



## Regional District of Nanaimo

### Drinking Water & Watershed Protection Program

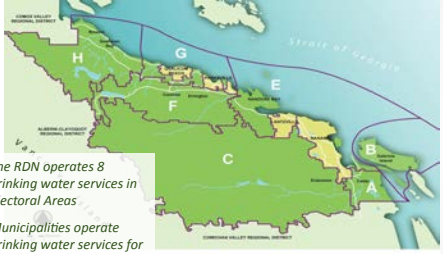


- BC's 3<sup>rd</sup> most populous RD
- Traditional territory of the Coast Salish People

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### A Federation of 4 Municipalities and 7 Electoral Areas



- The RDN operates 8 drinking water services in Electoral Areas
- Municipalities operate drinking water services for their residents

[ 2 ]


### Water is not confined by political boundaries



- Multiple watersheds and river systems.
- Drinking Water sourced from a combination of surface and groundwater.
- Small drainage basins vulnerable to short term variations.
- Important to manage water on a regional, watershed scale.


[ 3 ]

### Water is not confined by political boundaries



- Growth driven demand is increasing.
- Groundwater under stress.
- Surface water limitations in summer (when demand is highest).
- Important to manage water on a regional, watershed scale.

[ 4 ]



### Watershed stressors

- Regulatory authority widely distributed.
- No one group is resourced to tackle the problem.
- Addressing challenges requires partnerships.
- Regional District's natural role is "coordination".



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### Common Goals

*Why do we need to invest regionally in Watershed Protection?*

- Reduce cost to taxpayers (manage demand, optimize delivery)
- Ensure adequate, clean water supply (now and in the future)
- Enable better land use decisions (protect property values)
- Protect ecosystems & watershed health (i.e. fisheries resources)



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## Foresight

**2003**

- RDN Board identified DWWP as a priority in 2003-2005 Strategic Plan.

**2004**

- 2004 Action plan developed focusing on Electoral Areas.

**2006**

- DWWP Stewardship Committee established in 2006.

**2008**

- Committee mapped out a 10 year action plan, and budget.

**2012**

- Electoral Area referendum in 2008 secured elector assent to establish a DWWP service, funded through property tax assessment.
- In 2012 the 4 member municipalities joined the DWWP by servicing agreement.

**Stewardship Committee:**

- RDN Board and Staff
- Ministry of Environment
- Electoral Area residents
- Islands Trust
- Private Forest Lands Council
- Private water purveyors
- Stewardship community
- Island Health
- Water Improvement Districts
- Well Drilling Industry

## Program Funding

- The 2007 DWWP Action Plan provided a detailed 10 year budget.
- The 2008 Referendum authorized up to \$25 tax assessment to fund an annual operating budget of \$475k.
- In 2009, a property tax of \$10 was established in the Electoral Areas.
- In 2012, a formula was agreed upon to phase in municipal participation in the service.
- With phase in, all RDN residents will pay \$8 per year into the service.

**Funding sources:**


- Property tax requirement: \$8/property/year
- Grant funding
- Partnership contributions: *(financial and in-kind)*
  - Industry
  - Senior government
  - Stewardship groups.

## Services Delivered:

- Direct to Residents:**  
*"Team WaterSmart"*
  - Education and Awareness
  - Incentives/Rebates (toilet, rainwater harvesting, well upgrades, water quality testing)
- Building the knowledge base:**
  - Monitoring, measuring, reporting.
  - Effective leveraging partnerships with senior government, industry, community, academia.
- Planning and Policy tools:**
  - Land use decision making
  - Inform policy and provide decision support

## Value to the Taxpayer

- ✓ **Protect property values**
  - Long term water supply
  - Ecological and social qualities
- ✓ **Long term & short term cost savings**
  - Optimize benefits of local, provincial and federal funding and opportunities
  - Direct rebates
  - Decreased water bill
  - Prevent costs associated with resource degradation



## Achievements

### Education Program

- 80+ activities per year
- Directly reaching over a thousand residents annually








## Achievements

### Rebate Programs

- 250+ rebates given per year (muni's + EAs)
- Approx. \$54,000 back in residents pockets through rebates each year









## Achievements

### Community Watershed Monitoring Network



**Community Watershed Monitoring Network Stewardship Groups**

- Nanaimo & Area Land Trust
- Vancouver Island University
- Island Alliance for the Environment
- Qualicum Creek Environmental Society
- Island Watershed Inland Habitat Enhancement Society
- Friends of French Creek Conservation Society
- Parksville Qualicum Falls & Gorge of COE
- Qualicum Beach Enhancement Society
- Wile Creek Enhancement Society
- Landmark Historical Group/Association

**450+ hours in-kind contribution from MOE in first 4 years**

**\$2000+ cash funding, land access and safety gear from Island Timberlands**

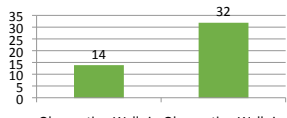
**9 volunteer stewardship groups = approx. 540 volunteer hours per year**

- Surface water quality sampling at 51 sites within our region


## Achievements

### Expanded Groundwater Monitoring

- Local data to support long term planning decisions that protect property values
- Attract provincial resources (incl. \$200,000 grant)

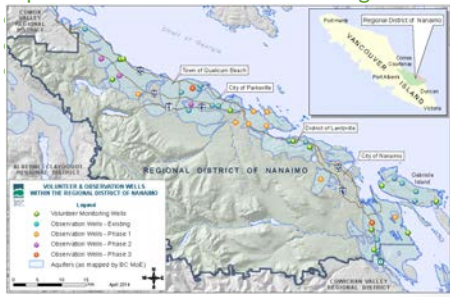


Period	Number of Observation Wells
Observation Wells in our Region Prior to Network Expansion	14
Observation Wells in our Region After Network Expansion	32



## Achievements

### Expanded Groundwater Monitoring





**WELLS FOR GROUNDWATER MONITORING WITHIN THE REGIONAL DISTRICT OF NANAIMO**

- Volunteer Monitoring Wells
- Observation Wells - Existing
- Observation Wells - Phase 1
- Observation Wells - Phase 2
- Observation Wells - Phase 3
- Aquifers (as mapped by BC MOE)

## Achievements

### Aquifer Characterization


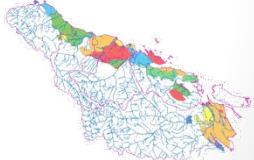
- High level of science to understand local groundwater processes in the Nanaimo Lowlands
- Attracted federal funding: a 5-year \$3 million (federal dollars) study within our region

## Achievements



### Water Budget (Phase 1) - Supply and Demand study

- Region wide data inventory :
  - surface water & groundwater availability
  - demand / usage
- Ultimately use supply and demand study to prioritize efforts and support long term planning decisions for sustainable development

## Collaboration

Regional funding attracts senior government resources & optimizes local government funding

**Leadership**




**Improved data collection** and monitoring in identified key areas

Using local science and data to **inform policies** and strategies to protect our water resources and succeed in **sustainable development**

Further **conservation efforts** to be more efficient with water in our region

Continued **partnerships** with provincial, federal and local agencies

**A region with a sustainable water future**



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**DRINKING WATER WATERSHED PROTECTION**

[www.teamwatersmart.ca](http://www.teamwatersmart.ca)



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