

2023 YEAR IN REVIEW – DRINKING WATER AND WATERSHED PROTECTION PROGRAM

RECOMMENDATION

That the Board receive the *2023 Year in Review – Drinking Water and Watershed Protection Program* report for information.

BACKGROUND

The Regional District of Nanaimo's (RDN) Drinking Water and Watershed Protection (DWWP) program action areas are organized into four related themes: Water Awareness and Stewardship; Water Information and Science; Water-Centric Planning and Policy Support; and Water Collaboration. A set of progress indicators outlined in the 2020-2030 DWWP Action Plan provides the basis for summarizing performance each year. For the full list of indicators please reference the [2020-2030 DWWP Action Plan](#) Section 7.1 (It is also excerpted in Figure 1 on page 2 of this report).

Below is a synopsis of details related to DWWP program performance based on the indicators for each theme in 2023. A more fulsome summary of highlighted accomplishments in 2023 under each theme is presented in Attachment 1. Also included in this staff report is a summary of key 2024 DWWP work plan items.

2023 Progress Indicators

Water Awareness and Stewardship

- Metered water use
 - 31% reduction in per capita water demand in the City of Nanaimo over the past 14 years (KWL, 2022)
 - Continued overall reduction in per capita water demand in RDN Water Service areas.
- # of watercourse enhancement or restoration projects completed
 - 5 in 2023; 31 total to date; supported by RDN DWWP Stewardship Seed funding
- Trends in groundwater and surface water
 - Groundwater trends reported in [Regional Groundwater Level Analysis Pre-Summer 2023](#) (12 aquifers reporting increasing or stable ten-year groundwater level trend; 7 aquifers reporting variable or decreasing ten-year groundwater level trend)
 - Surface water quality trends reported in [2023 Community Watershed Monitoring Data Analysis](#)

Water Information and Science

- # of monitoring sites with > 3 years of datasets in open platforms
 - 95 water monitoring sites (84 surface water quality, 11 groundwater level)

- Water Budgets completed
 - French Creek Water Budget Phase 3 completed in 2023
- Participation of community volunteers
 - 14 returning stewardship groups, representing ~60 volunteers
 - 31 volunteer well owners participating in ongoing monitoring
- Publications
 - Published 8+ updated water-related public education materials, including graphics, brochures and maps.

Water-centric Planning and Policy Support

- Planning processes informed by DWWP
 - Supported ongoing Official Community Plan Review for Electoral Area F, including draft Development Permit Area (DPA) guidelines.
 - Supported Parks Department with scoping of Biodiversity Plan.
 - Provided review for 10+ development referrals for Current Planning.
- Watershed performance targets / Implementation of rainwater management practices
 - Drafted rainwater management plan checklist for inclusion with draft DPA guidelines and coordinated the first round of Qualified Professional review.
- Advocacy with outside agencies
 - Developed resolution on Regional Water Supply Strategies, endorsed by the RDN Board and then successfully endorsed at AVICC and UBCM in 2023.
 - Provided input to the development of the Provincial Watershed Security Strategy and Fund.




	Theme	Progress Indicator 1	Progress Indicator 2	Progress Indicator 3	Progress Indicator 4
 Water Collaboration	 Water Awareness and Stewardship	Reduction of metered water use over time	Number of restoration projects completed	Market research survey response indicating improved awareness	Improving trends in groundwater level and surface water quality
	 Water Information and Science	Number of sites with long-term (>3 years) datasets hosted on open Provincial platforms	Completion of numerical water budget models for priority watersheds and aquifers	Continued participation of community volunteers in citizen science efforts	Number of publications communicating water science
	 Water-centric Planning and Policy Support	Number of planning documents and processes informed by DWWP actions/ information	Number of watershed performance targets developed	Implementation of innovative rainwater management policies and practices	Successful advocacy with outside agencies

Figure 1: Progress Indicators in Drinking Water and Watershed Protection Action Plan 2020-2030

2024 Highlighted Workplan Items

In 2024, the RDN DWWP program will continue to deliver key collaborative region-wide initiatives related to water stewardship, monitoring, and planning – as detailed in the DWWP Action Plan, RDN Financial Plan, and RDN Operational Plan. Progress updates will be provided four times a year via the DWWP Technical Advisory Committee as well as periodic report(s) to the Board. Highlighted work plan items in 2024 (with the associated DWWP operational budget amount, where applicable) include the following:

- Update the regional publication “State of our Aquifers” and mail it out to residents in areas supplied by groundwater. (\$30,000)
- Develop communication material on water supply planning in the region and best practices, as summarized in the CATAC report on Climate-Informed Water Supply Planning (Econics, 2023). (\$30,000)
- Initiate the Phase 3 Water Budget Study for Cedar-Yellowpoint-Cassidy (deferred from 2023). (\$112,500)
- Continue coordination of the Community Watershed Monitoring Network following an internal strategic planning session to refresh the vision for the next 5 years. (~\$100,000)
- Complete the Raingarden Demonstration site project at RDN Administration Building. (\$20,000)
- Continue to implement actions under the Regional Strategy for Rainwater Management.
- Explore options and advocate for stream mapping improvements in the region, in consultation with the Province, RDN Departments, Environmental Professionals, and stewardship groups.
- Continue to co-develop a new program related to Youth Ambassadors for climate and water stewardship. (\$3500)

FINANCIAL IMPLICATIONS

The work summarized here is all accounted for in DWWP Operating Budgets.

STRATEGIC PLAN ALIGNMENT

Managing Impacts of Climate Change - Advance priority actions that are identified within RDN Board-approved plans and initiatives.

Water Security - Collaborate with regional partners including First Nations, land trusts, federal, provincial, and local governments, to ensure water resources are managed and shared equitably and responsibly.

Water Security - Understand our water resources and their risks, to manage our water resources effectively and sustainably.

REVIEWED BY:

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ATTACHMENT

DWWP Program Accomplishments 2023 – Detailed Summary by Theme