

# **STAFF REPORT**

то:	Committee of the Whole	MEETING:	September 4, 2018
FROM:	Julie Pisani Drinking Water and Watershed Protection Program Coordinator	FILE:	5600-07 5345-40
SUBJECT:	Overview of Water Stewardship Rebat	tes	

### RECOMMENDATION

That the Overview of Water Stewardship Rebates be received for information.

### SUMMARY

The Regional District of Nanaimo (RDN) offers several rebates to eligible homeowners regionwide to incentivize water protection and conservation measures to improve efficiency and build local resiliency. This report provides a detailed update of Water Stewardship rebates. Information on all RDN rebates is available online at <u>www.rdnrebates.ca</u>.

Currently, Water Stewardship rebates include the following five programs:

- Septic Maintenance
- Rainwater Harvesting
- Wellhead Upgrades
- Well Water Testing
- Irrigation Upgrades and Soil Improvements

### BACKGROUND

The RDN offers several rebates to eligible homeowners region-wide to incentivize water protection and conservation measures to improve efficiency and build local resiliency. The five Water Stewardship rebates are administered through the Regional and Community and Utilities Department: four through Drinking Water and Watershed Protection (DWWP) and one through Wastewater Services.

RDN rebates are available on a first come first served basis. Once the annual funding is exhausted, rebates are unavailable until the next budgetary cycle. For that reason, homeowners may apply for pre-approval for Water Stewardship rebates to reserve funds for eligible work. The pre-approval option gives homeowners time to shop around for services, complete the

work, and submit their rebate claim. A rebate claim consists of receipts for completed eligible works or purchased materials; photographs illustrating the completed work and a completed checklist that indicates best practices were followed. This process applies to all rebate programs except for the Well Water Testing rebate which takes the form of a one-time-use voucher, that when presented at time of purchase, well owners receive 50% off on well water sample quality analysis at a local laboratory.

At this time, all 2018 Water Stewardship rebates are still available to residents, though most are close to capacity for this budget year. Staff will continue to monitor funding availability and update the RDN Rebate webpage, accessed through <u>www.rdnrebates.ca</u>, to inform residents once the funding is fully dispersed. Rebates are limited to one per property in each category, for the lifetime of each program.

A detailed overview of each Water Stewardship rebate follows.

# Septic Maintenance Rebate - Total 2018 Budget Allocated: \$35,000

The Septic Maintenance rebate program has been available since 2014 to all homeowners in the RDN, including member municipalities, who have an onsite septic system. Program goals are to protect water and the environment; make it easier for residents to manage maintenance of their septic systems; promote long-term septic system maintenance habits; and maximize the longevity of existing septic systems.

Table 1 shows the Septic Maintenance rebates offered for 2018. The rebate covers 75% of eligible expenses, to a maximum amount, except for the System Replacement which provides a flat rate rebate of \$600.

CATEGORY	AMOUNT	DESCRIPTION			
Distribution Box	\$200 maximum	<ul> <li>Replace or install distribution box with speed levelers to maximize the lifespan of the drain field by distributing effluent evenly to each line and preventing any one line from overload.</li> </ul>			
Risers	\$300 maximum	Installing risers provides surface access to buried components. Risers make future pumping, inspection, and maintenance much easier.			
Effluent Filter	\$100 maximum	Installing an effluent filter to extend system life by reducing the solids that build up in the disposal field.			
System Replacement	\$600 flat rate	Most septic systems are designed to last 25-30 years. This rebate is not available to new developments; only for replacement of an existing system.			

# Table 1. Summary of the Septic Maintenance Rebate Program

BONUS	\$100 maximum	As a bonus to encourage workshop attendance, 2018 SepticSmart workshop attendees receive a \$100 boost to their rebate maximum. At least four workshops are offered yearly.

## Rainwater Harvesting - Total 2018 Budget Allocated: \$22,500

The Rainwater Harvesting Incentive program has been available region-wide since 2012 to support residential rainwater collection system installation as a means of conserving groundwater or municipal water. It has proven to be very popular with private well owners, and to a lesser degree with municipal water customers. Applicants must install their system following the tank installation checklist outlined in the RDN Rainwater Harvesting Best Practices Guidebook. The rebate covers 100% of eligible expenses up to a maximum as stated in the table below.

CATEGORY	AMOUNT	DESCRIPTION
Cistern	\$450 maximum	Cistern must be rated for potable use (even if not used for that purpose). Total rainwater storage capacity to be installed must be 1000 imperial gallons or more.
Other eligible components	\$300 maximum	Includes debris trap/ filter, transport piping, installation costs.

# Wellhead Upgrades - Total 2018 Budget Allocated: \$3,000

Private well owners have access to rebate funds to support upgrading their wellhead construction to meet standards of the BC Groundwater Protection Regulation or to close an abandoned well on their property. This directly helps to protect surface contaminants from entering the aquifer and polluting groundwater. The rebate covers 100% of eligible expenses up to a maximum as stated in the table below.

CATEGORY	AMOUNT	DESCRIPTION
Secure Well Cap	\$50 - \$150	Vermin-proof caps should be used. Dug wells are eligible for up to \$50 maximum; drilled wells for \$150 maximum.
Well Casing Stick-up	\$200 maximum	To increase well casing stick up to a minimum of 12 inches above grade.
Surface Seal	\$300 maximum	To seal the gap between the well casing and the surrounding ground; generally bentonite clay is used.
Well Closure	\$500 maximum	Deactivate unused wells by backfilling with gravel and clay to ensure it is not a pathway for contamination.

## Table 3. Summary of the Wellhead Upgrades Rebate Program

# Well Water Quality Testing - Total 2018 Budget Allocated: \$10,000

This rebate applies to private domestic wells only. Residents present the voucher at the point of water sample drop-off at the lab. They receive 50% off their test cost and the RDN is billed for the remaining 50%. There is a limit of one voucher per well for the duration of the program. Well owners can choose to voluntarily share their water quality results with the RDN by checking a box on the voucher. Since 2014, 75% of rebate recipients have shared their well water quality results with the RDN, amounting to a total of 436 data points on groundwater quality. This has proven to be a successful means to build a background dataset on groundwater quality across the region, where data is not otherwise available.

# Table 4. Summary of the Well Water Quality Testing Rebate Program

CATEGORY	AMOUNT	DESCRIPTION
Well Water Quality Test	50% off	Must be a "full spectrum" analysis, at minimum sampling for: Total Coliform and Escherichia coli (E. coli), pH, Total Dissolved Solids (TDS), Hardness, Nitrate, Nitrite, Sulphate, Fluoride, Chloride, and 32 element metals scan.

# Irrigation Upgrades and Soil Improvements – Total 2018 Budget Allocated: \$8,000

This incentive program helps residents conserve water outdoors by enhancing the water efficiency of automated irrigation systems and/or by improving the water-holding capacity of soil through soil amendments. Only existing automated irrigation systems are eligible for upgrade rebates to replace old components, not new installations. The rebate covers 100% of eligible expenses up to a maximum as stated in the table below, with the exception of Soil / Mulch rebate which covers 50% up to a maximum of \$100.

# Table 5. Summary of the Irrigation Upgrades and Soil Improvements Rebate Program

CATEGORY	AMOUNT	DESCRIPTION			
Smart Controller	\$100 maximum	Upgrade to an irrigation controller with the following features: ability to connect to a sensor, minimum 4 program capability, multiple start times function, seasonal adjustment (% adjust) option for programming and a 365 day clock.			
Sensor	\$75 - \$125 maximum	Install a Rain Sensor (\$75), Soil Moisture or Weather-Based Sensor (\$125) to adjust irrigation programs based on site conditions.			
Drip Conversion	\$200 maximum	Change out old inefficient sprinklers to drip irrigation that: delivers water at plant root zone and uses less than 20 gallons of water per hour at less than 25 PSI. Soaker hoses, weeper hoses, and microspray emitters are not eligible.			
MP Rotators	\$50 maximum	Change out old inefficient sprinklers to Matched Precipitation Rotators that evenly distribute water across varying spray arcs at an efficient rate.			
Soil / Mulch	50% off up to \$100	The addition of nutrient-rich compost, manure, topsoil, and/or organic mulch to increase water holding capacity.			

Overall since 2012, nearly 1,200 rebates have been provided to residents to incentivize water stewardship actions and upgrades that protect water health in the long term. A summary of the number of rebates issued per program per year is outlined in Table 6.

There is steady and regular uptake in all of the rebate categories, illustrating the demand and interest from residents. Incentive programs have proven to be an effective supplement to information and education campaigns, by offering financial resources to enable residents to engage in the water stewardship behaviour the RDN promotes through programs like Team WaterSmart, WellSmart and SepticSmart.

Rebate Category	Number of Rebates								
Rebuild Galegory	2012	2013	2014	2015	2016	2017	2018 <sup>*</sup>	TOTAL	
Septic Maintenance	-	-	66	64	74	55	46	305	
Rainwater Harvesting	37	52	37	42	46	39	11	227	
Wellhead Upgrades	-	-	10	10	9	11	3	43	
Well Water Quality Testing	-	-	175	103	112	119	76	585	
Irrigation and Soil	-	-	-	-	-	11	22	33	

Table 6. Summary of all Water Stewardship Rebate programs - Number Issued Per Yea	ır
to Date	

\*Up to July 2018

# ALTERNATIVES

This report is provided for information.

# FINANCIAL IMPLICATIONS

Septic Maintenance rebates are fully funded through the SepticSmart program<sup>1</sup>, which receives \$0.02/Imperial gallon of the septage receiving fee currently set at \$0.24/Imperial gallon. The Septic Maintenance rebate budget has increased over the years to accommodate demand and to reflect the increase in revenue from a rising number of septic tanks pumped out each year.

<sup>&</sup>lt;sup>1</sup> In 2014 and 2015, the RDN partnered with the Western Canadian Onsite Wastewater Management Association of BC and they contributed \$8,500 each year to boost the Septic Maintenance rebate program. Since 2016, Septic Maintenance rebates have been funded entirely from revenue generated from septage receiving fees.

The other four Water Stewardship rebate programs are fully funded through the RDN's Drinking Water and Watershed Protection service. Budget is assigned based on demand, with Rainwater Harvesting allotted the largest total amount.

Since 2012, the Water Stewardship Rebates have provided more than \$400,000 in assistance to RDN homeowners. It is also projected that, by the end of the year, it will have stimulated more than \$2.1 Million in economic activity over that same period. Framed another way, for every dollar spent on rebate support to-date, over \$5 has been spent in the local economy.

Table 7 below summarizes the value of rebates provided from 2012 up to July 2018.

		issued all			Investment (2012-2018)			
Rebate \$ Issued	2012	2013	2014	2015	2016	2017	2018 (to July)	TOTAL to date
Septic Maintenance	-	-	\$25,815	\$24,981	\$33,043	\$33,272	\$23,970	\$141,081
Total Homeowner Investment	-	-	\$87,220	\$222,674	\$239,366	\$239,315	\$205,600	\$994,175
Rainwater Harvesting	\$25,723	\$37,681	\$27,750	\$31,500	\$33,706	\$28,835	\$8,144	\$193,341
Total Homeowner Investment	\$85,447	\$166,041	\$148,779	\$183,500	\$114,596	\$185,658	\$37,571	\$921,594
Wellhead Upgrades	-	-	\$2,287	\$2,750	\$2,638	\$2,699	\$310	\$10,685
Total Homeowner Investment	-	-	\$19,540	\$36,777	\$6,579	\$12,162	\$401	\$75,461
Well Water Testing	-	-	\$15,282	\$9,145	\$10,383	\$11,890	\$7,940	\$54,642
Total Well Owner Investment	-	-	\$30,564	\$18,290	\$20,766	\$23,780	\$15,880	\$109,284
Irrigation & Soil	-	-	-	-	-	\$2,849	\$3,706	\$6,556
Total Homeowner Investment	-	-	-	-	-	N/A**	N/A**	N/A**
Rebate Total	\$25,723	\$37,681	\$71,134	\$68,376	\$79,770	\$79,545	\$44,070	\$406,299
Homeowner Total	\$85,447	\$166,041	\$286,103	\$461,241	\$381,307	\$460,915	\$259,452	> \$2.1 M

 Table 7. Rebate Dollars Issued and Total Homeowner Investment (2012-2018)

\*\* Data not available at time of writing

## STRATEGIC PLAN IMPLICATIONS

RDN rebates support several priorities of the Board's 2016-2020 Strategic Plan. Providing these rebates meets objectives for *Economic Health* by helping residents pay for upgrades to their property that support water stewardship and by stimulating economic growth in industries that provide services for septic system maintenance, landscaping, rainwater harvesting and well maintenance. To date, Water Stewardship Rebates have incented over \$2.1 Million dollars of spending in the local economy.

A goal of all Water Stewardship Rebates is to protect water and the environment. This supports the Strategic priorities for the *Environment* by recognizing the importance of water in supporting our economic and environmental health. Water Stewardship rebates also support objectives for *Relationships* by enhancing partnerships with other agencies and cooperation between municipalities and electoral areas.

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