

Perspectives

A REGIONAL DISTRICT OF NANAIMO PUBLICATION | WINTER 2012

Church Road Transfer Station Takes LEED Gold

The Regional District of Nanaimo has received LEED Gold Certification for the 2011 retrofit, redevelopment and expansion of the Church Road Transfer Station. This state-of-the-art facility manages the collection of garbage, organics and recyclable materials in the northern area of the RDN, and is central to the Region's long-term solid waste diversion strategy. The \$5.5 million project incorporates features that have dramatically reduced energy consumption, water consumption and greenhouse gas emissions at the site.

LEED stands for Leadership in Energy and Environmental Design and is a third-party certification program and an internationally accepted benchmark for the design, construction and operation of high-performance green buildings.

Features of the new transfer station include a new food waste transfer facility and the complete redevelopment of an existing recycling drop-off area. Vegetated roofs on the operations building and the new scale house provide multiple benefits, including protection

of the roof membrane from solar exposure, habitats for birds and invertebrates, and reduction of stormwater runoff. The reduction in water use at the site is almost 80 per cent, achieved mainly through the use of high-efficiency toilets, urinals, faucets and showerheads.



RAINWATER HARVESTED FROM ROOF TOPS

A ground source heat pump that transfers heat to and from the ground behind the complex provides heating and cooling to the operations buildings. In addition, a solar hot water system is in place to take advantage of the solar energy and to pre-heat domestic hot water coming out of showers and lavatory faucets in the operations building. Large translucent panels in the new and existing transfer buildings allow abundant natural light into the space, reducing the need for artificial lighting.

One of the Church Road Transfer Station project's greatest challenges became a perfect opportunity for innovation. No sewage service is readily available near the transfer station, so the option of connecting to the closest sewer line was an expensive one. Instead, the project team came up with an integrated wastewater and rainwater system allowing an on-site treatment system to manage the wastewater in a series of underground tanks right behind the complex. Greywater from the tertiary treatment plant as well as rainwater harvested from the roofs replaces the use of potable water for floor washing at the site.

To be an example of the Regional District of Nanaimo's long-term commitment to achieving Zero Waste, the project team worked very hard to divert construction waste from the landfill. In fact, the construction waste was almost completely eliminated: only 0.02 per cent (by weight) of the waste was sent to landfill. Where possible, the RDN used building materials that were manufactured within the local region to support the regional economy and reduce the environmental

impacts from transporting building materials from far away. Over 60 per cent of the permanently installed wood products is FSC (Forest Stewardship Council) certified.

The Church Road Transfer Station retrofit, redevelopment and expansion was partially funded by a \$2.75 million allocation from Canada's Gas Tax Fund, which provides stable, long-term funding to local governments to help them build and revitalize public infrastructure. In December 2011, the Government of Canada passed legislation to make the Gas Tax Fund a permanent annual investment of \$2 billion per year.

RDN Transit Phase 2 Expansion

Regional District of Nanaimo Transit completed work on an expanded transit operations building in the late summer of 2012. The \$2,600,000 Phase 2 upgrade and expansion includes a new high work bay to accommodate double decker buses, a new fuel island, a bus body repair and paint bay, and a bus wash facility that uses recycled water.

BC Transit contributed approximately \$750,000 to this facility upgrade. The new site will be able to effectively manage RDN transit operations for the next 25 years, will allow for the use of double decker buses, allow flexibility in using alternate fuels and maximize the efficiency of site operations.



What's Inside:

- 2 Rural Village Centres Study
- 3 Moorecroft Regional Park
- 4 Water Budget Project



Rural Village Centres Study



Rural village centres are areas designated for future growth and development in the RDN's Electoral Areas. Since the RDN first established these areas in 1997, only a few of the Region's 14 centres have evolved into areas with the characteristics associated with mixed-use, complete, compact communities. The 2011 Regional Growth Strategy notes that questions have been raised about the ability of some of these areas to accommodate growth because of the significant costs associated with providing community sewer and water services.

Based on direction from the Regional Growth Strategy, the RDN hired DIALOG Consultants with G.P. Rollo & Associates to undertake a study to identify which of the rural village centres have the greatest potential to evolve into mixed-use centres. The study addresses 13 existing centres. Two additional study areas are also included based on direction from the RDN Board relating to a proposed development in Electoral Area H and a policy in the Electoral Area G Official Community Plan.

As of October 31, 2012, an Evaluation Framework to determine a set of key requirements to analyze each rural village centre has been completed and public input gathered through surveys and workshops has been documented. These documents are available at www.rdn.bc.ca.

The final report will include three interrelated parts:

- 1 Baseline Report** – will document information for each rural village centre using a set of key requirements identified as necessary for the development of a complete, compact centre.
- 2 Needs Assessment Report** – will use baseline information to identify specific needs to maintain and support rural village centres as complete, compact communities.
- 3 Evaluation Report** – will evaluate the potential of each centre to become a complete, compact community that warrants investment in infrastructure and services.

As with other studies or reports, the final report will go before the RDN Board prior to the document being made publicly available. It is anticipated that the final report will go before the RDN Board early in the new year.

The Regional Growth Strategy specifies that Rural Village Centres should be able to:

- Be planned and designed as pedestrian-oriented and transit-supportive;
- Be compact, complete and compatible in character with local context;
- Attract and support local commercial development;
- Attract and support local community services and amenities;
- Support regular transit service; and
- Demonstrate how their development will contribute to the goals of the RGS.

Industrial Land Supply and Demand Study



The 2011 Regional Growth Strategy provides direction to complete a study assessing the supply and demand for industrial lands within the Regional District of Nanaimo and its member municipalities. Urbanics Consultants Ltd. and HB Lanarc - Golder Associates have been hired to undertake the study, which is now approximately 75 per cent complete. The study is anticipated to be finalized by early 2013.

This study will help work towards Regional Growth Strategy Goal 7 to enhance the Region's economic resiliency by linking commercial and industrial strategies to the long term sustainability priorities of the region. Within this context the Regional Growth Strategy supports maintaining an attractive environment for industrial development while at the same time ensuring that land use, environmental protection, energy consumption and greenhouse gas reduction goals are met. This involves having a sufficient supply of industrial land that provides employment close to where workers live and that can be supported by public transportation and utility infrastructure.

The study will involve a sustainability analysis by reviewing industrial best practices related to improving energy efficiency and waste reduction and the potential for eco-industrial networking opportunities. The results of this study are intended to inform and potentially guide decisions that will affect future land use, mobility and sustainability.

The final report will include the following components:

- 1 Economic Base Review** – to understand the impacts of economic, demographic and employment trends on industrial land use.
- 2 Supply Analysis** – to inventory existing and proposed industrial land and assess the suitability of current industrial land supply in achieving regional sustainability goals.
- 3 Demand Analysis** – to assess the current capacity of industrial land to meet future industrial demand over the next 10 years.

The project consultants conducted a workshop for stakeholders at the Parksville Community Conference Centre on Tuesday, October 23. Primary stakeholder groups participating in the workshop included major industrial property & business owners, RDN staff, member municipality staff, members of the RDN Board of Directors, and those with transportation and/or economic development interests. A summary of the workshop findings will be included in the final project report that is expected to be completed in early 2013.

Agricultural Area Plan



The Regional District of Nanaimo Board of Directors adopted the RDN's first-ever region-wide Agricultural Area Plan on October 23, 2012. The Plan is the result of nearly two years of collaboration between the community, stakeholders, the RDN's Agricultural Advisory Committee and the project consultant, Upland Consulting.

The Plan was shaped by extensive input from farmers, food producers and consumers, and is intended to support, preserve and enhance local agriculture and aquaculture in the Region. It promotes actions by many key players, including the Regional District, that will serve to build resiliency within the Region, and provide an important guide as the Board moves forward to address the needs of local food producers.

Members of the public are encouraged to visit www.growingourfuture.ca to view the Plan and to access additional background information and documentary videos.

The Agricultural Area Plan process was funded in part by the RDN, and by the Investment Agriculture Foundation of BC through programs it delivers on behalf of Agriculture and Agri-Food Canada and the BC Ministry of Agriculture. For more information, contact the RDN Planning Department at 250-390-6510.

Accessible Lighthouse Country Regional Trail

The 2.5 km accessible portion of the Lighthouse Country Regional Trail South Loop officially opened in June 2012 and is extremely well-used by the community. The trail features over 150 m of raised boardwalk, benches, a picnic table, fish bridges, wood carvings and a formal railway crossing. The short route, level terrain and beautiful woods make this an easy trail experience for people of all ages and abilities. For added convenience, the RDN is currently installing an accessible toilet at the Lioness Blvd trailhead parking lot and upgrading the handicapped parking area.

The trail is designed for pedestrians and cyclists, wheelchair and medi-scooter users, as well as the visually impaired. A walk or roll along this edged gravel woodland trail is easily completed in less than an hour, and residents and visitors alike are finding that the trail provides an enjoyable way to get out and get active every day in Lighthouse Country.

Work on this Regional Trail began in the late 1990s with the RDN securing a permit to use undeveloped road allowance connecting Qualicum Bay and Bowser for trail. Over the next four years, Lighthouse area volunteers sustained an impressive trail blazing effort that helped clear over 5 km of rough footpath. Now the trail is part of a region-wide trail system that will eventually connect all RDN communities and major parks, and link to trail systems in neighbouring regional districts. It's about getting around without having to get in a vehicle. In Area H, north and south loops of the trail will be joined when Nile Creek is bridged; Qualicum Bay and Bowser will be fully linked when Thames Creek is bridged. Eventually, the Area's part of the regional trail system will run all the way down to Qualicum Beach, up to Rosewall Creek Provincial Park and inland to Horne Lake and Port Alberni.



LIGHTHOUSE COUNTRY REGIONAL TRAIL

Moorecroft Regional Park

After a year of public engagement including workshops, surveys and an open house, the Regional District of Nanaimo has completed the final draft of the Moorecroft Regional Park Management Plan. The plan will guide the management, development and operations of the park over the next 10 years. The Regional Parks and Trails Select Committee will review the draft plan in December, and will forward it to the RDN Board for consideration in January, 2013.



VIEW FROM MOORECROFT

As a condition of sale by Moorecroft's previous owner, the United Church of Canada, a park conservation covenant was developed with the Nature Conservancy of Canada to ensure that the natural habitat and ecosystems present at Moorecroft Regional Park are well protected over the long term. The management plan recommends minimizing development in the park, and recognizes that while some existing infrastructure can be used, many of the buildings are in poor condition and no longer meet public safety and risk management requirements.

The park plan provides phased recommendations and cost estimates over a 10-year timeframe. Some high priority actions to be implemented within the first few years include preparing a feasibility study for the building of a Long House with the Snaw-Naw-As First Nation; enhancing the visitor experience with the addition of new interpretive signage, benches and picnic shelters; improving designated trails to facilitate year-round use; and removing unsafe structures.

For reasons of environmental protection, common respect and the safety of all park users, the Moorecroft plan recommends that dogs be kept on-leash in the park at all times.

To review the final draft of the Moorecroft Regional Park Management Plan, including implementation priorities, visit the Recreation and Parks webpage at rdn.bc.ca, email moorecroft@rdn.bc.ca or contact Wendy Marshall, Manager of Parks Services, at 250 248-3252 or 1-888-828-2069.

Witchcraft Lake Regional Trail

The Province has given official recognition to a public recreational trail in the Vancouver Island University Woodlot between the City of Nanaimo's Witchcraft Lake

lands and the RDN's Mount Benson Regional Park. The Witchcraft Lake Regional Trail will provide authorized access to the Regional Park for hikers of Nanaimo's favourite mountain. The Regional Trail represents an excellent working arrangement between the City, the Province, VIU, the RDN and the Nanaimo and Area Land Trust which assists the RDN in the operation of Mount Benson Regional Park. The RDN Board is very pleased to have secured this important trail.

The Witchcraft Lake Regional Trail starts from a lakeside parking lot and floating boardwalk at the end of Benson View Rd (off Kilpatrick Rd, off Jingle Pot Rd, off Hwy 19). The RDN is in the process of adding a

kiosk to the trailhead parking lot, and is working with the City, VIU and the Nanaimo and Area Land Trust to install directional and interpretive signage along the trail up to the Regional Park. Users are reminded that while in the woodlot portion of the route up to Mount Benson, they are passing through working forest, and so harvesting activities may be in progress from time to time. The Regional Trail itself will not be logged over and a buffer on each side will help maintain the woodland trail experience.

Mount Benson Regional Park features 212 hectares of rough mountainous terrain below the twin peaks of Mount Benson. A return trip to the summit takes five to seven hours for most people. Hikers are reminded to wear appropriate footwear, carry food and water, be prepared for inclement weather, and let a friend or family member know of your route plans and estimated return time. In the winter months, the Regional Park is a great place to snowshoe and cross-country ski.

For more information about RDN Parks and Trails, call 1-888-828-2069 or visit www.rdn.bc.ca and click on Services, then Parks.

Water Budget Project

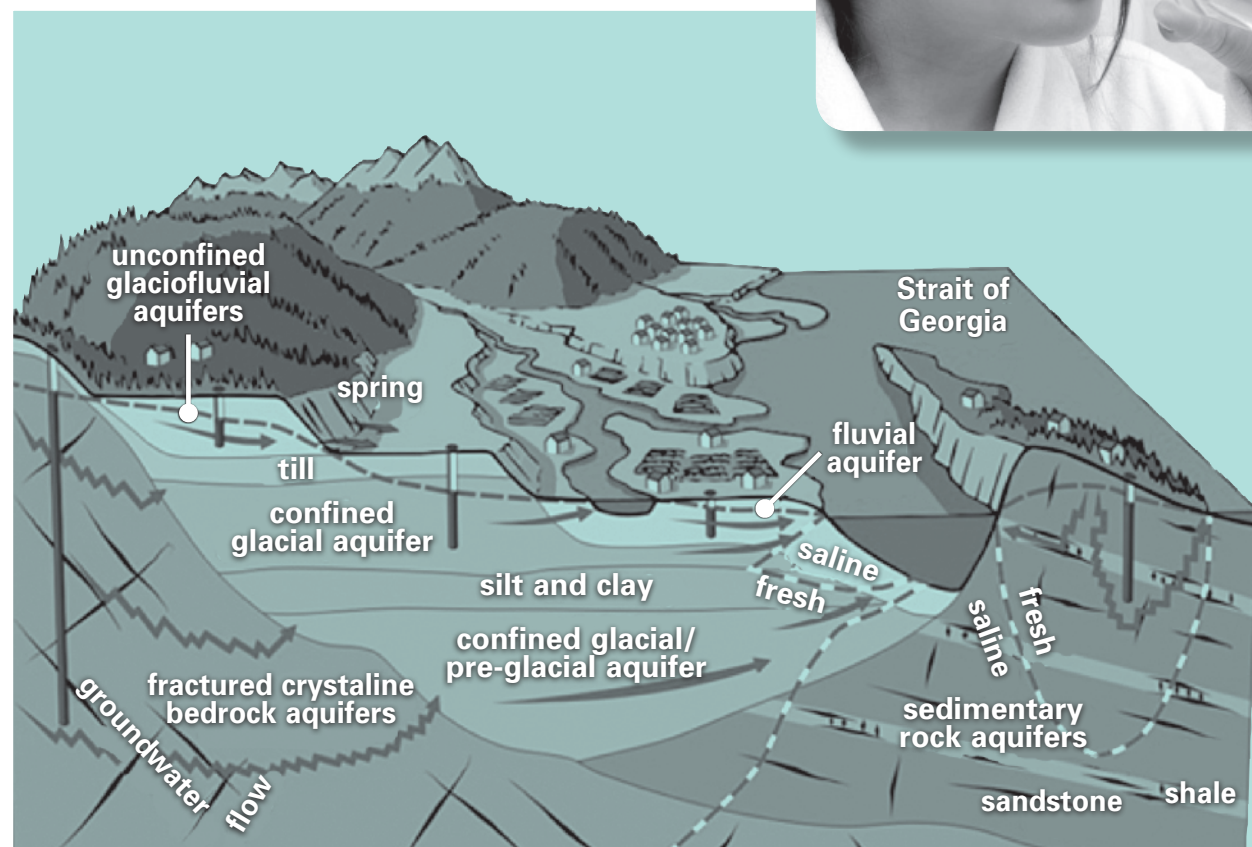
Many people in the Regional District rely on groundwater and yet we know very little about how much is available, where it's stored, and where it connects to local rivers and provides fresh, cool water to keep rivers running in dry summer months. One goal of the Drinking Water and Watershed Protection program is to better understand the region's water resources. If we understand our water resource, we reduce the risk of damaging it. To do this the RDN is working on a Water Budget Project. A household budget looks at how much money is coming in and going out to ensure that we spend within our limits and plan for the future. Similarly, a water budget looks at how much of the water we receive as rain and snow makes its way through our region above and below the ground, how it gets used along the way and where that water resource may be experiencing stress.

To complete the water budget, the RDN is working with two consultants, groundwater specialists at the Ministry of Forests, Lands, and Natural Resource Operations, scientists from the Geological Survey of Canada and volunteers from across the Regional District.

A big part of the project involves visualizing the underground water by creating a 3-dimensional picture, or model. During the summer of 2012, RDN residents helped create the underground picture of where the water table is across the Region. In 15 areas across the Vancouver Island portion of the region, staff went door to door and asked residents at 79 volunteer properties if they could take a water level reading and do a basic water quality test in their well. On Gabriola and Mudge Islands, the RDN monitored the response of water levels to tides in 11 volunteer wells. This information tells scientists how quickly water moves through the ground and therefore how much space there is in cracks and fractures in the rocks.

This volunteered information will help develop the regional water budget. Results will be very valuable because it will show us where we need to develop water protection strategies now and where we may have concerns in the future. It also allows the RDN to better understand how different actions may affect the water resource. The information compiled for the Water Budget Project will be viewed as an interactive map. The RDN will manage this water 'geo-database' and update it with new information in the coming years.

A draft report on the Water Budget Project will be taken to the Drinking Water Watershed Protection Technical Advisory Committee later this month, and a final report on the project will be introduced to the RDN Board and the public in early 2013.



Picture source: Wei, M., Ronneseth, K., Allen, D., Kohut, A.P., Grasby, S. and Turner, B., 2010. Cordilleran Hydrogeological Region. In: Groundwater resources in Canada; Rivera (editor). Geological Survey of Canada, Ottawa, ON. Chapter 9