



REGIONAL
DISTRICT
OF NANAIMO

DRINKING WATER & WATERSHED PROTECTION

November 20, 2024 | Technical Advisory Committee Meeting



REGIONAL
DISTRICT
OF NANAIMO

AGENDA

APPROVAL OF THE AGENDA

ADOPTION OF MINUTES

ROUNDTABLE UPDATES

INVITED PRESENTATIONS

STAFF PRESENTATIONS

NEW BUSINESS

ADJOURNMENT



REGIONAL
DISTRICT
OF NANAIMO

ROUNDTABLE UPDATES
ALL COMMITTEE MEMBERS

INVITED PRESENTATIONS

**Englishman River Water Intake Fish
Habitat Monitoring Update**

**Barbara Silenieks,
City of Parksville**

**Regional District of Nanaimo
Natural Asset Management Planning**

**Kim Fowler
Manager of Sustainability & Energy
Regional District of Nanaimo**

DWWP PROJECT UPDATES

- STEWARDSHIP SEED FUNDING 2024 PROJECTS
- WATER STEWARDSHIP REBATES – 2024 REVIEW
- CLIMATE INFORMED WATER SUPPLY PLANNING COMMUNICATIONS – PROJECT UPDATE
- DWWP YEAR IN REVIEW
- LOOKING AHEAD TO 2025

STEWARDSHIP SEED FUNDING – 2024 PROJECTS

RDN’s DWWP program supports efforts of stewardship groups taking action to monitor, restore, research, and bring educational awareness to local watersheds

Seed Funding of up to **\$5,000*** for up to 3 consecutive years towards projects within the RDN that:

- Are led by a non-profit organization,
- Involve volunteers,
- Are jointly funded by other partners, donors, and/or in-kind contributions,
- Actively enhance stream, river, lake, estuary, or wetland health, hydrology, function, or conservation

**due to project need and available budget, funds greater than \$5,000 have been allocated to support some projects this year*

Since 2016, 31 diverse projects across the region have been supported through SSF with over \$82,000 issued to date

www.rdn.bc.ca/stewardship-seed-funding

Stewardship Seed Funding (SSF) Program Summary (2016 – 2023)

Year	Group	Project
2016	Departure Creek Streamkeepers	Departure Creek Habitat Assessment
2016	MVIHES	Shelley Creek Water Balance Model
2016	Walley Creek Streamkeepers	Walley Creek Riparian Planting Phase 1
2017	Departure Creek Streamkeepers	Departure Creek Bank Stabilization
2017	Walley Creek Streamkeepers	Walley Creek Riparian Planting Phase 2
2017	Island Waters Fly Fishers	Millstone River Vegetation Fencing & Tools
2017	NALT	Plum Creek Wetland Restoration
2018	MVIHES	Shelley Creek Signage Support
2018	NALT	Chase River Slope Restoration
2018	NALT	Knarston Creek Riparian Restoration
2019	NALT	Holden Creek Riparian Restoration
2019	MVIHES	Englishman River Estuary Water Quality Monitoring
2019	NALT	Chase River Wetland Restoration
2019	Island Waters Fly Fishers	Millstone River Bioengineered Bank Stabilization
2019	NALT	Lower Knarston Creek Riparian Restoration Project
2020	NALT	Lower Knarston Creek Riparian Restoration Project
2020	Qualicum Beach Streamkeepers	Beach Creek Flow Monitoring Station
2020	NALT	Chase River Wetland Riparian Restoration
2020	Qualicum Beach Streamkeepers	Little Qualicum River Estuary Restoration
2021	Save Estuary Land Society	French Creek Estuary Water Quality Monitoring
2021	Departure Creek Streamkeepers	Departure Creek Off-channel Restoration
2021	BC Conservation Foundation	UV-filter sampling in RDN swim lakes & rivers
2021	NALT	Cat Stream Riparian Restoration
2022	Guardians of our Salish Estuaries	Little Qualicum River Estuary Restoration – Year 1
2022	Fanny Bay Salmonid Enhancement	Deep Bay Creek Habitat Mapping
2022	BC Conservation Foundation	Tire Wear Toxicant Sampling across RDN – Year 1
2023	Guardians of our Salish Estuaries	Little Qualicum River Estuary Restoration – Year 2
2023	Gabriola Lands & Trails Trust	Riparian Education & Restoration on Gabriola creeks – Year 1
2023	BC Conservation Foundation	Tire Wear Toxicant (PPDQ) Monitoring – Year 2
2023	MVIHES	Shelly Creek Land Survey for restoration potential
2023	BC Conservation Foundation	Community-based Flow Monitoring Network

STEWARDSHIP SEED FUNDING – 2024 PROJECTS

1. Guardians of our Salish Estuaries (GooSE)

YEAR 3 - LITTLE QUALICUM ESTUARY RESTORATION AND RESEARCH



Funds Allocated: \$5,000

Project Goals: Restore channel-edge habitat that has been overgrazed by Canada geese and explore restoration methods, invasive species, and nutrient cycling.

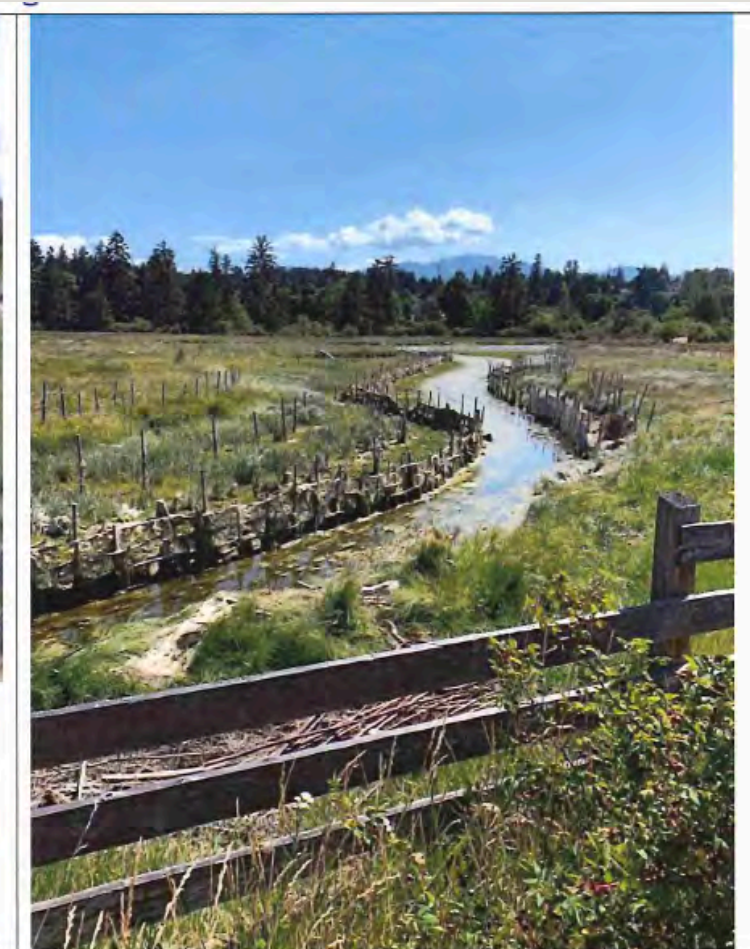
- Remove existing fencing from marsh habitat and build eco-cultural exclosures around sensitive habitat
- Transplant sedge species from donor sites and plant nursery sedges
- Mitacs supported research investigating plant survival, invasive species, and nutrients



Courtesy of GooSE



Little Qualicum River Estuary – May 21 2009, before GooSE restoration and Canada Goose mitigation. Recent Canada Goose marsh platform degradation noticeable along an eroded wide tidal channel viewed from Surfside Road.



Little Qualicum River Estuary – July 2023. Carex transplanted in 2022 and 2023 are doing well within Eco-Cultural habitat exclosures. Tidal edge vegetation recovering and narrowing.

STEWARDSHIP SEED FUNDING – 2024 PROJECTS

2. Gabriola Lands & Trails Trust (GaLTT)



YEAR 2 - GABRIOLA STREAMSIDE AWARENESS AND RESTORATION CAMPAIGN

Funds Allocated & Issued: \$5,000

Project Goals: Bring watershed awareness to streamside property owners along Goodhue, Castell, and Descanso Valley Creek and support property owners undertaking streamside restoration

- Focused streamside landholder outreach and education on riparian protection and restoration; working with over 20 properties, including a local farm and golf course
- Development of public outreach materials and signage
- Volunteers and school groups involved in restoration planting on private property supported by a QEP



Goodhue Creek and You
... Caring for water quality and wildlife habitat on your property

You are living in the Goodhue Creek watershed.

A watershed is an area of land that catches rain and snow and drains or seeps into a marsh, stream, creek, river, lake or groundwater. Gabriola's watersheds are vital for the health and quality of our groundwater and are critical to maintaining nature's biodiversity.

You may be lucky enough to have Goodhue Creek, or a wetland or smaller wintertime creeklet flowing right through your property. The privilege of living alongside a creek or stream comes with the responsibility of understanding how to manage your property to protect the health of our most precious natural resource. Even if it runs dry in the summer or has portions that are now roadway ditches, these are all waterways: the lifeblood of the landscape.

These waterways provide ecological services that landholders, communities, and wildlife jointly benefit from. They are truly an oasis of biodiversity.

1 Commons wetland viewed from Good Earth

STEWARDSHIP SEED FUNDING – 2024 PROJECTS

3. Qualicum Beach Streamkeepers (QBS)

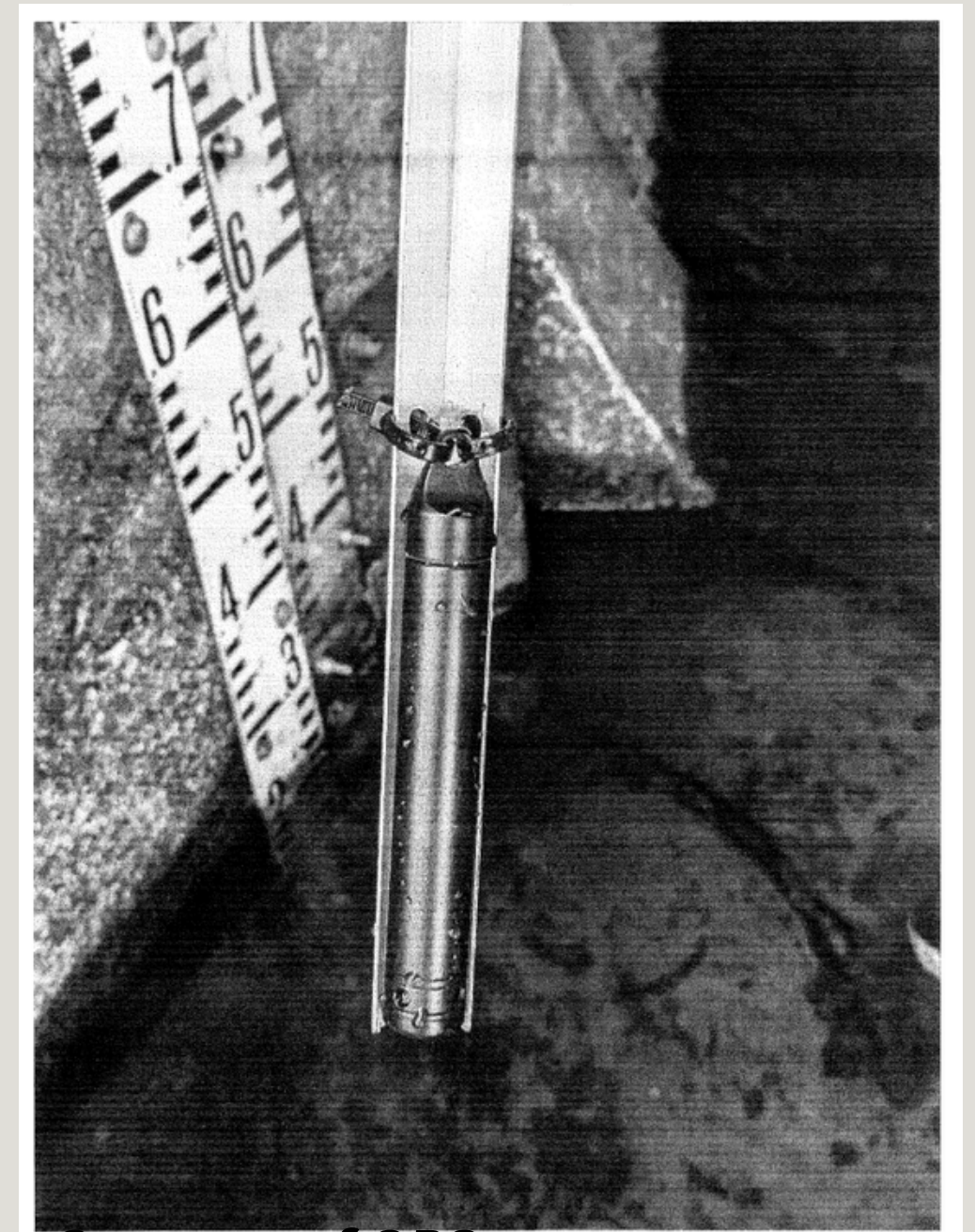


GRANDON CREEK HYDROMETRIC DATALOGGER REPLACEMENT

Funds Allocated & Issued: \$1,147

Project Goals: Replace an existing stream level logger with a new logger and assembly to ensure the continued collection of flow data

- Outdated Solinst Levelogger 4 replaced with a Solinst Levelogger 5 by QBS volunteers and BC Conservation Foundation
- QBS volunteers will carry out flow measurements at least six times annually to validate datalogger readings
- The site supports the Community-Based Flow Monitoring Network initiative led by BC Conservation Foundation and BC Ministry of Environment and Climate Strategy



Courtesy of QBS Grandon Creek datalogger April, 2024 1/1

STEWARDSHIP SEED FUNDING – 2024 PROJECTS

4. Qualicum Beach Streamkeepers (QBS)



STREAM MAPPING AND FISH HABITAT ASSESSMENT WITHIN BEACH CREEK, GRANDON CREEK, AND WHISKY CREEK

Funds Allocated: \$10,000

Project Goals: Map and complete fish habitat assessments within each watershed to inform land use planning and future restoration opportunities

- Supported by local biologists and technical experts, QBS volunteers will be involved in ground truth mapping and habitat assessment
- Limited geospatial data on these urban watercourses
- Biologists will develop mapping data to share with the Province and RDN



Courtesy of QBS & Weaver Tech LTD

STEWARDSHIP SEED FUNDING – 2024 PROJECTS



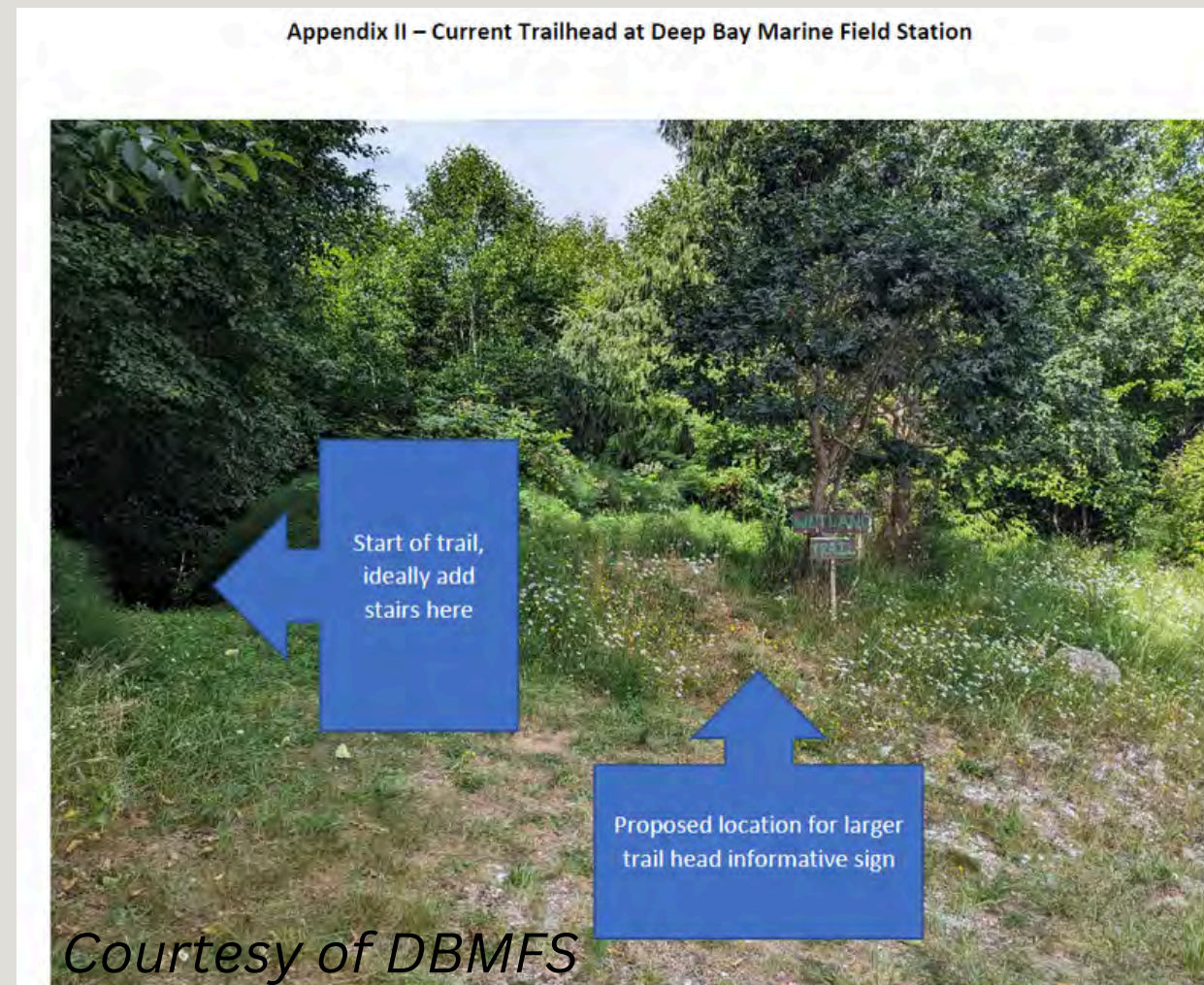
5. VIU Deep Bay Marine Field Station (DBMFS)

WETLAND TRAIL ENHANCEMENT AND EDUCATIONAL SIGNAGE

Funds Allocated: \$10,000

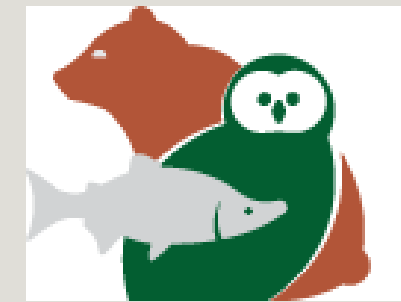
Project Goals: Increase knowledge and appreciation of the ecological and cultural features within a community wetland trail

- Create accessibility, install interpretive signage, and encourage community members, school groups, and visitors to explore and learn



STEWARDSHIP SEED FUNDING – 2024 PROJECTS

6. BC Conservation Foundation (BCCF)



YEAR 2 - INITIATING A COMMUNITY-BASED FLOW MONITORING NETWORK

Funds Allocated: \$4,956

[Learn more at: cfmnvi.com](https://cfmnvi.com)

Project Goals: Improve hydrometric data collection to better understand stream flow conditions across the ECVI and create a network of engaged stewards

- Expand to include two new community groups and sites
- Provide volunteer training and support
- Quality check, upload, and share data



Figure 2. Departure Creek station facing downstream toward the control. Levellogger housing and staff gauge are visible on right side of photo. *Courtesy of BCCF*

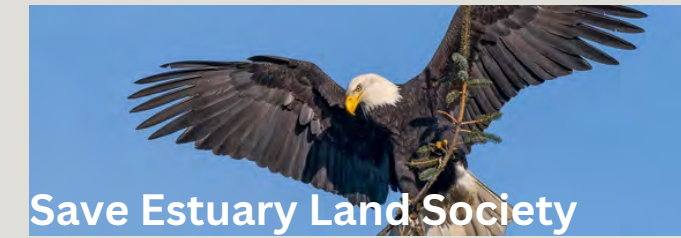
Table 1. Currently active and proposed community groups and monitoring sites involved in the Flow Network. Shading indicates stations within the RDN.

Community Group	Monitoring Sites	Station ID
<i>Currently Active</i>		
Departure Creek Streamkeepers/ Nanaimo & Area Land Trust	Departure Creek	08HB0033
Qualicum Beach Streamkeepers	Grandon Creek	08HB0011
	Beach Creek	08HB0031
Beaufort Watershed Stewards	Cook Creek	08HB0032
	Wilfred Creek	08HB0024
Tsolum River Restoration Society	Tsolum River	08HB0012
Morrison Creek Streamkeepers	Morrison Creek	08HB0034
<i>Proposed for 2024-25</i>		
Walley Creek Streamkeepers	Walley Creek	n/a
Friends of Linley Valley*	Cottle Creek	n/a

*newly established stewardship group

STEWARDSHIP SEED FUNDING – 2024 PROJECTS

7. Save Estuary Land Society



HYDROLOGICAL ASSESSMENT WITHIN THE FRENCH CREEK NATURE PRESERVE

Funds Allocated: \$1,380

Project Goals: To assess the hydrological connectivity of the French Creek Estuary Nature Preserve (FCENP) wetlands and water channels to identify restoration opportunities

- The Nature Preserve contains relic channels that connect French Creek to the estuary, which now fill with groundwater and run-off, creating freshwater wetlands
- Assessment will inform a FCENP Management Plan

[Learn more at www.getinvolved.rdn.ca/fce-nature-preserve](http://www.getinvolved.rdn.ca/fce-nature-preserve)



Courtesy of Denise Foster and Save Estuary Land Society

STEWARDSHIP SEED FUNDING – 2024 PROJECTS

8. Fanny Bay Salmonid Enhancement Society (FBSES)

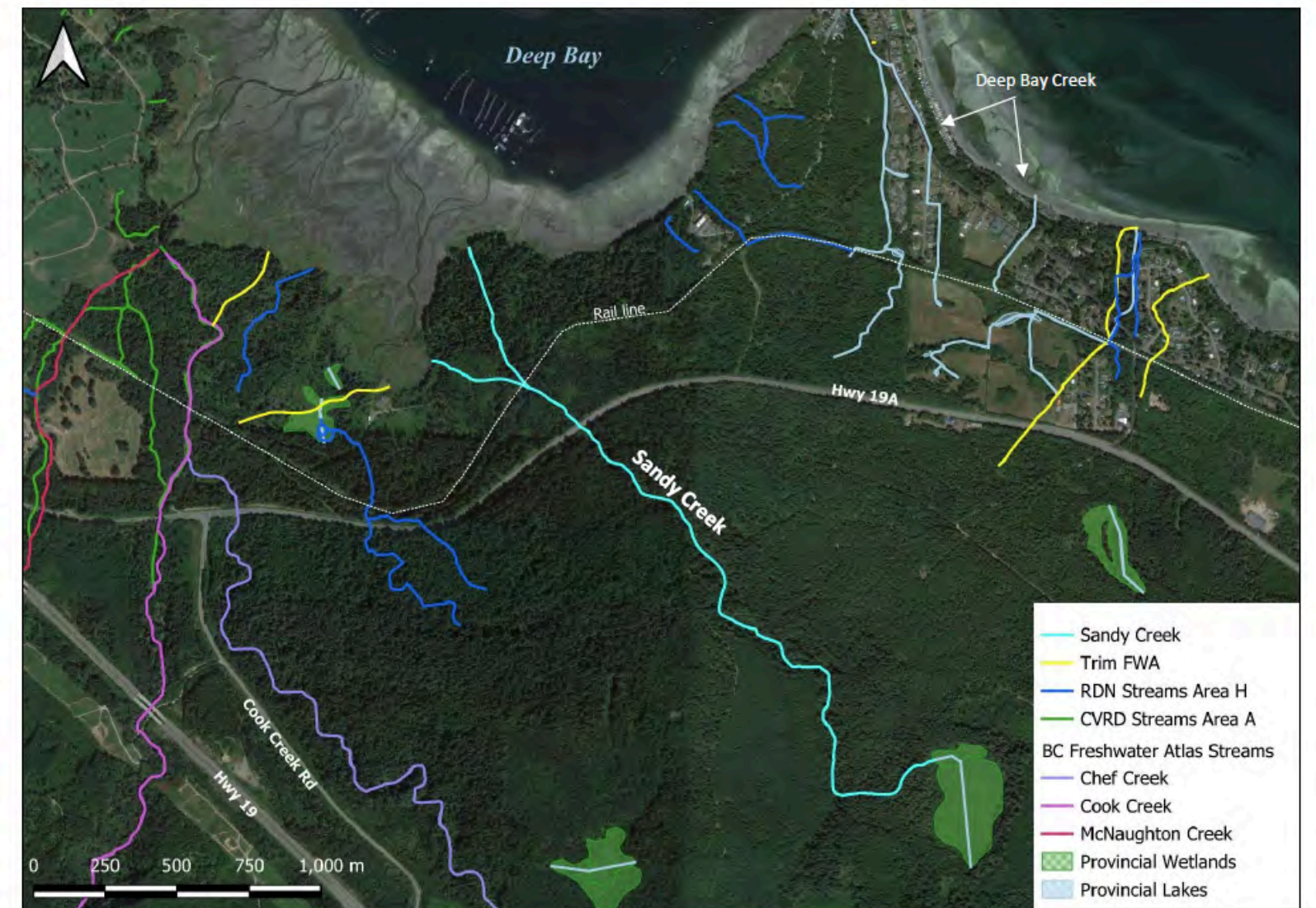
STREAM MAPPING AND HABITAT ASSESSMENT WITHIN THE SANDY CREEK WATERSHED

Funds Allocated: \$5,000

Project Goals: To map and assess Sandy Creek located in the Bowser area.

- Supported by local biologists and technical experts, FBSES volunteers will be involved in ground truth mapping and habitat assessment
- The purpose of stream mapping is to:
 - Provide GIS data to the Province and decision makers
 - Identify previously unidentified tributaries and ditches
 - Assess existing habitat values
 - Assess low summer flow refuge habitat
 - Identify barriers to fish access
 - Observe impacted or underperforming riparian habitats
 - Identify opportunities for future enhancement projects

Map 1. The current mapped extent of Sandy Creek (light blue). (QGIS)



STEWARDSHIP SEED FUNDING – 2024 PROJECTS

9. Friends of French Creek Stewardship Society (FFCSS)

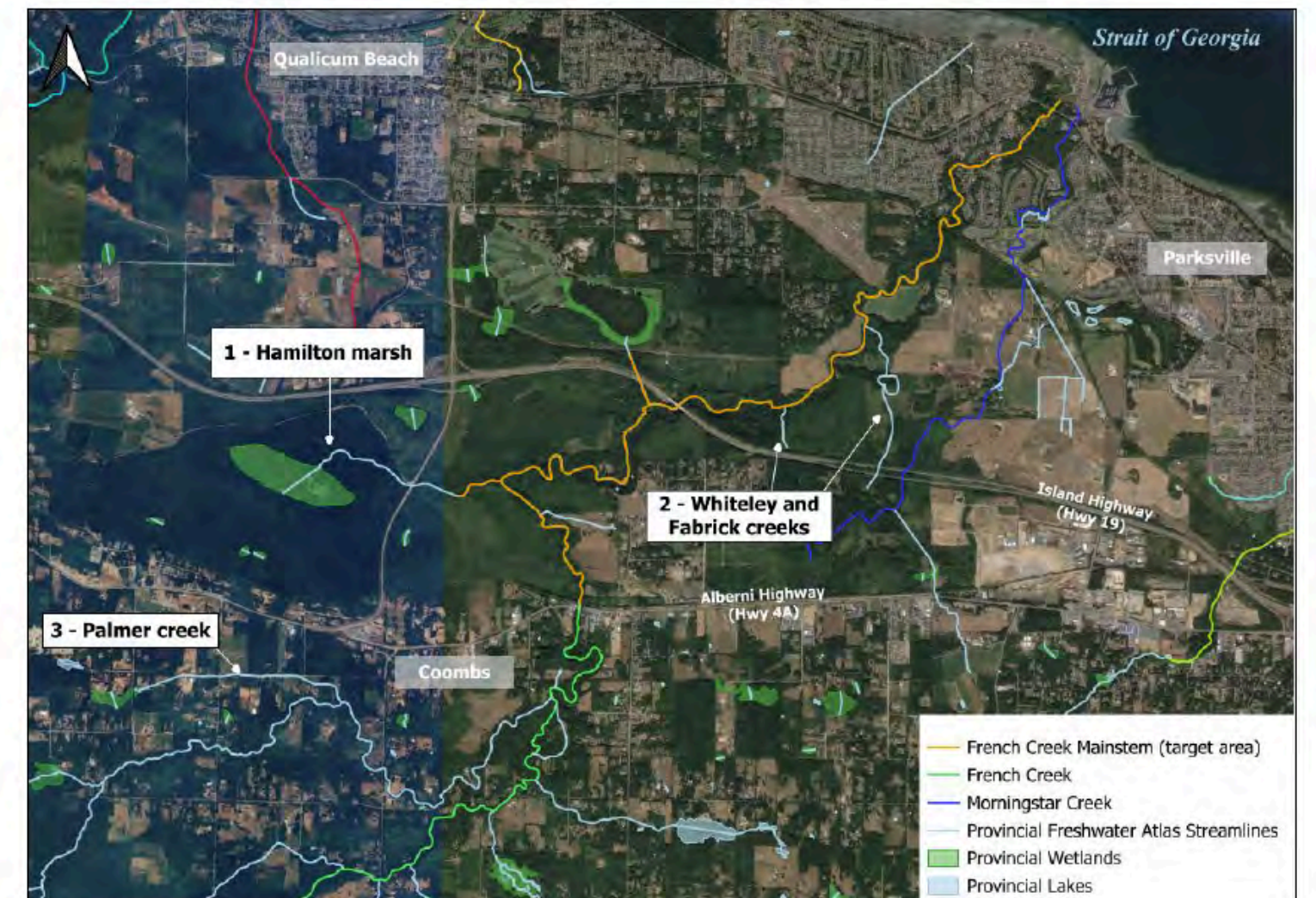
STREAM MAPPING AND HABITAT ASSESSMENT WITHIN THE FRENCH CREEK WATERSHED

Funds Allocated: \$2,518.60 in 2024; additional \$2,481.40 allocated for 2025

Project Goals: To map and assess the French Creek watershed

- Supported by local biologists and technical experts, FFCSS volunteers will be involved in ground truth mapping and habitat assessment
- The purpose of stream mapping is to:
 - Provide GIS data to the Province and decision makers
 - Identify previously unidentified tributaries and ditches
 - Assess existing habitat values
 - Identify barriers to fish access
 - Observe impacted or underperforming riparian habitats
 - Identify opportunities for future enhancement projects

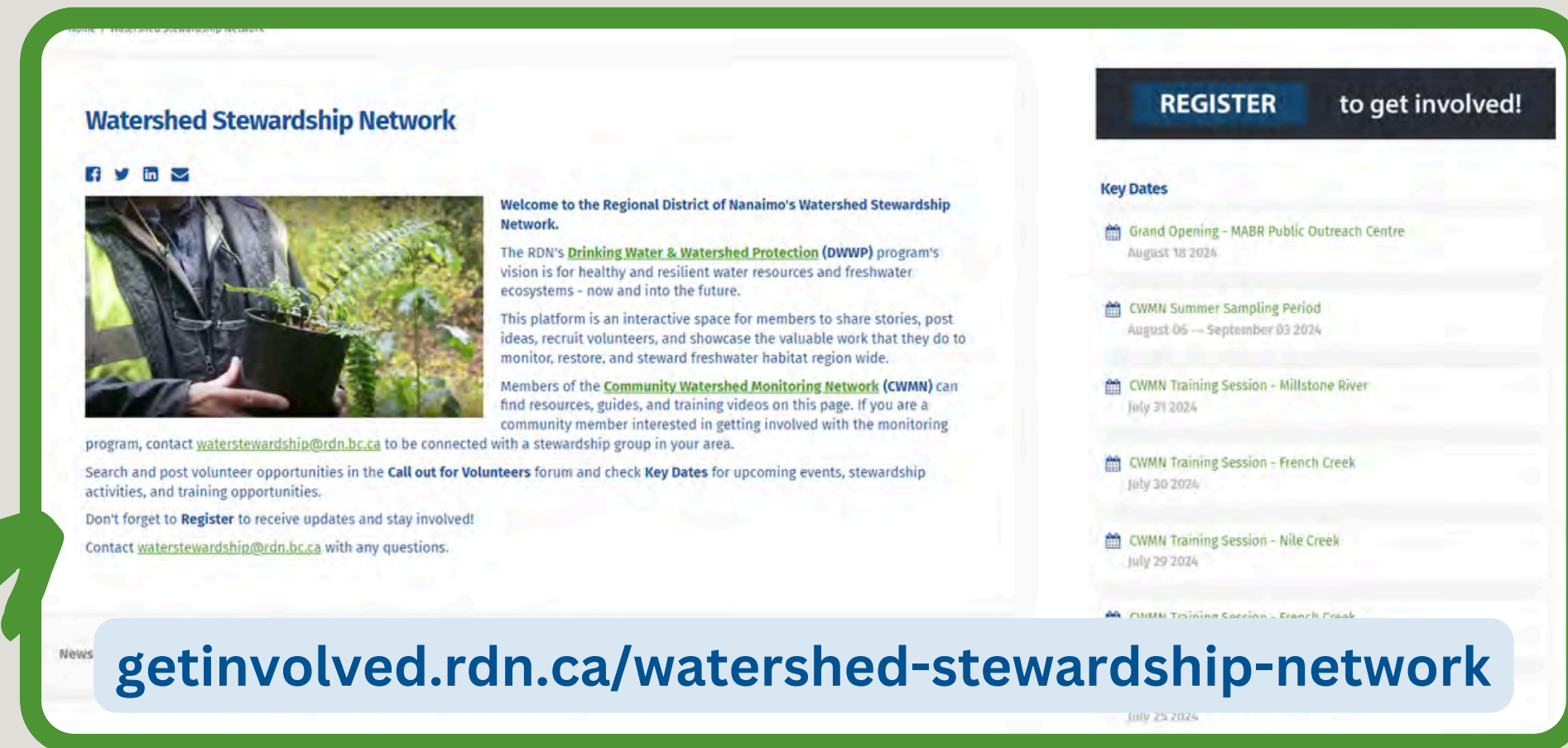
Map 1. The current mapped extent of French Creek and its tributaries, as per the Provincial Freshwater Atlas. The mainstem of French Creek to be ground-truthed is outlined in orange (from the Strait of Georgia to the Alberni Highway); while 3 groups of tributaries to be ground-truthed are indicated by the arrows. (QGIS)



STEWARDSHIP SEED FUNDING – 2024 PROJECTS

New this year and looking into 2025

- Increased program budget from previous year to support a greater number projects
- Increase project support to up to \$10,000 to accommodate rising costs of materials and services
- Develop an internal project tracking database
- Online electronic webforms to simplify the application process
- Highlight projects through a newsletter linked to the RDN's **Watershed Stewardship Network Get Involved** page

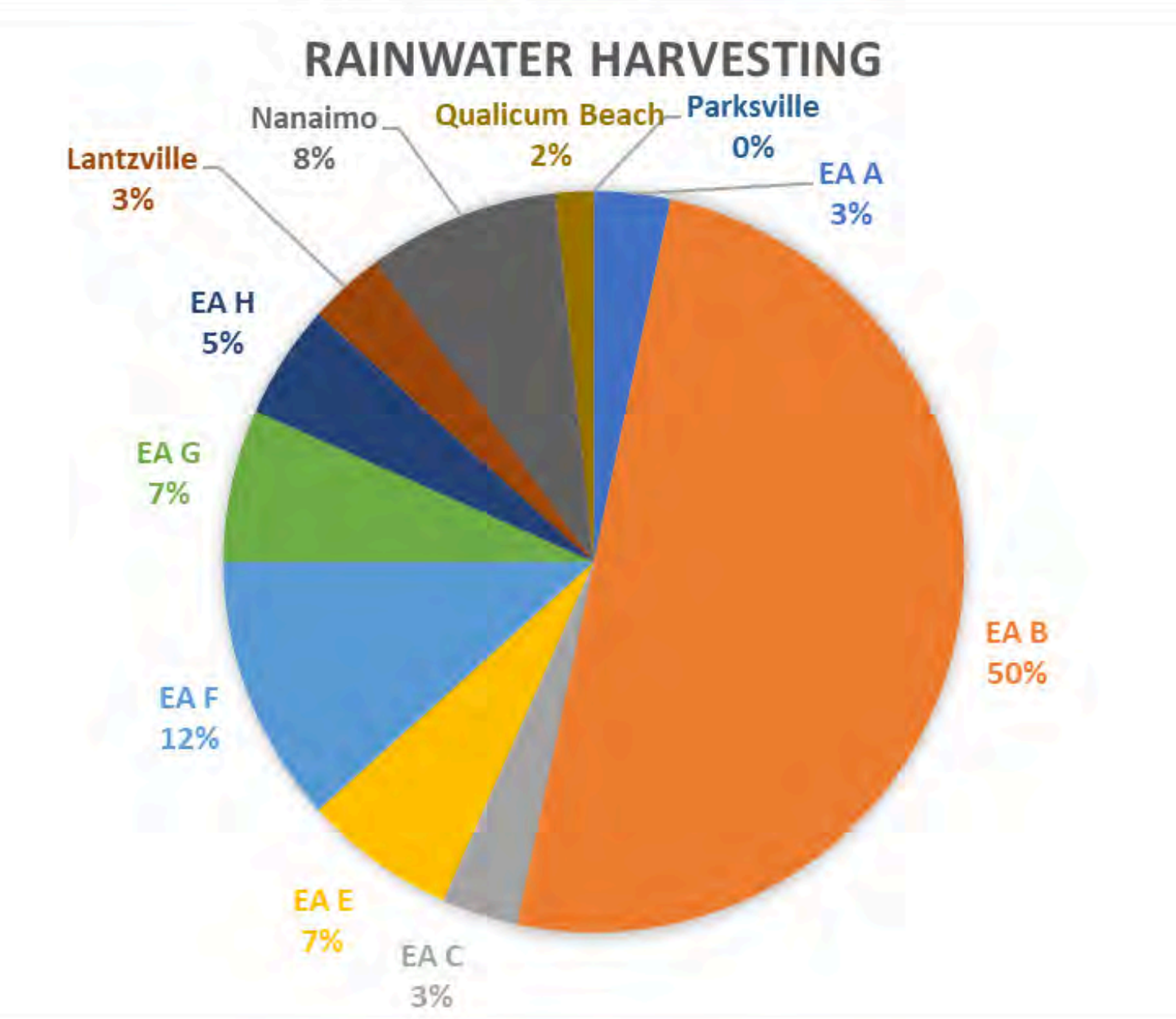


The screenshot shows the 'Watershed Stewardship Network' website. The main content area includes a welcome message, a photo of a person holding a potted plant, and information about the Drinking Water & Watershed Protection (DWWP) program and the Community Watershed Monitoring Network (CWMN). A 'REGISTER to get involved!' button is visible in the top right. A 'Key Dates' section lists several events, including a Grand Opening and multiple CWMN training sessions. At the bottom, a blue banner displays the URL: getinvolved.rdn.ca/watershed-stewardship-network. A green arrow points from the text 'Get Involved page' in the list above to this URL.

WATER STEWARDSHIP REBATES – 2024 REVIEW

Rainwater Harvesting

- Rebate increased this year from \$750 to \$1000 maximum rebate off the installation of 1000 imperial gallons or more of rainwater storage.
- Funds were carried over from 2023 and from other rebate programs which were not fully used this year to allow for a total of 60 applications
- Rebate is now fully subscribed for 2024



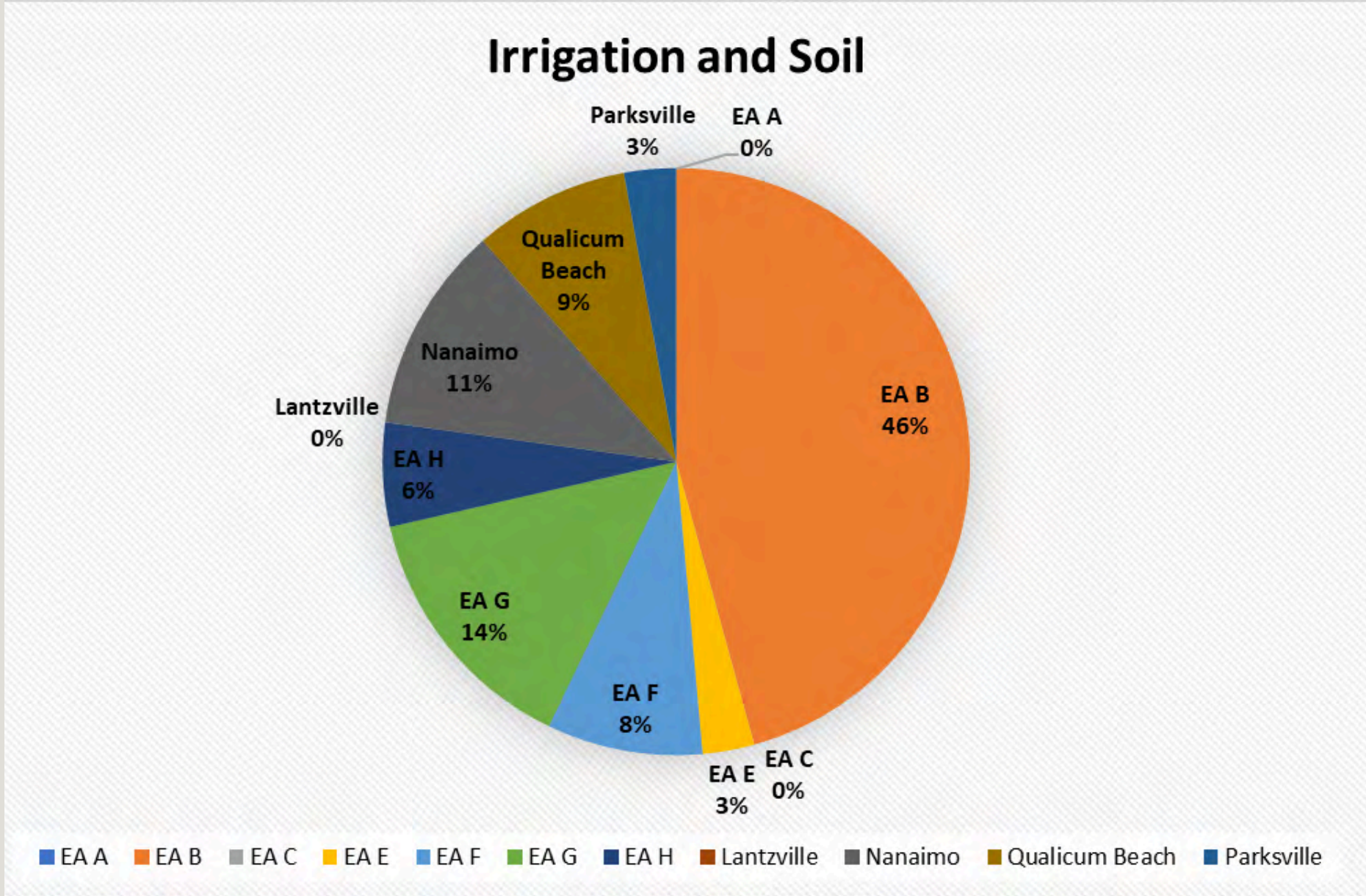
Rebate Applications	Total Allocated	Rebates Issued	Total Issued
60	48,000 +	32	30,658

EA A	EA B	EA C	EA E	EA F	EA G	EA H	Lantz	Nan	QB	PV
2	30	2	4	7	4	3	2	5	1	0

WATER STEWARDSHIP REBATES – 2024 REVIEW

Irrigation and Soil

- 35 Irrigation and Soil rebates were received this year with 4 still waiting for final claim documents
- 25 rebates were for Soil Improvements only
- 46 % from EA B which were almost all soil rebates. This equals about 28% of funds going to these 16 rebates.
- This chart shows the number of applications but does not reflect the funds allocated which varies depending on the rebates given (from \$100-\$675)



Rebate Applications	Total Allocated	Rebates Issued	Total Issued
35	15,000	31	5,674.20

EA A	EA B	EA C	EA E	EA F	EA G	EA H	Lantz	Nan	QB	PV
0	16	0	1	3	5	2	0	4	3	1

WATER STEWARDSHIP REBATES – 2024 REVIEW

Irrigation and Soil

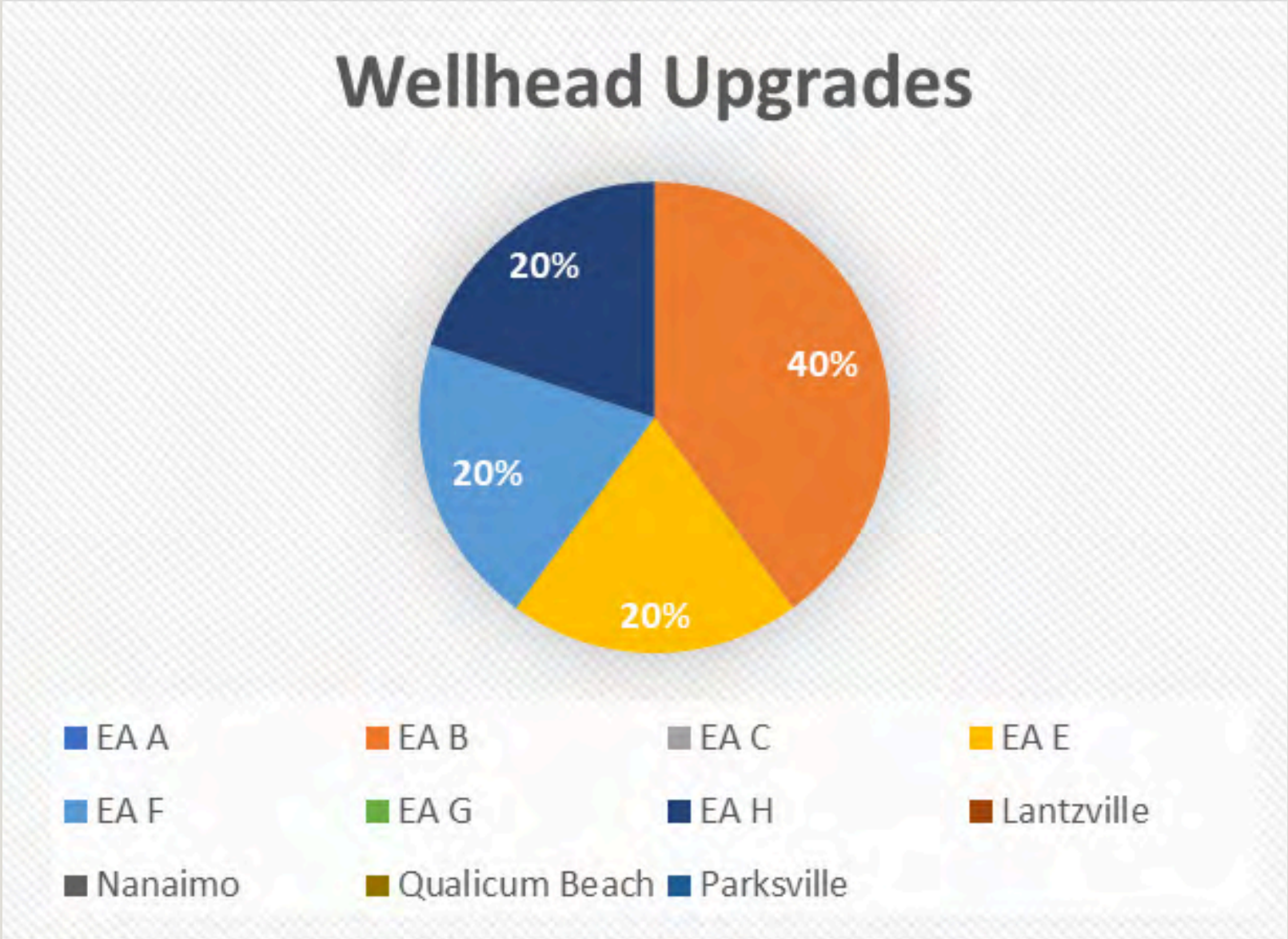
- **Options to include Strata's in this rebate program:**
 1. Create a **ratio calculation** of land space:units to determine eligibility. Would need to know the area of the property covered by irrigated land which may be more challenging to determine.
 2. Have **brackets** for number of units (1-25 = \$500, 25-50= \$1000) etc.
 3. Have **one amount per property** regardless of size or # of units (ie. max \$1000).
 4. Or apply the **same amounts as individual households** receive ie. \$650 max
 5. **Leave the program as-is** and only apply to individual households

Smart Controller	\$100
Rain Sensor or Weather or soil Moisture Sensor	\$75- \$125
Drip Irrigation	\$200
Matched Precipitation (MP) Rotators	\$50
Quality Top Soil, Compost, or Other Organic Mulch	50% off (up to \$100)
Complete Both Irrigation System Upgrades & Soil Amendment	\$100

WATER STEWARDSHIP REBATES – 2024 REVIEW

Wellhead Upgrades

- Rebate program promoted at WellSmart workshops in the Spring and Fall
- 5 total rebates this year, most included the WellCap, Stick up extension and surface seal.
- 2023- 4 rebates, 2022-9, 2021- 7
- 2025 will be reviewing advertising for this rebate to increase uptake



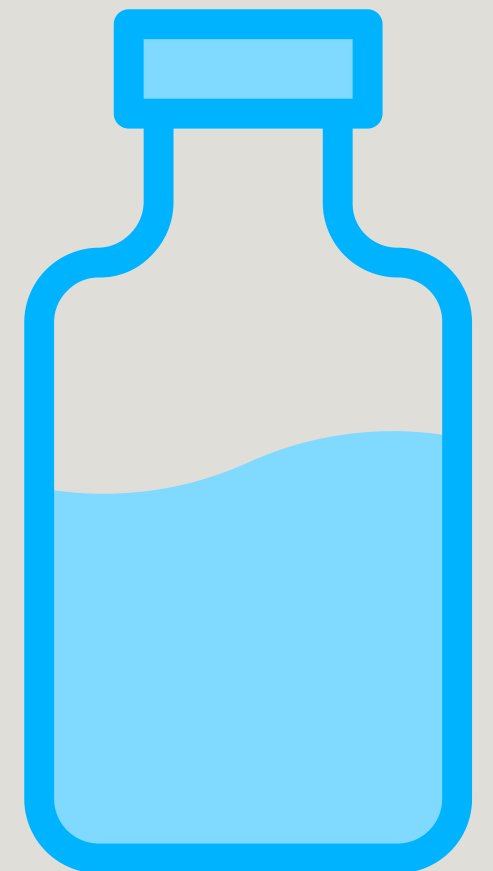
Rebate Applications	Total Allocated	Rebates Issued	Total Issued
5	11,250	3	1,250

EA A	EA B	EA C	EA E	EA F	EA G	EA H	Lantz	Nan	QB	PV
0	2	0	1	1	0	1	0	0	0	0

WATER STEWARDSHIP REBATES – 2024 REVIEW

Well Water Testing

- WWT Rebate processing changes for 2024:
 - Now pre-approval structure same as other rebate programs
 - Diversity of labs on website- choice of water testing location in hands of the applicant
 - Applicants are now required to share their results with the RDN
 - RCU admin staff now administrating several steps of the rebate process
- Rebate was on-hold for most of 2024 with a ‘soft launch’ for those who had inquired and/or attended a WellSmart workshop
- Will fully launch in early 2025 and allow those who tested their water in 2024 to apply



CLIMATE-INFORMED WATER SUPPLY PLANNING COMMUNICATIONS PROJECT UPDATE

Climate Action Technical Advisory Committee Recommendation: 2022-2024

Priority 1:
Ensure ongoing Water Supply
Resiliency supported by
Natural Asset Management

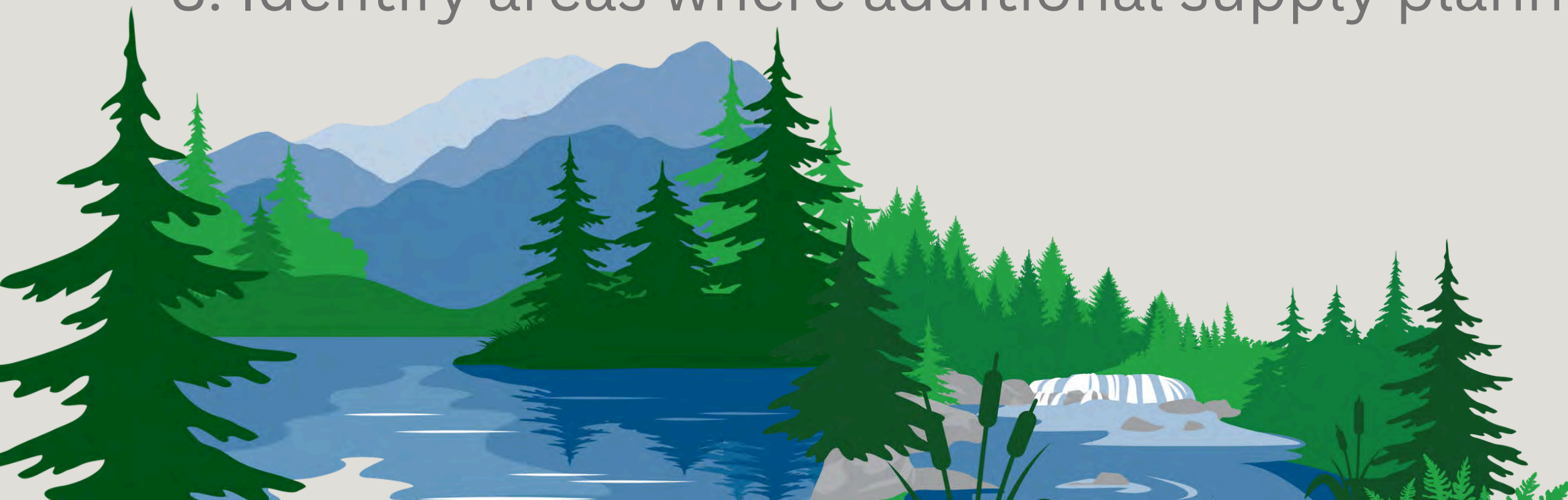
- Ensure water supply resilience under expected future climate scenarios
- Encourage climate-focused supply planning across the region
- Support public understanding of climate-related supply planning



CLIMATE-INFORMED WATER SUPPLY PLANNING COMMUNICATIONS PROJECT UPDATE

To advance this priority, the CATAC identified immediate implementation tasks for 2022-2024:

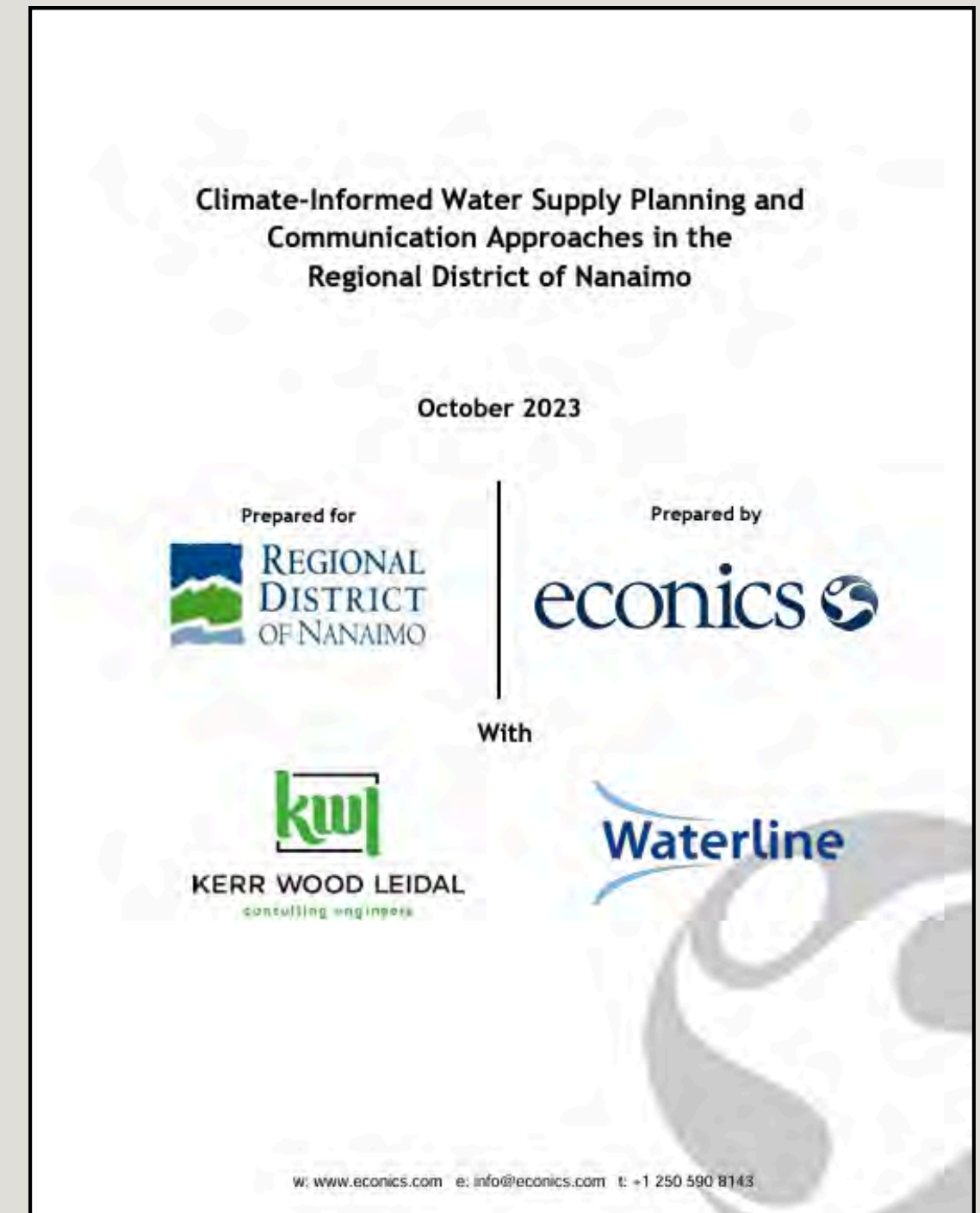
1. Document state of existing, climate-informed supply planning across water purveyors in the RDN (where purveyors are willing), including contingency/emergency supplies.
2. Make RDN information easily accessible and understandable by the public and encourage other water purveyors to do the same.
3. Identify areas where additional supply planning work is needed.



CLIMATE-INFORMED WATER SUPPLY PLANNING COMMUNICATIONS PROJECT UPDATE

Implementing CATAC's Recommendation:

- Delivered by both RDN DWWP and Energy & Sustainability depts.
- Worked with Econics and KWL – consultant team familiar with the RDN context as it relates to provision of water services
- Developed a Best Practices guide for Climate-Informed Water Supply Planning
- Interviews with regional water service providers to understand current practices
- Final report provided observations and recommendations of collaboration, coordination, and communication opportunities



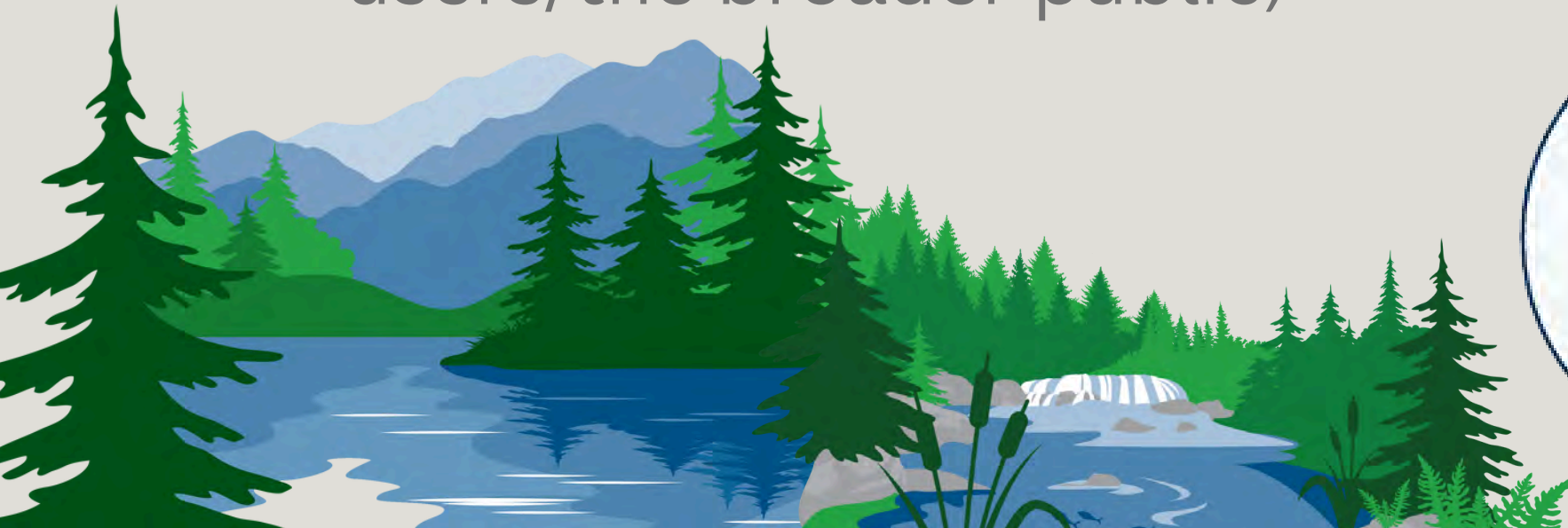
CLIMATE-INFORMED WATER SUPPLY PLANNING COMMUNICATIONS PROJECT UPDATE

Outcomes from the Report: Leading Practices

Protecting drinking water from the impacts of climate change

Leading Practices for Water Service Providers:

- Understand how much source water is available now
- Forecast future demand for drinking water
- Plan and manage for the impacts of climate change including droughts and emergencies
- Communicate the actions water service providers are taking (to water users/the broader public)



CLIMATE-INFORMED WATER SUPPLY PLANNING COMMUNICATIONS PROJECT UPDATE

Communications Objectives:

- Work with water service providers to provide water users/customers with easily accessible and understandable communications materials that will:
 - Communicate actions that service providers are taking to prepare for climate impacts on water supplies
 - Increase residents understanding in their local water source



CLIMATE-INFORMED WATER SUPPLY PLANNING COMMUNICATIONS PROJECT UPDATE

Communications Materials include:

- Fact sheet for posting to websites (for all service providers to use/modify for use)
- A “Climate Smart” mini toolkit that includes:
 - A Climate Smart Leading Practices one-page hand-out
 - A Climate Smart Action Report template for posting to websites (*easy-to-complete for water service providers, unified look-and-feel*)
 - Interactive map - “Where my water comes from” that can be linked to / from service provider web pages
 - Newsletter / postcard / social media template to encourage visitation to pages

The image displays two sample communication materials. The first is a cover for a 'Climate Smart Action Report' for 'The City of [Municipality]'. It features a 'CLIMATE SMART' logo at the top, a photograph of a salmon jumping in a river, and the title 'Climate Smart Action Report' in a teal box. The second material is a fact sheet titled 'Taking action to protect our drinking water from the impacts of climate change'. It includes text about water conservation, climate change risks to drinking water, and a section for 'A Climate Smart water service provider' with four bullet points: understanding source water availability, forecasting future demand, managing climate change impacts, and communicating actions to users. The fact sheet also includes a 'Becoming Climate Smart' section and a list of actions to support the city.

CLIMATE-INFORMED WATER SUPPLY PLANNING COMMUNICATIONS PROJECT UPDATE

Next Steps:

- ✓ • Workshop #1 with Water Purveyors
- Complete development of communications materials based on feedback
- Workshop #2 with Water Purveyors to share materials - first week of December
- Distribute materials to water purveyors
- Set up RDN online hub (via Get Involved page and/or links on RDN Water Service Area pages) to share communications materials

CLIMATE SMART

Climate Smart Action Report
The City of [Municipality]

REGIONAL DISTRICT OF NANAIMO

Taking action to protect our drinking water from the impacts of climate change

Drinking water is a precious resource that needs to be conserved and protected. By working together, the City of [Municipality] and water users (residents, businesses and institutions) can help ensure we have safe, sufficient drinking water now and in the future.

Climate change poses new risks to our drinking water

While population growth, land development and seasonal water scarcity all place pressures on our water resources, climate change is presenting new and urgent challenges to our drinking water.

Climate change on eastern Vancouver Island is expected to result in longer, drier summers, wetter winters and more extreme weather events.

There may be less water available from reservoirs, rivers and aquifers during the warmer months and reduced water quality during the wetter months. Floods, landslides and forest fires may happen more frequently, posing new risks to water infrastructure.

Becoming Climate Smart

To protect our drinking water from the impacts of climate change, the City of [Municipality] is implementing Climate Smart Best Practices. These best practices were developed out of research gathered from water service providers across the region and generally accepted practices for climate-informed water supply planning.

Climate Smart Best Practices will support the City of [Municipality] to:

- Build a more resilient water supply
- Benchmark and report out on the actions we are taking to protect our drinking water from the impacts of climate change

A Climate Smart water service provider:

- Understands how much source water is available now
- Forecasts future demand for drinking water
- Plans and manages for the impacts of climate change including droughts and emergencies
- Communicates its Climate Smart actions to water users

Taking action to protect our drinking water from the impacts of climate change

The City of [Municipality]

CLIMATE-INFORMED WATER SUPPLY PLANNING COMMUNICATIONS PROJECT UPDATE



LEGEND

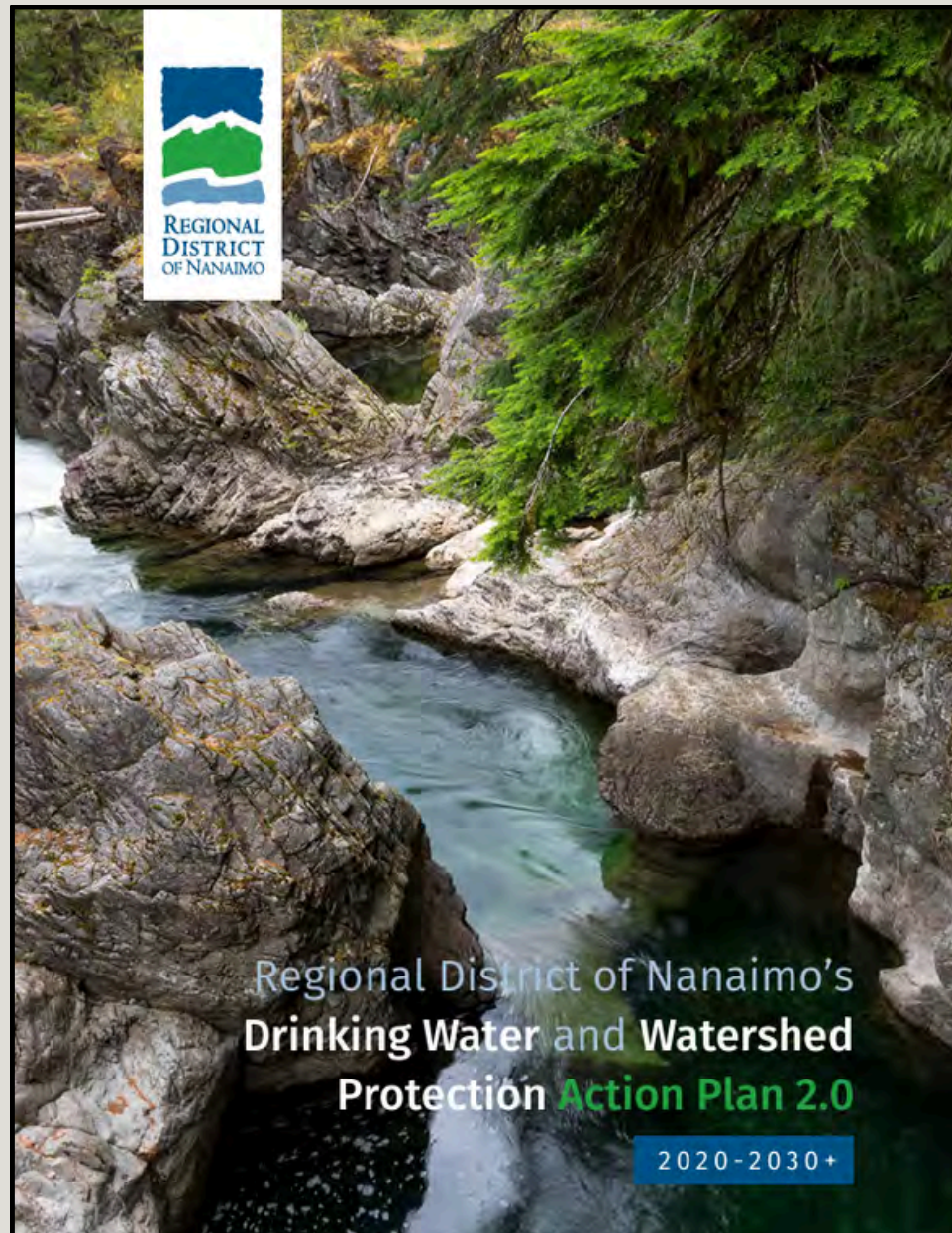
- GROUNDWATER SOURCE - COMMUNITY WATER SYSTEM
- SURFACE WATER SOURCE - COMMUNITY WATER SYSTEM
- BOTH SURFACE WATER AND GROUNDWATER SOURCES - COMMUNITY WATER SYSTEM
- WATERSHED AREAS
- AREAS WITH PRIVATE WELLS

WATER SERVICE AREAS

- RDN Water Service Area
- Deep Bay Improvement District
- Bowser Waterworks District
- Qualicum Bay-Horne Lake Waterworks
- Little Qualicum Waterworks District
- Town of Qualicum Beach
- EPCOR French Creek Water Utility
- City of Parksville
- District of Lantzville
- City of Nanaimo
- Southwest Extension Water District (supplied from City of Nanaimo)
- North Cedar Improvement District





DWWP 2024 YEAR IN REVIEW

Refer to handout summarizing key accomplishments in 2024



DWWP Theme	DWWP Initiative <i>(* = continuing; ^ = new ...as of 2024)</i>	Action Detail	Complete	>>2025
		2024		
Water Awareness and Stewardship	5.1.1 Community Based Social Marketing (CBSM) review / redesign of outreach programs	Ongoing Implementation	✓	
	5.1.1 Public research survey for benchmarking on water behaviours, perspectives and priorities	-		
	5.1.1 Multimedia outreach *	Updates to graphics, water sources materials	✓	
	5.1.1 Demonstration sites / interpretive signage *	Admin building rain garden	✓	✓
	5.1.1 Youth water leadership engagement *	Ongoing Implementation	✓	
	5.1.1 Team WaterSmart tours, community events, workshops, school materials, irrigation	Ongoing Implementation	✓	
	5.1.2 Expand existing rebate programs*^	increased funds for RWH	✓	
	5.1.2 Explore new rebate for water flow meters for wells^	Push out to 2025 >>		
	5.1.3 Agricultural sector outreach^	Push out to 2025 - 2026 >>		
	5.1.3 ICI sector outreach^	-	-	-
	5.1.4 Expand seedfunding for restoration projects*^	15% increase	✓	
	5.1.4 Water stewardship organizations networking opportunities^	Ongoing Implementation	✓	
	5.1.5 Support regional water conservation plans*	-	-	-
	5.1.5 Coordinate regional watering restrictions communications *	Ongoing Implementation	✓	
	5.1.5 Support small water systems with annual working group session*	-	-	-
	5.1.6 Participate in and coordinate advisory committees*	Ongoing Implementation	✓	
Water Science and Information	5.2.1 Maintain regional surface water (CWMN) and groundwater (VOW) monitoring*	Initiated Strategic Planning	✓	
	5.2.1 Hydrometric and climate monitoring partnerships*	BCCF / Prov / VIU		✓
	5.2.1 Data management *^	GW Data Management System	✓	
	5.2.1 Explore potential for Benthic Invertebrate Monitoring (ie. CABIN)^	Continued pilot in 2023/Strategic Planning	✓	
	5.2.1 Wetland monitoring and mapping *^	Citizen science	✓	
	5.2.2 Water budget phase 3*	Cedar-YP initiated	✓	
	5.2.2 Surface water trend analysis*	CWMN Tech Memo	✓	
	5.2.2 Groundwater trend analysis*	Pre-Summer Reporting	✓	-
	5.2.2 Quantifying ecosystem services via ecological accounting pilot (in partnership with MNR)	French Crk EAP year 2; Support Reg. MNR	✓	✓
	5.2.2 Snowpack modelling^	completed pilot - ongoing support with partner	✓	
	5.2.2 Water balance modelling (rainwater management) Linked to 5.2.4	French Creek Phase 2 complete	✓	
	5.2.3 Interactive water map(s)*^	Update DWWP Website watershed map	✓	
	5.2.3 Data visualization through dynamic graphs^	Groundwater level graphs	✓	
	5.2.3 Publications*^	SooA 90% complete, release in 2025	✓	✓
5.2.4 Develop watershed performance targets for priority water region^	French Creek implementation		✓	
Water-centric Planning	5.3.1 Integrating water information into key long-range planning processes*^	Ongoing Area F OCP, RGS	✓	
	5.3.1 Provide regional water information to inform referrals from Current Planning and the	Staff Time	✓	
	5.3.1 Provide regional water information to inform Emergency Services operations*	Staff Time	✓	
	5.3.1 Develop a regional rainwater management strategy^	Complete	✓	
	5.3.2 Best practices and policy research*^	Water governance	✓	

DWWP YEAR IN REVIEW: ACTION PLAN PROGRESS INDICATORS

		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	

DWWP YEAR IN REVIEW: ACTION PLAN PROGRESS INDICATORS

Theme	Progress Indicator 1		Progress Indicator 2		Progress Indicator 3		Progress Indicator 4	
<p>Water Awareness and Stewardship</p>	<p>Reduction of metered water use over time</p>	<p>Over 30% reduction in per capita water demand in City of Nanaimo over past 14 years; 2.3% reduction in RDN Water Service Areas ** data is variable, need more consistency across all systems to be able to report **</p>	<p>Number of Restoration project completed</p>	<p>8 community-level restoration and research projects supported through Stewardship Seed Funding in 2024</p>	<p>Market research survey response indicating improved awareness</p>	<p>2021 benchmark survey complete, to be re-assessed in 2025</p>	<p>Improving trends in groundwater level and surface water quality</p>	<p>GW Level: Regional analysis identified increasing or stable trends in 13/ 22 aquifers reporting; 9 / 22 aquifers reporting had spatially variable trends with wells ranging from a large decline to increasing. SW Quality: Trend analysis was completed in 2023 with 3 streams added in 2024; variable results some parameters at some locations improving, others declining.</p>
<p>Water Information and Science</p>	<p>Number of sites with long-term (>3 years) datasets hosted on open Provincial platforms</p>	<p>Groundwater monitoring (VOW): 11 sites; Surface water quality (CWMN) 84 sites; Hydrometric stations 3; Climate stations 1</p>	<p>Completion of numerical water budget models for priority watersheds and aquifers</p>	<p>Initiated the Cedar- Yellowpoint- Cassidy Phase 3 Water Budget</p>	<p>Continued participation of community volunteers in citizen science efforts</p>	<p>14 returning stewardship groups (CWMN); 31 ongoing well monitoring volunteers</p>	<p>Number of publications communicating water science</p>	<p>Climate-Informed Water Supply Planning Communications Materials (in progress); State of Our Aquifers Newsletter (in progress); New Watering Restrictions Update communication material; Our Water Sources graphic update completed; Keynote Presentation for Streamkeeper AGMs.</p>
<p>Water-centric Planning and Policy Support</p>	<p>Number of planning documents and processes informed by DWWP actions / information</p>	<p>Area F OCP Update (in progress); Parks Biodiversity Plan; 10+ Development Referrals; Climate Best Practices For Water Supply Report; Muncial Natural Asset Initiative, RDN Climate Action Plan 2025-2029; City of Nanaimo Monitoring Strategy</p>	<p>Number of watershed performance targets developed</p>	<p>French Creek Water Region Performance Targets - Implementation, Monitoring, and Adaptive Manangement</p>	<p>Implementation of innovative rainwater managment policies and practices</p>	<p>Draft Rainwater Management Plan Checklist and Draft DPA with Rainwater Performance Targets</p>	<p>Successful advocacy with outside agencies</p>	<p>Communicated the results of the French Creek Water Budget to the Ministry of Water Land and Resource Stewardship and formally request Provincial leadership in water planning for the areas included in the scope of the report.</p>

DWWP YEAR IN REVIEW: ACTION PLAN PROGRESS INDICATORS

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LOOKING AHEAD TO 2025

- Cedar-Yellowpoint-Cassidy Water Budget Phase 3
- Community Watershed Monitoring Network Strategic Planning
 - Supported through Riparian Spatial Analysis map updates, engagement with stewardship groups and monitoring partners
- Climate Monitoring – Snowpack monitoring support
- Ecological Accounting Process Partnership with MABRRI - 3 year agreement, Year 3
- Water Attitudes Benchmark – Five-Year Progress Survey
- Supporting Rainwater Management / Watershed Protection Demonstration Sites, including signage and outreach materials
- Providing Stewardship Seed Funding to support watercourse enhancement projects
- School Freshwater Stewardship Education Delivery Contract (NALT) & Watershed Field Trips
- Ongoing water monitoring network operation, (including groundwater, surface water quality, hydrometric, lakes, wetlands) and reporting
- Ongoing rebate program delivery - Rainwater harvesting, Wellhead upgrades, Well Water Testing, Irrigation & Soil Improvements





THANK YOU
see you in 2025!