Actions

Approach energy resilience in a manner that feasibly minimizes impacts to the climate and environment

Adopt comprehensive methods for GHG accounting in alignment with Metro Vancouver standards to support emissions reduction planning and improve performance measures

Prioritize the adoption of electric and fuel cell electric fleet vehicles, and consider alternative fuel choices for transportation assets

Maximize energy recovery and optimize energy efficiency in the regional water system and utility operations

Implement low carbon procurement and construction practices to reduce emissions and prioritize sustainable solutions

Draft Strategy: Advance Ecological Health and Environmental Stewardship Across Metro Vancouver Lands

Potential Actions

Use capital infrastructure projects as an opportunity to improve ecological health and sequester carbon

Support ecological health through ecological enhancement initiatives and integrated management of natural assets

Pursue opportunities to collaborate with local First Nations on public education initiatives related to ecological health and environmental protection

Draft Strategy: Support Healthy Fish Populations in the Capilano, Seymour, and Coquitlam River Systems

Potential Actions

Increase high-quality fish habitat and support for migration, rearing, and spawning for fish species native to the Capilano, Seymour, and Coquitlam River systems

Manage environmental flows to minimize impacts to fish habitat and spawning

Draft Strategy: Minimize the Environmental Impacts of Leaks and Spills

Potential Actions

Reduce releases to the environment from new and existing infrastructure, equipment, and operations

Continue to build resilience through the Environmental Management System



Priority Area 4: Conservation and Efficiency

Using water wisely by reducing leaks and waste, promoting conservation, and installing meters on new homes to help track use and detect issues.

Draft Strategy: Advance Residential Water Metering

Potential Actions

Member jurisdictions to mandate metering on all new residential construction, in addition to one or more of the following, by 2028:

- · Properties undergoing major renovations
- Properties undergoing utility service replacement
- Properties participating in a voluntary metering program
- Properties undergoing transfer of ownership
- Properties with secondary or laneway suites
- Existing meter-ready connections
- Connections with pools, hot tubs, and/or water features

Member jurisdictions to increase the percentage of drinking water that is metered by 2035, from 2021 levels:

- In jurisdictions where less or equal to 25% of drinking water volume is metered, target to increase to 2.0 times that amount
- If 26% to 50% of drinking water volume is metered, target to increase to 1.5 times that amount
- If 51% to 75% of drinking water volume is metered, target to increase to 1.2 times that amount
- If more than 76% of drinking water volume is metered, target to increase to 1.1 times that amount

Metro Vancouver will support residential water metering by providing implementation guidance and standardized communication for members

Draft Strategy: Reduce Drinking Water Use through Active Conservation

Potential Actions

Continue to implement and advance region-wide drinking water conservation programs and promotions

Demonstrate and promote water use efficiency within regional/member facilities

Work together to conserve drinking water by reducing base drinking water demand

Explore the use of water rates that promote conservation, such as tiered and seasonal pricing

Work together to conserve drinking water by reducing seasonal demand

Implement leakage reduction programs

Progress a region-wide drinking water conservation program for the industrial, commercial, and institutional and agriculture sectors



Priority Area 4: Conservation and Efficiency

Using water wisely by reducing leaks and waste, promoting conservation, and installing meters on new homes to help track use and detect issues.

Draft Strategy: Continue Advancing the Recovery and Reuse of Non-Potable Water

Potential Actions

Support the adoption of non-potable water systems and use through advocacy, education, and research

Explore opportunities and partnerships with member jurisdictions and First Nations to increase adoption of non-potable water use within their communities

Draft Strategy: Increase Operational Efficiency

Potential Actions

Continue to assess cost efficiencies in operational and capital budgets

Advance automation of the treatment and transmission systems

Maximize beneficial use of drinking water treatment residuals and investigate alternative residuals handling methods

Advance metering on municipal connections to the Metro Vancouver transmission system

Continue optimizing operations of the treatment and transmission systems

Continue to develop a more integrated relationship between member jurisdictions and Metro Vancouver to efficiently deliver high-quality water to the region



Priority Area 5: Operational Workforce Development

Making sure the right people, tools, and funding are in place to deliver safe, high-quality drinking water every day, including training staff, maintaining equipment, and coordinating with local municipalities.

Draft Strategy: Pursue regional youth recruitment opportunities

Potential Actions

Promote career awareness and education opportunities to high school students

Engage First Nations youth to share career and education opportunities

Develop a communications toolkit to target various youth audiences for recruitment

Draft Strategy: Collaborate with key industry advocates and training providers

Potential Actions

Advocate to post-secondary institutions for creation or expansion of water operations education programs

Work with industry advocates to increase awareness of career opportunities

Draft Strategy: Enhance career development opportunities for existing Metro Vancouver operators

Potential Actions

Collaborate to create a career growth and succession plan

Support continuing education

Encourage networking opportunities

Next Steps

We want to hear from you. Your feedback will help refine these strategies and actions before the final Drinking Water Management Plan is completed.

Take the survey before September 12 at:



https://metrovancouver.org/ services/water/drinking-watermanagement-plan-update

Find upcoming opportunities:

This is our water, our region and your input helps shape what comes next. Join the conversation at a community event or public webinar.

Visit **metrovancouver.org** and search:

"Drinking Water Management Plan Update"