

# Sustainability Report 2003-2004

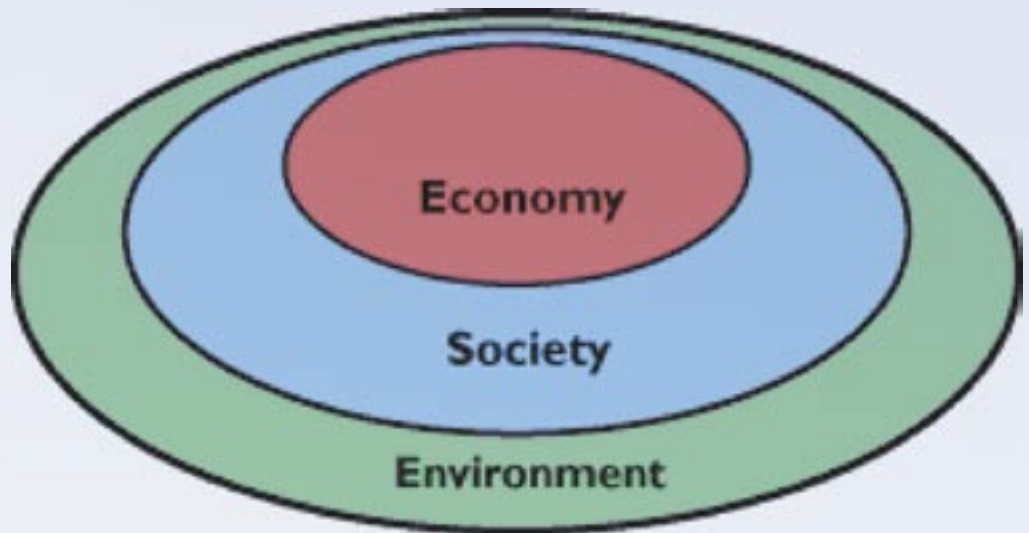
Regional District of Nanaimo







REGIONAL  
DISTRICT  
OF NANAIMO



The Regional District of Nanaimo recognized its responsibility to work towards sustainability in the early 1990s, and consequently developed the Regional Growth Strategy. The Regional Growth Strategy, first adopted in 1997 and updated in 2003, is a long-range plan to promote human settlement that is socially, economically and environmentally healthy. It establishes a vision of sustainability for the region, and provides a path towards that vision through goals, policies and land use designation maps.

Most definitions of the word sustainability recognize that people have an impact on the earth, and that people should try ensure that what they do today does not erode our environmental, social and economic capital. Sustainability is about recognizing the inter-relationships between our environment, our society and our economy. It's about recognizing that people are part of the ecosystem, and that the economic and social lives of people should be integrated

into the environment in ways that maintain or enhance the environment, rather than degrade or destroy it. Put another way, sustainability recognizes that our economy exists within society, that society is much more than economy, that society exists within the environment, and that the environment surrounds society, as illustrated in the diagram above.

The Regional District of Nanaimo has undertaken a wide variety of initiatives and projects since it adopted the Regional Growth Strategy, to support its vision of a more sustainable region.

This Sustainability Report is a summary of our 2004 and 2005 initiatives intended to enhance the environmental, social and economic health of the region and its residents. The report is structured according to a series of sustainability characteristics developed through the State of Sustainability Project, the Regional District's initiative to monitor the Regional Growth Strategy.

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On behalf of the Regional District of Nanaimo Board of Directors, I am proud to present the 2003-2004 Sustainability Report. The RDN Board is committed to nurturing a vibrant network of environmentally, socially and economically sustainable communities, and is making good on this commitment with programs and practices that benefit the entire region.

The RDN includes Electoral Areas A through H, as well as the municipalities of Qualicum Beach, Parksville, Lantzville and Nanaimo. Its 17 directors work together to ensure that services are delivered on a cooperative, region wide basis, or within selected local areas. These services include public transit, growth management, fire protection, sewage treatment, solid waste management, recreation and parks, building inspection and bylaw enforcement, water supply, general administration and emergency planning.

From the RDN Regional Growth Strategy to the Drinking Water Protection Project to the Regional Parks Review, we are working to improve on the goal of a sustainable region.

Thank you for your interest in this report. Please visit our Web site at [www.rdn.bc.ca](http://www.rdn.bc.ca) for more information about RDN programs related to sustainability.

Sincerely,  
Joe Stanhope  
Chairperson  
Regional District of Nanaimo





## environmental capital

### Safe, sufficient water supply

#### Drinking Water Protection Action Plan

The RDN recognizes that there is a high level of public interest in ensuring the availability of a sufficient, high quality drinking water supply for existing and future residents. This is evident from the feedback received at public workshops conducted in 2004 about drinking water and sustainability. The RDN Board is striving to make a positive difference in this area.

Through the Drinking Water Protection Action Plan, the RDN has committed to:

support drinking water protection through the Regional Growth Strategy, official community plans, land use regulations and zoning bylaws;

provide drinking water of sufficient quantity and quality to residents and property owners with RDN local water service areas;

promote water conservation within the RDN local water service areas; and

obtain sufficient information about the sources of drinking water for RDN local water service areas, to ensure that a sufficient drinking water supply is available for the current and projected population within these areas.

To support these objectives, the RDN is:

conducting monthly and annual testing to ensure that RDN water meets and exceeds both the BC Approved Drinking Water Quality Guidelines and the Canadian Drinking Water Guidelines for health.

reviewing the pricing structure for RDN

local water service area water, to identify possible changes to the pricing structure to promote water conservation.

conducting a public awareness campaign for RDN local water service areas to raise awareness about the need to conserve water and methods of water conservation. As part of this campaign the RDN has launched a new WaterSmart program (outlined later in this report).

publishing an annual report regarding drinking water provided by the RDN in its local water service areas. This report, once completed, will be available on the RDN's new WaterSmart web pages at [www.rdn.bc.ca](http://www.rdn.bc.ca).

The evaluation of long-term water supply in local water service areas is an ongoing activity. This work will continue to be carried out to ensure safe and reliable supply of drinking water to the service areas.



## Water Quality

Regional District of Nanaimo water utilities comply with the BC Safe Drinking Water Regulations (2003), as do other municipal and private water systems in the province. The Regulation has sections dealing with water potability and the collection of samples, and sets criteria that sample tests must meet.

The Environmental Health Officer designates the locations for the weekly collection of samples from RDN water systems. These samples are tested by both RDN Water Utilities staff at its lab and at a private lab chosen by the Health Authority.

Water samples are tested for total and fecal coliform. The presence of fecal coliform indicates that the water may contain bacteria harmful to human health and would trigger an immediate boil water advisory for water system users. The RDN has never had fecal coliform in its test results or had to issue a boil water advisory.

In addition to weekly tests provided to the Health Authority, the RDN conducts

annual potability tests on water from its systems. These tests measure chemical and physical properties such as colour and the presence of metals or minerals. The results of these potability tests are compared to the Guidelines for Canadian Water Guidelines. Water from the RDN's water service area wells continues to meet these guidelines.

## □ Healthy ecosystems and the protection of ecological features

### Community Land Use Planning Program

The RDN maintains and updates seven electoral area official community plans all of which include some form of environmental protection in electoral areas A, C, D, E, F, G and H of the region.

Official community plans help protect the various ecosystems in the natural environment by documenting the location of known, special environmental features,

and by providing policies to help eliminate, or at least minimize, the potential negative impacts of development on the identified special environmental features.

One of the key ways official community plans help reduce the potential negative impacts of development on special parts of the environment is through the designation of development permit areas pursuant to the Local Government Act. Most electoral area official community plans designate as development permit areas sensitive ecosystem areas such as the coastal zone, rivers and streams and the area immediately beside them, wetlands, eagle trees, and areas with special or rare vegetation. For properties in a development permit area, a development permit must be obtained prior to disturbing land and constructing buildings or structures.

The RDN utilizes the Sensitive Ecosystems Inventory that was prepared by the Ministry of Water Land and Air Protection in order to establish environmentally sensitive areas in need of protection. The development permit application process provides an opportunity to make sure that appropriate measures will



be taken to protect the identified sensitive environmental features on the property.

During the last few years the RDN has had at least one official community plan review under way each year. Each time an official community plan is reviewed the latest environmental information is obtained, where possible, and new policy options to better protect the environment are considered.

In 2003, the official community plan for Electoral Area H was updated and new provisions were included in it to protect the environment. Similarly, work was undertaken to review the official community plan for Electoral Area E in 2004.

### Beachfront Retaining Wall Policy

To protect marine environment and habitat, the RDN approved a Beachfront Retaining Wall Policy in 2004. Property owners who want to build seawalls need to obtain RDN approval prior to building.

The RDN Planning Department encourages residents to determine whether they really need a retaining wall and to examine alternative methods, for example, bioengineering. If a retaining wall is the only alternative, the RDN encourages the use of riparian native vegetation planted among the rocks to create a natural look and provide habitat on the marine foreshore.

### Greater Nanaimo Pollution Control Centre Permeable Parking Surface

At the Greater Nanaimo Pollution Control Centre, a new environmentally-friendly, permeable parking surface allows storm water to seep slowly through into the groundwater, which is better for the environment than large amounts of runoff.

### Regional Parks and Trails Plan

The RDN maintains and regularly updates a parks plan for the region. The new Regional Parks and Trails Plan builds on the RDN's 1995 Regional Parks Systems Plan to define the direction, policies, priorities and actions for the RDN over the next 10 years.

Currently the RDN manages eight regional parks totalling almost 450 hectares, and over 60km of regional trails. The vision for our regional parks and trails network is a system that secures protects and stewards land

and water of environmental significance and habitat value; provides rewarding outdoor recreational opportunities; fosters education and appreciation of the natural environment; and enhances liveability for current and future residents of the RDN.



## □ clean air that is safe to breathe/minimal greenhouse gases

### Landfill Gas Flare Project

To make better use of gas generated at the regional landfill, the RDN's Solid Waste Department has a program to capture and flare landfill gas in order to reduce greenhouse gas emissions.

Landfill gas is a combination of carbon dioxide, methane and other trace gases resulting from the decomposition of organic material in the landfill environment.

The landfill gas captured by the RDN will be used as fuel, and/or to produce energy in an off-site facility.

### Greenhouse Gas Emissions Reduction Plan

The RDN is committed to reducing greenhouse gases, and is a participant in the Federation of Canadian Municipalities Partners For Climate Change Program. Through the program, local governments, non-governmental organizations, businesses and community groups are partnering to reduce greenhouse gas emissions, and raise awareness about climate change.

## □ conservation of natural resources and perpetual availability of renewable resources

### Regional and Community Land

#### Use Planning Programs

The RDN's community planning and regional planning programs protect land for resource uses by designating land for such uses, by promoting parcel sizes that are appropriately sized for resource use, and by limiting incompatible uses adjacent to these parcels.

RDN land use designations recognize provincially designated resource areas (such as the Agriculture Land Reserve).

### WaterSmart

The RDN's efforts to raise public awareness about water conservation are primarily contained in the newly developed WaterSmart – Water Services Web site, located at [www.rdn.bc.ca](http://www.rdn.bc.ca).

As part of the WaterSmart program, informational publications that focus on water conservation techniques and tips will be available to the public in the spring and summer of 2005

A WaterSmart student program is planned for the summer of 2005. The students organizing this new RDN program will provide information on water saving tips, speak to groups about water conservation, and assist homeowners with questions regarding water conservation in their homes and gardens.

### PowerSmart Energy Efficiency Improvements

The Liquid Waste Department is working with BC Hydro under the Power Smart Partner Program to find energy efficiency improvements within the liquid waste facilities.

As a result of this program, the RDN has installed energy efficient lighting at its Liquid Waste facilities.

## Green Building Project

As part of its ongoing commitment to sustainability, the RDN Board encourages Green building practices in the region, and is considering a Green Building Project. This project will increase public and development industry awareness about Green Buildings, and make Green Building Practices easier to implement.

Green Buildings are a sustainable alternative, and the Green Building Project fits with the RDN's Regional Growth Strategy's environmental protection goal. Compared to traditional construction methods, Green Buildings require fewer resources to construct, and less energy to operate once they are built.

The RDN Board has agreed to gain a basic understanding about Green Buildings, and has asked staff to develop terms of reference for further consideration of Green Buildings as an option in the RDN.

## Low Consumption Toilets

As of January, 2005, the Provincial Ministry of Community, Aboriginal and Women's Services amended the Water Conservation Plumbing Regulation, and invited local governments to apply this requirement in their respective jurisdictions. This building code amendment allows the RDN to require building contractors to install six-litre, low-consumption toilets in any newly constructed or renovated buildings. The new requirement will reduce water demands and wastewater quantities in the Regional District.

## □ reduced energy requirements

## Environmental Management System

The Environmental Services Department at the RDN is implementing an Environmental Management System to improve the operation of its Liquid Waste facilities. This set of problem identification and problem-solving tools will assist the RDN in meeting federal, provincial and local requirements, improving environmental performance and increasing public confidence.

The EMS will be certified through



RDN Solid Waste Program Coordinator Alan Stanley (L) and Special Projects Assistant Louise LeBlanc check out compost with Doug Bolton of International Composting Corporation. ICC creates the compost from diverted commercial food waste.

the International Organization for Standardization, and will meet the requirements of the ISO 14001 standard. This standard is based on the "plan, do, check, act" model of operation, and allows for continual improvement through goal-setting, training, monitoring and corrective action.

Once the EMS is in place, the RDN expects to reduce its use of water, electricity and chemicals at its Liquid Waste facilities. There is also the potential to move toward use of alternative energy sources (co-generation).

## □ environmentally sensitive treatment of waste

## Zero Waste

The goal of the RDN Zero Waste project is to create local employment and sustainable economic development instead of garbage. Through redesign, reduction, reuse, repair, reclaiming, recycling, composting and other activities, this goal can become reality.

Moving towards Zero Waste means phasing out products that can't be reused, repaired, recycled or composted, and learning how to deliver more services by using less energy and resources. It also means taking responsibility for our purchasing decisions at both the personal and the political level, and refusing to buy

products that aren't consistent with the goal of Zero Waste.

## Organics Diversion Strategy

A 2004 RDN study showed that 35 percent of the total waste sent to local landfills is compostable organic material. These compostable organics (food waste, yard waste and compostable paper products) make up well over 50 percent of the residential waste stream and 40 percent of the industrial, commercial and institutional waste stream.

In 2005, the RDN is implementing the first phase of its Organics Diversion Strategy, with a focus on commercial food waste diversion. The RDN hopes to introduce full commercial and residential organics diversion by 2007.

## Biosolids Recycling

All of the biosolids (the processed organic solids that result from sewage treatment processes) the RDN produces at its wastewater treatment plants are diverted from the landfill, then composted and reused.

Biosolids from the Greater Nanaimo Pollution Control Centre are composted at Malaspina University College's woodlot facility, then applied to forest lands. Biosolids from the French Creek plant are sent to a commercial composting facility in Cobble Hill.





### **Environmental Management System**

**Once the ISO 14001-certified Environmental Management System is in place at RDN Liquid Waste facilities, the RDN will be able to explore the use of alternative energy sources (co-generation). Using the “plan, do, check, act” model consistent with ISO 14001, RDN staff will be able to fully integrate environmental considerations into the Liquid Waste Department’s daily operations. This will result in improved environmental performance at LWD facilities.**





## ☐ healthy residents

### Recreation and Parks Programming

Residents of the RDN have the option to participate in a wide variety of recreational services through the RDN Recreation and Parks Department. Swimming, skating, recreational hockey and a variety of seasonal programs are all available at our recreational facilities.

In District 69 (Parksville, Qualicum Beach, and Electoral Areas E, F, G and H) the RDN operates Oceanside Place arena and Ravensong Aquatic Centre. Recreation services are provided to residents of Gabriola Island through a formal agreement with the Gabriola Recreation Society. Regional Parks services including the Regional Trails System are available to all residents of the Regional District.

The RDN develops and provides recreational programs, special events, and specialized services to residents

## social capital

of Parksville, Qualicum Beach and Electoral Areas E, F, G and H. Recreation programmers are based out of Oceanside Place, and work with the community to develop, implement, and evaluate a wide range of programs aimed at all ages.

Key areas of programming include preschool and adult, children and youth, summer camps, and special events including the Terry Fox Run. Recreation and Parks also collaborates on the annual Kidfest event. Other areas of service include a financial access program, a grants-in-aid program, programming for people with various ranges of abilities, a volunteer program, and field scheduling.

Program participants and the taxpayers of Electoral Areas E, F, G, and H and the municipalities of Parksville and Qualicum Beach, all financially support the Recreation Coordinating function.

Recreation and Parks publishes an Active Living Guide three times per year, to

supply residents with valuable community recreation information, and information pertaining to seasonal programs and events.

### Regional Trail Planning

Walking, cycling and spending time outdoors are important activities to RDN residents. The RDN Board supports and encourages this through supporting acquisition and stewardship of a vibrant Regional Parks and Trails system.

Planning for regional parks includes a system of trails to link regional, municipal and provincial parks. Completed trail links include a route from Rath Trevor Provincial Park to Top Bridge municipal park, the Parksville-Qualicum Links, the Arrowsmith Trail, the Lighthouse Country Trail, Big Qualicum River DFO Trails and the Morden Colliery Trail. The RDN is also working with local trail enthusiasts to provide a Trans Canada Trail link from



Nanaimo's city limits to the area south of Nanaimo and the Cowichan Valley Regional District. This project involves partnering with private landowners.

More information about RDN trail planning is available on the RDN Web site at [www.rdn.bc.ca](http://www.rdn.bc.ca), under the Community Services Section.

## □ availability of health care services and education and training facilities

### Funding for Health Care Facilities

The RDN Board of Directors also sits as the Nanaimo Regional Hospital Board, and Directors are responsible for approving the annual budget for this health care facility. The RDN contributes a significant part of the funding required to construct hospital facilities in the region.

(In British Columbia, the Province pays 100 per cent of operating costs for health care facilities, but just 60 per cent of the cost to build and upgrade health care facilities. Regional taxpayers shoulder the remaining 40 per cent of capital costs.)

## □ affordable housing that suits the regional demographic

### Regional and Community Planning Program

Official Community Plans encourage mixed use communities where places to live, work, learn, play, shop and access services are easily accessible within designated nodal areas.

Nodes are designed to accommodate people from a variety of cultural, economic and employment backgrounds, and to make it easy for residents to use alternative transportation methods such as cycling, walking and public transit.

Nodal development happens according to each community's population size



and housing needs Families, singles, retirees, working residents, the aged, the disadvantaged and those of lavish or modest means can all be found in a typical nodal structure. In the RDN, a high percentage of the population is aged, so nodal development must provide for decreased mobility of residents.

The RDN works with individual communities to identify land where a variety of different housing forms and sizes can be constructed. This makes it more convenient for residents to “age in place”. For example, a variety of housing types would make it possible for parents to raise a family on a 1000 m<sup>2</sup> lot, then move to a townhouse when their children leave home, then move to a smaller townhouse, condominium or assisted care home when they are older.

## □ transportation options

### Transit Services

Regional Transit is an integrated system that the RDN operates in partnership with BC Transit. The RDN maintains and

updates a transit business plan, both to set transit service priorities in the region and to provide a strategy for implementing these priorities. Transit routes serve urban residential areas and provide participating rural areas with connections to shopping, educational and recreational facilities in the City of Nanaimo, City of Parksville, the Town of Qualicum Beach and the District of Lantzville. Regional Transit also serves the area from Cedar in the south of the RDN to Qualicum Beach in the north.

In Parksville, Qualicum Beach and Electoral Area G, the RDN runs a Community Bus service. These accessible mini-bus travel a fixed route, but will divert from that route to pick up passengers who can't make it to the regular stops. Community Buses also provide handyDART service. Each bus is equipped with a lift for wheelchair and scooter access. Passengers can call in advance to book an off-route stop, or can wait at a designated stop for scheduled service.

Community Buses are smaller, quieter and more fuel-efficient than conventional buses. Combining the two services has improved transit options and has made handyDART operation more cost-efficient.





## economic capital

### ❑ Diversity of businesses, services and employment/vital urban core

#### Regional and Community Planning Programs

The RDN and member municipalities are working together to make the region economically sustainable, by partnering on economic development-related projects. Regional Growth Strategy Policy 6B states (in part) that to this end, the RDN and member municipalities have agreed to work as partners or individually, to the extent possible within existing budgets and programs to:

❑ Update and provide information about economic development opportunities in the region;

❑ Ensure that sufficient land is available for desirable economic development activity;

❑ Limit the scale of retail development to the needs of the community;

❑ Develop plans and agreements with the appropriate authorities to improve infrastructure and access to the region (eg. Communication networks, roads, airports, ferries, servicing, port, roads) for the purpose of attracting desirable economic development; and

❑ To streamline regulation and approval processes.

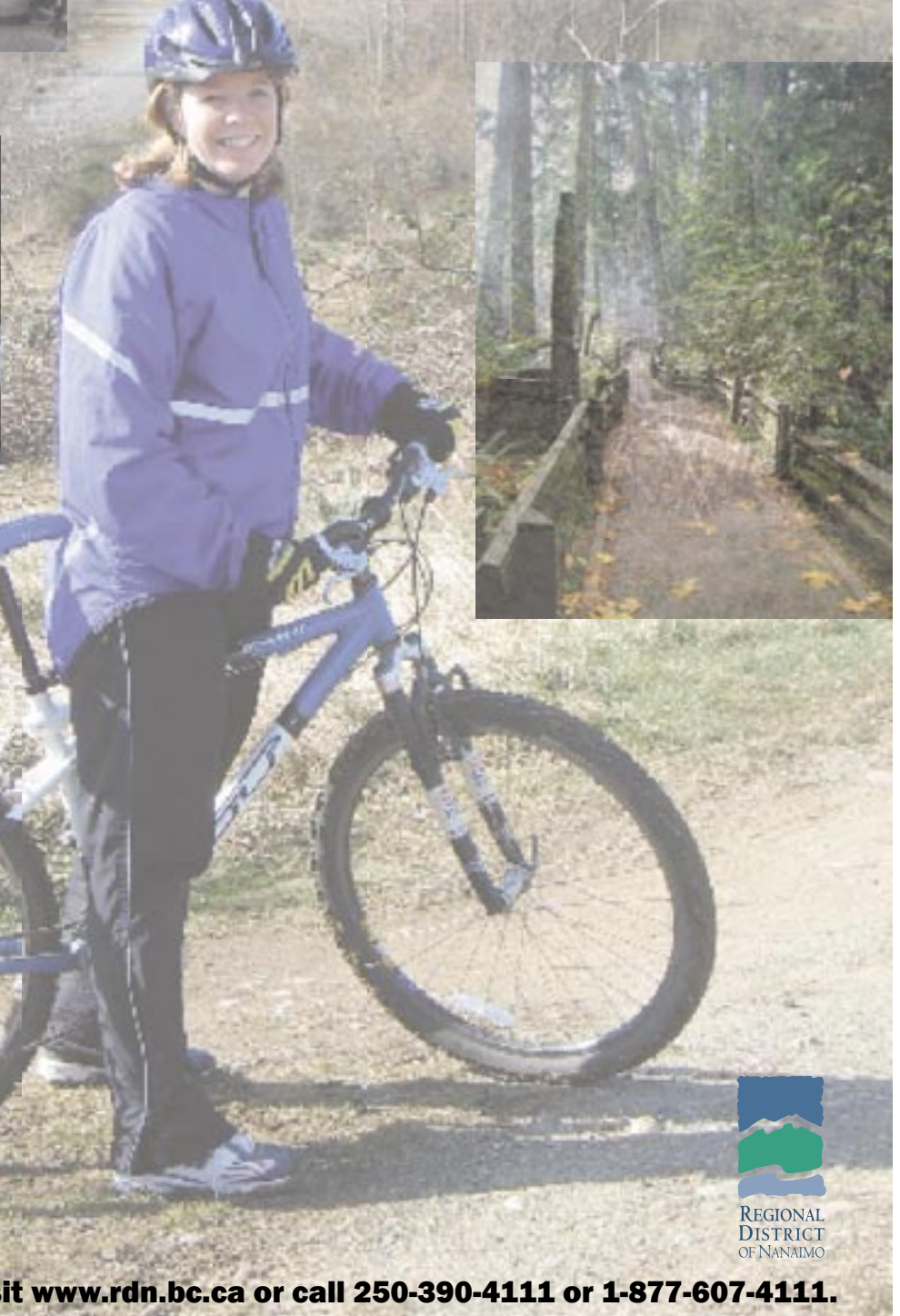
Through Electoral Area Official Community Plans and zoning bylaws, the RDN encourages a variety of businesses and employment opportunities (including home-based businesses), and provides residents with the certainty that this level of diversity will be maintained.

The nodal structure outlined in the RDN

Regional Growth Strategy encourages urban cores that maximize walkability and the use of alternative transportation options such as cycling and public transit. Locating residences, shops and services in a convenient urban core minimizes the need to use extra energy and resources to sustain regional communities. It also encourages residents to shop locally, which supports the local economy while minimizing the need for travel. This in turn reduces the environmental impact of vehicle travel and the wear and tear this travel creates on local infrastructure.

Nodal “village centres” include walkways and cycling paths, protected natural areas, plazas, public parks and gardens. In Qualicum Beach, for example, the village structure means residents can access all the services they need in or close to the urban core. In Nanaimo, the current conference centre proposal and the planned relocation of the transit exchange will enhance the accessibility of the downtown core.





**For more information visit [www.rdn.bc.ca](http://www.rdn.bc.ca) or call 250-390-4111 or 1-877-607-4111.**