Shaping Our Future

THE REGIONAL DISTRICT OF NANAIMO
GROWTH STRATEGY REVIEW

www.ShapingOurFuture.ca

Regional Growth Strategy Review 2007-2008

An Assessment of Regional Growth Management Related Challenges and Opportunities

March 2008

REGIONAL DISTRICT OF NANAIMO

Table of Contents

1.0 INTRODUCTION

The Regional Growth Strategy (RGS) has been in place for ten years and in that time it has been modified and changed on several occasions, most notably during the Five-Year review process which took place in 2003. Despite these changes, the eight original goals have remained the same:

Goal 1. Strong Urban Containment
Goal 2. Nodal Structure
Goal 3. Rural Integrity
Goal 4. Environmental Protection
Goal 5. Improved Mobility
Goal 6. Vibrant and Sustainable Economy
Goal 7. Efficient Services
Goal 8. Cooperation Among Jurisdictions

While these goals have endured, significant challenges that are impeding the Region's progress toward achieving the vision and goals of the RGS have become evident. Broadly stated, the main challenges that have been brought to the attention of the RDN's Development Services Department in the five years since the last RGS review are:

- Implementation of the RGS;
- Location of the Urban Containment Boundary (UCB);
- Affordable housing;
- Achieving desired densities in the urban areas;
- Reducing greenhouse gas emissions;
- Servicing for village centres;
- Parcel size in rural areas;
- The future use of resource lands;
- Locations for large scale recycling and solid waste processing facilities; and,
- Location of ecoindustry.

This report examines each of these challenges in turn, identifying the consequences of continuing along the current path, and indicating the opportunities to address each challenge in an updated RGS. This report is not intended to dismiss other issues and challenges that have been raised, or that come to the forefront as the RGS Review proceeds. Other challenges that are identified will be addressed through the RGS review.

2.0 CHALLENGES AND OPPORTUNITIES

2.1 IMPLEMENTATION OF THE RGS

Challenge: While there is support for the broader, region-wide goals stated in the RGS, the specific actions necessary to implement these goals have not been taken.

The RGS is a policy document that establishes the desired direction for the type and location of development on a region-wide basis. Implementation of the RGS takes place through Official Community Plans (OCPs) and Zoning Bylaws, and generally occurs in the following manner: the RGS establishes region-wide goals; for each RGS goal there are policies providing direction to each community; each community has an official community plan which states how the RGS goals will be implemented in that community; and finally the policies in the official community plan are then implemented by adopting new bylaws and regulations pertaining to growth and development such as land use, subdivision and environmental protection. For example, each community can implement the goals of the RGS by adopting regulations, bylaws and incentives that support growth in the identified urban areas and limit growth in the rural areas.

Indications that the RGS is being implemented successfully would include: higher rates of growth in urban rather than rural areas; increasing densities in urban areas; better air quality; fewer trips by automobile; more people cycling, walking and taking public transit to work and school; and more housing choice in urban areas. While there are signs that some components of the RGS are being implemented successfully, data from a variety of sources indicate that much more needs to be done to achieve the RGS goals.

The report titled *Prospering Today, Protecting Tomorrow, The State of Sustainability of the Regional District of Nanaimo* (November 2006), documents how well the region is progressing towards attaining the goals of the RGS. That report concludes that overall, the region is not doing well in its efforts to become more sustainable. The lack of progress in implementing the RGS is highlighted by several indicators in that report:

- The rate of regional population growth is faster outside the UCB than inside the UCB, and our land use bylaws permit the subdivision of many more small acreages;
- Regional open spaces and forest lands are being converted to other uses;

- Transit ridership remains low even though most residents live within walking distance of a bus stop;
- We are heavily dependent on the private automobile. Our use and per capita number of private automobiles are increasing, and transportation is our greatest contributor to green house gas emissions;
- Our air quality frequently exceeds the recommended acceptable health levels for ground level ozone; and
- Our per capita electricity and natural gas consumption rates are high compared to other areas, and continue to increase.

Data from other reports and assessments support these findings. The latest figures from Statistics Canada show that the rate of population growth in the rural parts of the RDN is much faster than in urban areas. According to the 2006 Canada Census all but one of the electoral areas are growing faster than the municipalities. In particular, Electoral Areas C and F, the two considered to be the most rural, are growing faster than the Electoral Areas and municipalities that are considered more urban. This rapid growth in outlying areas demonstrates that the RGS is not being implemented effectively. Not enough has been done to support growth in urban areas and discourage growth in rural areas.

In addition, the RDN's *Land Inventory and Residential Capacity Analysis* completed in 2007 shows that there has been little progress in achieving higher densities in the urban parts of the RDN. In 2006 the average density of the urban areas in the municipalities was just under 6 dwelling units per hectare, while the average density of the village centres in the electoral areas is much lower at less than two units per hectare. This low level of density is likely to persist given current zoning, which favours the conventional pattern of residential development that has predominated in the region to date, namely single family detached homes located away from existing town and village centres.

Specifically, the *Analysis* predicts that under current zoning, the range of housing choice at full build-out will remain as narrow as today, with more than 67% of all new residential development taking the form of single family detached homes. Furthermore, more than a quarter (28%) of all new residential development will take place outside of urban areas (as delineated by the RGS's Urban Containment Boundaries).

In addition, many official community plans continue to recognize historic zoning in rural areas and most do not support an increase in densities for designated urban areas. This is despite new concerns related to climate change, loss of green space, and impacts on groundwater. The same pattern of development continues with single family homes on

large lots located far away from most services and amenities. The only practical way for these people to get to work and access shopping, schools, and medical facilities is to drive. This land use pattern does not support public transit and for most people, the distance to these services is too far to walk or cycle.

Opportunity: Take a proactive approach to implementing the Regional Growth Strategy.

The opportunity is still available to take a more proactive approach to implementing the RGS while at the same time achieving other goals and objectives relating to sustainability and greenhouse gas reduction. The RGS provides direction on what should be done. It is a now a matter of taking the necessary steps and implementing the growth strategy with actions such as changing zoning and adopting incentive measures to support the attainment of the RGS goals.

2.2 THE LOCATION OF THE URBAN CONTAINMENT BOUNDARY (UCB)

Challenge: Locating the UCB so that it strengthens urban containment while accommodating expected growth in the region.

The UCB is a line on the map that distinguishes urban from rural land. A well-defined and appropriately located UCB is intended to ensure that growth occurs in a coordinated, well-planned fashion, resulting in compact urban centres surrounded by productive forest and agricultural land. By concentrating most development within urban areas, the UCB limits low-density, rural sprawl resulting in economic, social and environmental benefits for local governments and residents.

The economic benefits of a compact urban form include more efficient and cost-effective delivery of infrastructure, including transportation, utilities and community services. This allows local governments to invest tax dollars in a way that provides the greatest possible benefit to the most number of people. Residents also benefit economically as compact urban areas bring together the critical number of people needed to support local commercial enterprises as well as transit. A vibrant local economy supports people with daily needs and good jobs close to home, while frequent, reliable transit can reduce or even eliminate reliance on the private automobile, resulting in potentially significant savings for households.

Socially, the benefits of contained urban areas arise when diverse groups of people come together in the shared public spaces that characterize cities. Chance encounters between

people walking through pedestrian-friendly neighbourhoods or visiting the cultural amenities that are concentrated in compact cities tend not to occur in low-density, single use or auto-oriented communities. Other social advantages relate to the health benefits that come from increased walking and cycling, as well as lower levels of air pollution due to reduced automobile use.

This reduction in air pollution ties into the environmental benefits that emerge when an appropriately located UCB is respected. Reduced lengths and frequency of automobile trips result in fewer greenhouse gas emissions and improved air quality. In addition, focusing development inside the UCB alleviates pressure on open spaces, natural habitat, resource lands and rural areas, preserving the functional and aesthetic integrity of the rural landscape.

It was these aspirations for well-planned development, and concerns over the alternative, sprawling pattern that led the RDN to develop the Regional Growth Strategy in 1997, with the UCB as the cornerstone to that plan. The UCB is central to achieving all of the RGS goals, and critically important to Goal 1: Strong Urban Containment and Goal 3: Rural Integrity.

In its current location, the UCB represents an agreement between all RDN members regarding where urban development will be supported, and where it should not occur. Lands that were specifically excluded from urban development include the Agricultural Land Reserve, managed forest lands and other undeveloped rural areas without community sewer and water service. Furthermore, when the RGS was drafted in 1997, it was recognized that the UCB should be considered:

> *…as a permanent limitation to development; revisions result in "phased sprawl" and defeat the purpose of the UCBs. Hence, even 5-year amendments should be limited in scope.*

Despite this original consensus, as well as the various benefits associated with urban containment described above and assessments[1] that indicate that there is currently enough land in urban areas to accommodate the region's projected residential growth for the next 30 years, there is ongoing pressure to move the urban containment boundary to allow development proposals in rural areas.

[1] Residential capacity analyses were conducted by the RDN in 2001 and 2007 and by the City of Nanaimo in 2007. All of the analyses concluded that there is enough land available for development to meet housing demand for the next 30 years without expanding the urban area.

Opportunity: Reaffirm a collective commitment to urban containment and compact mixed use urban development.

Given the increasing challenges local governments are facing with respect to the delivery of services, coupled with escalating public concern over climate change, the recognition that the quality and character of the landscape is negatively affected by conventional patterns of development, and a growing awareness of the limits to growth, urban containment can be made a priority now more than ever. By contrast, policies that support residential development far from jobs, schools, services, shopping, and recreational facilities will be increasingly seen as fiscally imprudent, resulting in dwindling resources available for investment in social and ecological infrastructure with consequences that affect the health and well-being of present and future residents of the region.

Therefore, the Regional District of Nanaimo and its member municipalities can reaffirm their commitment to urban containment and compact mixed use development by coming together and agreeing by consensus on the appropriate location of the UCB based on a collectively understood rationale, and implementing the policies that support this commitment.

2.3 AFFORDABLE HOUSING

Challenge: **Housing in the Region is getting more expensive, and housing choice remains relatively narrow, putting adequate, affordable housing out of reach for many residents.**

Available, affordable housing has wide ranging benefits for the individual, for families and for the community. The provision of an appropriate housing mix, including town homes, apartments, and garden suites as well as single-family homes, directly affects the social, economic and environmental sustainability of the region, allowing people of varying means, ages and family types to live in their community of choice, and contribute to the strength and success of that community.

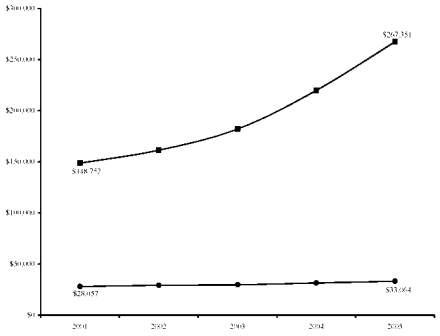

Figure 1:
Change in House Prices
Change in Income
(2001-2005)

In the Regional District of Nanaimo, housing is becoming less affordable as average house prices rise much more quickly than average incomes (Figure 1). This is exacerbated by a

relatively narrow housing choice, with 67% of homes as single-family detached dwellings, the most expensive housing type.

A consequence of this lack of affordable housing, as indicated in the *State of Sustainability Report*, is that the RDN has one of the highest percentages of people in 'core housing need' in the Province. A household is considered to be in core housing need if householders do not live in, and are unable to access acceptable housing – housing that is affordable (costs less than 30% of the household's gross, before-tax income), in adequate condition, and is of a suitable size. Over 8% of homeowners and 36% of renters were in core housing need in 2001. As well, the RDN has the highest number of applicants per subsidized housing unit in the Province (6.7 applicants per unit), nearly double the Provincial average.

Opportunity: Influence housing affordability through land use regulations and development approvals.

Although local governments have no role in income support programs they do have a role in shaping housing supply. Currently, the RGS contains one policy that references affordable housing:

> *Nodes should be designed to accommodate people from a variety of cultural, economic, and employment backgrounds. Nodes should not be allowed to become exclusive places. The design of housing and public facilities should reflect the needs of the broad local community. Nodes should provide for the housing needs of many groups – families, singles, retired, working, the aged, the disadvantaged, and those of lavish or modest means.*

The RGS could provide more direction and establish policies for action or agreements that will address the issue of housing affordability. The CRD and GVRD have used their regional growth strategies to establish regional housing policies. Some examples of the types of policies that could be included in the RGS are:

- The RGS could state that a regional affordable housing strategy will be developed to improve housing affordability;
- The RGS could be used to set targets for new affordable housing units or to reduce the number of people in core housing need. Each member would then indicate how it intends to meet those targets in its regional context statement;
- The RGS could direct the RDN and its member municipalities to investigate the provision of social housing;
- The RGS could require members to indicate how they will ensure that existing rental housing will be upgraded and maintained in regional context statements;

- The RGS could direct members to investigate options for promoting housing affordability including incentives, regulations, best practices, approvals processing, fees, taxes and partnerships.

Both the CRD and GVRD have taken the approach of developing a separate regional affordable housing strategy.

To complement affordable housing initiatives, the RDN could also work toward providing more and better transportation options through land-use planning that is supportive of transit, walking and cycling, reducing the need for a car, making more income available for housing or other purposes.

2.4 ACHIEVING DESIRED DENSITIES IN THE URBAN AREAS

Challenge: The densities needed to support regular transit, local commercial uses and walkable neighbourhoods are not being achieved in the urban areas of the RDN.

The RGS has designated urban areas and includes policies to support higher densities and nodal development, but actual development is regulated largely by zoning, and overall, desired densities are not being achieved in urban areas.

Concern about sprawling, low-density development was one of the catalysts that triggered the initiation of the regional growth strategy more than 15 years ago, and higher densities are a key component of the RGS goals for urban containment and nodal development.

The benefits associated with high density development in compact urban areas are numerous and well known. Frequent, reliable transit is feasible, and travel by foot or bicycle to local amenities and shops are viable options. Consequently, fewer cars are on the road, greenhouse gas emissions are reduced, and air quality improves, resulting in the improved health of residents. Municipal infrastructure can be provided at a reduced per capita cost, while development pressures on resource and agricultural lands and natural habitat is reduced, resulting in greater environmental protection and preservation of rural integrity. Also, high density centres can accommodate a wide range of housing types, making housing more attractive and affordable to a wider segment of society.

By contrast, continued low density development runs contrary to the vision for a sustainable region as it generally tends to have the following outcomes:

- high levels of traffic congestion and pollution;
- few choices in getting around;
- loss of resource lands and open spaces;
- high housing costs and few housing choices;
- more roads and infrastructure to maintain;
- environmental damage from ever-expanding development;
- increasing obesity, diabetes, asthma, and other health problems related to poor air quality and an inactive lifestyle.

SERVICE DESCRIPTION	DENSITY (Dwellings/ ha)
Local bus, daytime hourly service	9.88
Local bus, extended hours and 60 minute service, or 30 minute daytime service	17.29
Frequent bus service, some express	22.23
Very frequent service (@5-10 minutes)	37.05

Figure 2: Transit Service Related to Density

Currently, none of the urban areas in the RDN meet the required density for hourly transit service. The City of Nanaimo and the eastern portion of Qualicum Beach have the highest densities at just over 6 dwellings per hectare. According to BC Transit, effective hourly bus service requires a density that approaches 10 dwellings per hectare (Figure 2).

Adding to the challenge, there are a number of contributing factors that makes achieving higher densities in urban areas difficult. At the outset of a project, proposals for higher density development are often met with opposition from the community. People feel threatened by changes in the character of their neighbourhood and believe that an influx of people will take away the rural character that made the RDN attractive to begin with. Compounding this is the fact that development outside of the urban areas at lower densities is particularly attractive because of land availability and development capacity, lower land costs and, consequently, relatively affordable, large homes. This in turn perpetuates market demand for conventional residential development. In areas that are already built up, achieving higher densities requires significant residential redevelopment, which is not feasible for development companies and must therefore take place incrementally, owner by owner, over an extended period of time. Finally, most of the zoning currently in place in the region sets a maximum (as opposed to a minimum) density. Many developments are built at lower than these maximum densities, thereby reducing the capacity for the region to accommodate new housing.

Opportunity: Use the RGS to provide strategic direction on how high quality, strategically located density can make the region more sustainable, liveable and affordable, and facilitate the gradual densification of existing neighbourhoods.

As the Regional Growth Strategy is a key document for directing land use it could contain more specific policies with respect to nodal development and density. As well, in association with the RGS, education and awareness on the benefits of compact development should be

provided. The RGS could also include policies on incentives for densifying existing neighbourhoods, including rezoning to allow secondary or garden suites.

2.5 REDUCING GREENHOUSE GAS EMISSIONS

Challenge: Greenhouse gas (GHG) emissions are rising in the Region and the RDN has progressed slowly in effecting the policy changes, and facilitating the behavioural changes that will dramatically reduce per capita GHG emissions.

There is a general awareness that GHG emissions are largely caused by human activities, and that there is a strong connection between GHG emissions and climate change. However, GHG emissions in the Region continue to rise. Since GHG emissions in this Region are almost entirely tied to land use patterns, and specifically to transportation and building energy use, the RGS plays a key role in directing how GHGs will be reduced.

The Province has targeted a 33% reduction in greenhouse gas emissions from 2006 levels by 2020. It is necessary for an updated regional growth strategy to include targets for achieving these reductions. For the RDN, promoting a land use pattern that is compact, makes use of existing infrastructure and is supportive of a variety of modes of transportation can make a significant contribution to emission reductions. Some of the essential actions are:

- Strengthen urban containment through zoning and development approvals;
- Encourage green buildings through education and with financial incentives;
- Promote mixed-use nodes through zoning;
- Remove barriers to clean, renewable energy use;
- Support transit-oriented development;
- Support the densities and require the infrastructure to create walkable communities
- Provide cycling facilities including bike routes along streets, end-of-trip facilities in workplaces, as well as free tips for maintenance and safe riding; and
- Use zoning and incentives to encourage jobs and services close to homes.

While the RGS indirectly supports the reduction of GHGs, it is now necessary to specifically outline how GHGs will be reduced.

Opportunity: Use the RGS to influence transportation and building related GHGs.

Since transportation and building related GHGs account for nearly 100% of regional GHG emissions (Figure 3), the Regional Growth Strategy has the ability to influence the majority of GHGs in the region through its land use and transportation policies.

The RGS has a role to play both in helping to mitigate climate change impacts and in improving the region's adaptive capacity to reduce those impacts. This role includes influencing the patterns and form of where we live and work, how we move around, how far we have to travel by car, and recognizing the importance of protecting our natural assets.

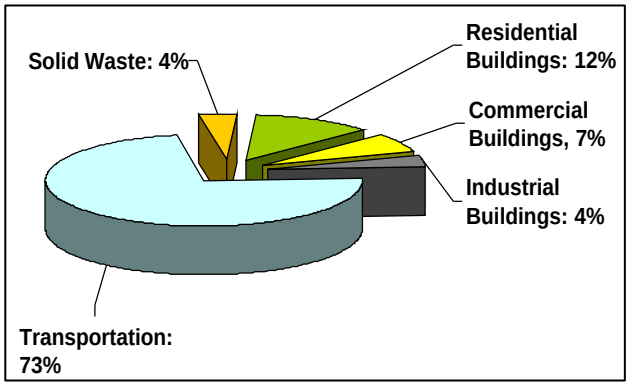

Figure 3: 2002 Region-Wide GHG Emissions by Sector

As the RGS is the key document for influencing land use and in turn transportation alternatives, it should contain specific direction with respect to urban containment, nodal development, density, and infrastructure for walking, cycling and public transit. As well, The RGS will be required to include targets and policies on how GHGs will be reduced.

2.6 SERVICING FOR VILLAGE CENTRES

Challenge: There is a lack of servicing at identified nodes, and a potential inability to service these nodes efficiently and cost effectively for the long term using conventional infrastructure.

The RGS identifies urban areas, including the village centres, in the Regional District, but development of these nodes requires the provision of community water and sewer services. Currently, there is no strategy in place to determine how to best provide these necessary services. Furthermore, there have been no technical assessments undertaken to determine if these village centres can be serviced efficiently and in a cost effective manner.

The provision of community sewer in the village centres has been an issue since the RGS was first adopted. Development is being directed toward village centres and developers are advised that new development should be connected to a community sewer system, despite the fact that there is no community sewer system in place. This requirement adds costs that make development in village centres less attractive than in outlying areas, perpetuating the tendency toward low density rural development. Additionally, establishing a community sewer system by getting resident approval to establish a local service area has not been successful, and thus far development proposals within village centres have not been large enough for a developer to bear the costs associated with establishing a community sewer system.

As it becomes increasingly important to concentrate people in more compact forms of development, effective servicing for these centres will be essential, and will require capacity to accommodate growing populations while preserving groundwater tables, minimizing impacts on the landscape, without imposing an unbearable fiscal burden on taxpayers.

Opportunity: Explore innovative and cost effective ways to service areas within the Urban Containment Boundary with community water and sewer facilities, and review the location of existing village centres.

Goal Number Seven of the RGS aims to have all new and existing development within the Urban Containment Boundary (UCB) serviced by a community sewer system. While much of the land within the UCB is currently serviced by a community sewer system, there are still several areas within the UCB where a community sewer system has not been established. These unserviced lands within the UCB are primarily in the village centres in the electoral areas.

If the RGS goal of supporting nodal development within the established village centres is to be realized then a reassessment of the location of the village centres and/or a new servicing approach is required. With respect to the location of the village centres, a review could be conducted that focuses on the feasibility of providing community sewer and water services. While the locations of many of the village centres are based on historical community development, it may not be feasible to provide services to these designated urban growth areas. Difficulties in servicing these areas could be the result of a wide range of factors including excessive cost, no source of water supply or unacceptable ecological impacts. Alternatively, there may be areas outside of the current UCB where it is much easier to provide services by extending an existing community system.

As the village centres represent the historical hearts of the communities, there is likely to be a strong desire by community members to see these areas remain as centres. In such cases, it may be worth exploring alternative approaches to servicing. Emerging trends that connect clusters of development to flexible treatment facilities modeled on ecological systems have proven to be extremely effective and adaptable to changing populations.

This decentralized approach to water and wastewater could help to encourage compact development in the heart of these communities as a developer would not be expected to establish a community water and/or sewer system that would eventually service a much

larger area. With this approach the focus would be on completing only the desired development. If feasible, such innovation in the provision of services could yield additional benefits associated with the concentration of expertise in the Region, and recognition for leadership in alternative appropriate technologies.

2.7 PARCEL SIZE IN THE RURAL AREAS

Challenge: Identifying a minimum parcel size in rural areas that supports the goals of strong urban containment and protecting rural integrity.

An ideal minimum parcel size for most rural private property in the RDN has not been identified. The original Regional Growth Management Plan (RGMP) from 1997 suggested parcel sizes of 8 ha for land in the ALR and 50 ha for private managed forest land however no specific sizes were identified for rural residential parcels. Identifying an ideal parcel size is a recommendation from the amended (2003) RGS:

> *The RDN and member municipalities agree to investigate the ideal and practical minimum parcel sizes for resource uses on lands designated as Resource Lands and Open Space.*

A significant challenge in providing a rationale for an ideal parcel size lies in defining rural integrity. In some parts of the region, rural integrity may be consistent with residential lots ranging in size from 1,000m^2 to 4,000m^2 (1/4 acre – 1 acre), while in other places rural integrity may require the presence of farms on large acreages, and still in others it may require large tracts of undeveloped forested land.

To date, the meaning of rural integrity has been described in individual OCPs. For the most part, each OCP has recognized existing uses and parcel sizes, and has supported the continuance of smaller parcel sizes of an acre or less. Where OCPs have recognized that parcel sizes should be larger, those policies have not always been implemented, and as a consequence the zoning that permits the creation of smaller parcels is still in effect.

The result of maintaining relatively small minimum parcel sizes in rural areas is reflected in the latest population growth figures from Statistics Canada. According to the 2006 Canada Census, all but one of the electoral areas are growing faster than the municipalities in the RDN. Furthermore, Electoral Areas C and F, which have the least amount of urban development, are growing at a faster rate than the Electoral Areas and municipalities which are more urban. This contradicts the aim of the RGS, and presents a potentially significant

source of controversy between the RDN and member municipalities, each of whom are meeting limited degrees of success in implementing the RGS and controlling rural sprawl.

Opportunity: Use the RGS review to come to consensus on a definition of 'rural integrity' for the region, and identify ideal minimum parcel sizes for new lots in different rural land categories without decreasing the parcel size.

As long as the minimum parcel size for subdivision remains relatively small in rural areas of the RDN, growth will continue in rural areas at a high rate. Thus, the only practical way of discouraging ongoing rapid growth outside the UCB is to significantly increase the minimum parcel size for new subdivisions.

Currently, based on the servicing standards from the Ministry of Community Services, the smallest parcel of land that can be created without servicing is 1 ha. Therefore it may be reasonable to require that all lots outside of the UCB be a minimum of 1 ha for new subdivisions. This would significantly reduce the potential number of new lots in rural areas.

This, however, is an extremely difficult political course of action, having direct, financially measurable consequences for significant numbers of people living outside the UCB. To mitigate this, the RDN, through the RGS process will require extensive consultation with local residents in electoral areas in an effort to form a collaborative vision for preserving rural integrity, and to build the political support and buy in for that vision among RDN members.

2.8 RESOURCE LANDS

Challenge: The ability of forest companies to sell and/ or develop privately owned land.

Much of the regional district is comprised of privately managed forest lands owned by forestry companies. As part of the productive forest, these lands are important to the strength of the local economy, and while they are privately owned, they also serve as significant recreational areas and green spaces that are highly valued by the community.

Due to economic challenges in the forestry sector, the forestry companies are reviewing their land holdings to determine which lands have a higher value for non-forestry uses, including residential development. Examined within the context of regional development,

converting these lands to urban or suburban uses would be in direct conflict with the RGS, particularly with Goal 1-Strong Urban Containment and Goal 3-Rural Integrity.

Firstly, all these forest lands lie outside the UCB, therefore directing development to these areas would weaken urban containment, and promote sprawl into rural areas, exacerbating many of the problems outlined in this document.

Secondly, development of these lands is not needed to accommodate projected future population growth. Using these lands to do so would mean choosing an extremely inefficient way to accommodate people, and would require extending expensive services well beyond current limits. This would put an extraordinary strain on local government resources, and would inevitably result in an inequitable system of taxation whereby residents in existing developed areas would disproportionately finance the development and maintenance of new services in distant areas.

From an environmental standpoint, converting forest lands to rural-residential uses would eliminate tracts of natural habitat, harming local ecosystems and their biodiversity and permanently establishing a land-use pattern known to generate high levels of greenhouse gas emissions, and cause other negative health effects.

Finally, the broader economic consequences of converting productive forest land to residential uses includes the closure of future opportunities for a diversified local forest economy that capitalizes on, as examples, recreation, non-timber forest products, and the development of local value-added industries. This represents a major opportunity cost, all for an immediate, one-time return that is of primary benefit to individual forest companies.

Opportunity: Collaborate with private forestry companies, the Private Managed Forest Land Council and the Provincial Ministry of Forests in the development of a long-term, integrated forestry and recreation land and resource use plan.

A productive forest landscape in the RDN supports a vibrant local economy, and preserves an authentic component of the regional rural landscape. A collaborative approach to the management of forest lands that advances forest companies' economic objectives, while also contributing to the social well being of residents and the environmental health of the region will create long-term stability for forestry in the RDN.

This approach offers the opportunity to generate wealth from a wide variety of sources. Balancing forestry practices and recreational management with the protection of ecologically sensitive areas will capitalize on growth in nature-based tourism and recreation and will foster diversity in the forest sector by encouraging the use of non-timber forest resources. This can be further supported by strongly promoting a local value-added processing and manufacturing sector.

The result will be greater stability in the industry and the local economy, and resilience to external, uncontrollable forces that influence the economic viability of forestry in the region.

2.9 FUTURE SITES FOR SOLID WASTE RECYCLING AND PROCESSING

Challenge: Determining appropriate locations for new recycling and re-use processing facilities.

As the RDN continues to move towards its zero waste goal, much of the waste that currently goes to the regional landfill site will be diverted to other facilities for recycling and processing. As this is a regional challenge that is affected by growth in the RDN, it has been suggested that determining the appropriate location for these sites could be addressed in the RGS.

Locations for recycling and re-use facilities could be identified. In particular, the RDN should consider locations for facilities that could accept wood waste from land clearing, and compost facilities. In both cases, it is best that such facilities be located away from residential and urban areas, as facilities of this nature can create negative impacts such as noise, traffic and odours.

In determining the appropriate location for waste management facilities, the key challenges are finding a location that is far enough from settlement areas to mitigate the above-mentioned impacts, without being so far away that transportation costs are prohibitively expensive. It is also essential to find a site that is large enough, and unconstrained by slope or other relevant environmental factors.

Opportunity: Establish a framework for decision-making to guide the selection of locations for new waste management facilities.

Waste management facilities serve the entire region, thus considering their location could fall within the purview of the RGS. However, the RGS need not necessarily include a site specific designation. Instead, the RGS could include policies, recommendations for best practices and essential criteria that provide a framework to guide decision-making when determining the most appropriate location for waste management facilities.

2.10 LOCATION OF ECOINDUSTRY

Challenge: A lack of information regarding the availability of land for ecoindustry, and the demand for new light and heavy industry in the Region.

Ecoindustry refers to an approach to locating and consolidating industries in a way that connects flows of materials and energy for different processes to maximize efficiency, and minimize waste. In fact, the very concept of waste disappears as the by-product of one process becomes the fuel or material resource for another. The resultant network of interconnected facilities, processes and infrastructure is called an ecoindustrial network.

The *Land Inventory and Residential Capacity Analysis* from 2007 points out that the RDN has not gathered together the information that would enable a capacity analysis for industrial lands in the region. In addition, the report states that there is an absence of a medium to long-term demand study for light and heavy industry.

Without this information, it is difficult to determine where new industries should be located, and whether there is the demand and the ability for the region to participate in the evolution from 'industry-as-usual' to the emerging trend toward ecoindustry.

Opportunity: Include policies that support the development of ecoindustry in the RGS and conduct a capacity analysis for industrial land in the RDN.

There is an opportunity for the RDN to act on the recommendations contained in the *Land Inventory and Residential Capacity Analysis*, and identify the availability of appropriate land for industry, as well as the medium and long term demand for industrial land in the region. With clarity on this information, the RDN will be able to set a direction for industrial development that brings together complementary industrial activities in ecoindustrial networks. This will maximize the efficiency of participating industries and minimize the waste generated by industry.

In addition to the environmental benefits of reduced waste and pollution, and the economic benefits associated with the efficient use of resources, a potential benefit that will arise for industries in the RDN that come together as ecoindustrial networks will be the competitive advantage derived from taking a leadership role in this emerging trend. Expertise in the principles and practices of ecoindustry will be an exportable intellectual resource, while the region as a whole may benefit from an enhanced reputation for leadership in ecoindustry and a clear commitment to sustainability in industry.

3.0 SOURCES

BC Stats. (2007) *2006 Census Profile: Nanaimo CD*. Retrieved February 2008 from: http://www.bcstats.gov.bc.ca/data/cen06/profiles/detailed/59021000.pdf

BC Stats. (2000) *Income Profile 1996 Nanaimo Regional District*. Retrieved February 2008 from: http://www.bcstats.gov.bc.ca/DATA/dd/in_prof/IP152.pdf

BC Stats. (2007) 2006 *Census Profile: Nanaimo C*. Retrieved February 2008 from: http://www.bcstats.gov.bc.ca/data/cen06/profiles/detailed/59021007.pdf

BC Stats. (2007) *British Columbia Municipal and Regional District: 2006 Census Total Population Results* Retrieved February 2008 from: http://www.bcstats.gov.bc.ca/data/cen06/mun_rd.asp

BC Stats. (2008) *Community Facts: Nanaimo, City*. Retrieved February 2008 from: http://www.bcstats.gov.bc.ca/data/dd/facsheet/cf230.pdf

BC Stats. (2008) *Community Facts: Nanaimo, Regional District*. Retrieved February 2008 from: http://www.bcstats.gov.bc.ca/data/dd/facsheet/cf230.pdf

Regional District of Nanaimo, (2006). *Prospering Today, Protecting Tomorrow: The State of Sustainability of the Regional District of Nanaimo*. November 2006.

Regional District of Nanaimo, (2007). *Population and Housing Change in the Nanaimo Region, 2006 to 2036*.Prepared by Urban Futures, October 2007.

Regional District of Nanaimo, (2007). *Regional District of Nanaimo Regional Growth Strategy Background Report: Land Inventory and Residential Capacity Analysis*. Prepared by The Sheltair Group, October 2007.

Statistics Canada. (April 2001) *The Value of Words: Literacy and Economic Security in Canada*. Retrieved April 13, 2006 from http://www.statcan.ca/english/freepub/89F0100XIE/value.htm.

Statistics Canada. (2001) *2001 Census Dictionary*. Retrieved April 12, 2006 from http://www12.statcan.ca/english/census01/Products/Reference/dict/fam021.htm.

Statistics Canada. (2002) *Agriculture Census 2001: Census Terms*. Retrieved July 12, 2006 from http://www.statcan.ca/english/freepub/95F0301XIE/notes/center.htm.

Statistics Canada. (2002) *Farming Facts 2002*. Retrieved June 7, 2006 from http://statcan.ca/english/freepub/21-522-XIE/21-522-XIE02001.pdf.

Statistics Canada. (2005) *Canada's Performance Report 2005: Indicator Methodology*.

BC Transit. *Transit and Land Use Planning*. http://www.bctransit.com/corporate/resources/pdf/res-urban-20.pdf

Vancouver Island Real Estate Board (2002) *Vancouver Island Real Estate Board 2001 Annual MSL® Sales Summary.* Retrieved February 2008 from http://www.vireb.com/2001/Sales-2001.htm

Vancouver Island Real Estate Board (2003) *Vancouver Island Real Estate Board 2002 Annual MSL® Sales Summary.* Retrieved February 2008 from http://www.vireb.com/2002/Sales-2002.htm

Vancouver Island Real Estate Board (2004) *Vancouver Island Real Estate Board 2003 Annual MSL® Sales Summary* Retrieved February 2008 from http://www.vireb.com/2003/Sales-2003.htm

Vancouver Island Real Estate Board (2005) *Vancouver Island Real Estate Board 2004 Annual MSL® Sales Summary.* Retrieved February 2008 from http://www.vireb.com/2004/Sales-2004.htm

Vancouver Island Real Estate Board (2006) *Vancouver Island Real Estate Board 2005 Annual MSL® Sales Summary* Retrieved February 2008 from http://www.vireb.com/2005/Sales-2005.htm

Vancouver Island Real Estate Board (2007) *Vancouver Island Real Estate Board 2006 Annual MSL® Sales Summary.* Retrieved February 2008 from http://www.vireb.com/2006/Sales-2006.htm