



Monitoring

Background Report

REGIONAL GROWTH STRATEGY

January 28 • 2014

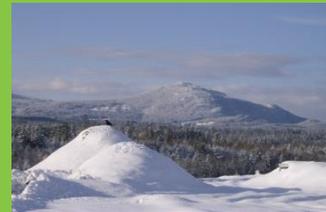


Table of Contents

1. INTRODUCTION.....	2
1.1 MONITORING PROGRESS ON ACHIEVING THE RGS VISION	2
1.2 DOCUMENT PURPOSE:	2
1.3 WHAT IS MONITORING?	2
1.4 WHAT IS EVALUATION?.....	4
1.5 IS MONITORING REQUIRED?	4
2. WHAT IS THE HISTORY OF MONITORING THE RGS?	5
2.1 FIRST MONITORING REPORT - 1997.....	6
2.2 SECOND MONITORING REPORT - 1998.....	6
2.3 THIRD MONITORING REPORT - 1999.....	6
2.4 FOURTH MONITORING REPORT - 2000.....	7
2.5 FIFTH MONITORING REPORT – 2001-2002	7
2.6 RGS REVIEW & FORMATION OF THE RGMAC – 2003	7
2.7 SIXTH MONITORING REPORT – 2003-2004	8
2.8 SEVENTH MONITORING REPORT – 2006	8
2.9 RGS REVIEW – 2007-2011	8
2.10 EIGHTH MONITORING REPORT – 2012	8
3. INDICATORS AND MONITORING THE RGS	9
3.1 WHAT IS AN INDICATOR?	9
3.2 THINGS TO CONSIDER FOR INDICATOR SELECTION:.....	9
3.3 INDICATORS PREVIOUSLY USED FOR MONITORING THE RGS	10
3.4 SUGGESTED INDICATORS IN THE 2011 RGS	11
4. THE ROLE OF BASELINES, BENCHMARKS AND TARGETS IN RGS MONITORING	14
4.1 WHAT ARE “BASELINES”?	14
4.2 WHAT ARE “BENCHMARKS”?.....	14
4.3 WHAT ARE “TARGETS”?	14
4.4 THINGS TO CONSIDER WHEN SETTING TARGETS.....	15
4.5 WHAT IS THE HISTORY OF USING “TARGETS” TO MONITOR THE RGS?	16
4.6 DO WE HAVE TO SET TARGETS FOR THE RGS?	16
4.7 WHAT IS THE RELATIONSHIP BETWEEN TARGETS AND INDICATORS?.....	16
5. NEXT STEPS FOR MONITORING.....	17
5.1 OBJECTIVES FOR SETTING TARGETS & SELECTING INDICATORS FOR THE 2011 RGS.....	17
5.2 PROPOSED APPROACH FOR SETTING TARGETS & SELECTING INDICATORS FOR THE 2011 RGS	18
APPENDIX 1 – INDICATORS FROM 2000 RGS MONITORING REPORT	19
APPENDIX 2 – STATE OF SUSTAINABILITY INDICATORS, 2006 MONITORING REPORT	20
APPENDIX 3 – RGS 2011 GOALS	22

1. INTRODUCTION

1.1 MONITORING PROGRESS ON ACHIEVING THE RGS VISION

The 2011 Regional Growth Strategy (RGS) is a strategic planning document that defines a regional vision for sustainability for the Regional District of Nanaimo (RDN). The RGS uses goals and related policies to work towards achieving that vision. It establishes where we want to go and sets out actions for how we will get there.

An essential part of implementing or carrying out the 2011 RGS involves monitoring progress and evaluating the effectiveness of actions undertaken to achieve the RGS vision. Monitoring is part of being “accountable for our decisions and actions” one of the sustainability principles that the 2011 RGS is founded on.

Monitoring our progress will help us understand if our actions are having the results we intended. It could indicate that policies need to be adjusted to reflect new government powers or changes in environmental, social, and economic circumstances since the plan’s adoption. Monitoring ensures that the RDN and member local governments are making decisions that move the region towards the vision of a more sustainable community as established in the RGS.

Without effective planning, monitoring and evaluation, it would be impossible to judge if work is going in the right direction, whether progress and success can be claimed, and how future efforts might be improved.

United Nations Development Program, 2009

1.2 DOCUMENT PURPOSE:

The purpose of this document is to:

- Provide an understanding of monitoring and evaluation
- Explain the need to monitor the RGS
- Review the history of monitoring the RGS
- Review the history of selecting indicators and establishing targets to monitor the RGS
- Discuss potential steps to move forward with selecting indicators and targets for the RGS

1.3 WHAT IS MONITORING?

Monitoring involves the ongoing collection of information to provide feedback on progress towards achieving RGS goals. Diagram 1 shows how monitoring is part of the process for planning and implementing the RGS. In the context of the RGS, monitoring is intended to answer the following questions:

- Are we doing what we said we would?
- What is happening? Are we making progress on achieving the results we wanted to achieve?

The first question can be answered by tracking specific actions taken by the RDN to implement the RGS. The second question requires a greater degree of effort to collect information that measures progress towards achieving specific goals. This information can be used to produce reports and evaluate progress towards achieving the goals of the plan. Indicators are frequently used to monitor progress towards achieving results.

Diagram 1: Setting Targets and Monitoring in the RGS Planning and Implementation Cycle



1.4 WHAT IS EVALUATION?

The aims of both monitoring and evaluation are very similar: to provide information that can help inform decisions, improve performance and achieve planned results. While monitoring tells us whether or not we are making progress towards our goals, evaluation provides an understanding of the value of the actions we are taking and the extent to which they are effective in achieving our goals.

Evaluation is intended to help us answer:

- How effective are our actions/policies in achieving the results we wanted?
- Do we need to adjust our actions/policies to achieve the results we want?

“...evaluation should (enable) the incorporation of lessons learned into the decision-making process ...”

Evaluation should help identify opportunities to improve the effectiveness of actions to implement the RGS.

1.5 IS MONITORING REQUIRED?

The *Local Government Act* requires regional districts that have adopted a regional growth strategy to:

- Establish a program to monitor its implementation and the progress made towards its objectives and actions, and*
- Prepare an annual report on that implementation and progress.¹*

In accordance with the legislative requirements, the RGS has the following policies under Section 5.2 Implementation:

Policy 1. Prepare an annual report on implementation and progress towards the goals and objectives of the RGS.

Policy 4. Establish a process and program to identify and establish targets to achieve key policies set out in this RGS within one year of adoption of this RGS.

Policy 5. Establish a process and program to monitor, evaluate and periodically report on regional economic, population, social and environmental trends and progress towards achieving RGS goals and policies and the targets to be established as set out in Policy 4, within one year of adoption of the RGS.

¹ British Columbia Local Government Act, Part 25 – Division 4 - Section 869 (1)

2. WHAT IS THE HISTORY OF MONITORING THE RGS?

Since the RGS was first adopted in 1997 there have been eight monitoring reports produced. One of the challenges of ongoing monitoring of the RGS has been a lack of consistency on how progress has been measured and reported over time. While some reports have covered similar information, there has been no consistency in the format of the reports or the use of measurable indicators that can easily be compared over time. This is due to a number of factors including the time and resources that were available to prepare monitoring reports, particularly those that began to use measurable indicators. The diagram below provides a summary of the eight monitoring reports to date, followed by a brief history of monitoring the RGS.

Diagram 2: Summary of RGS Monitoring Reports 1998-2013

	RGS ² Monitoring Reports	Published	Description
1	Growth Management Plan 1997 Annual Report	Jan 28, 1998 (Staff Report)	Description of activities undertaken by the RDN to carry out policies.
2	Growth Management Plan 1998 Annual Report	May, 1999	Description of activities undertaken by the RDN to carry out policies.
3	1999 Annual Report on the Growth Management Plan	March, 2000	Description of activities undertaken by the RDN to carry out policies and introduction of 'policy' indicators to measure progress.
4	2000 Annual Report on Progress Towards the Vision and Goals of the Growth Management Plan	April, 2001	First monitoring report to use a set of 32 quantitative indicators to measure progress. Document includes numerous tables, charts and diagrams to show progress as measured by indicators. Work was overseen by a group of community representatives known as the Performance Review Committee (PRC).
5	2001-2002 Annual Report Regarding Implementation Progress	August, 2003	Description of activities undertaken by the RDN to carry out policies.
6	Sustainability Report 2003-2004	May, 2005 (RDN Board Received)	Description of activities undertaken by the RDN that relate to the 22 characteristics of a sustainable region rather than to specific areas relating to RGS goals.

² The RGS was originally referred to as the Growth Management Plan until it was renamed the Regional Growth Strategy as part of its first major update in 2003.

7	Prospering Today, Protecting Tomorrow – The State of Sustainability of the Regional District of Nanaimo - 2006	Sept, 2006	Detailed analysis of 41 quantitative indicators used to show progress towards 22 sustainability characteristics of the region, some of which directly relate to policies in the RGS and areas that the RDN can influence.
			Work was overseen by a group of community representatives known as the Regional Growth Management Advisory Committee (RGMAC).
8	2012 Annual Report Regional Growth Strategy Implementation and Progress	March, 2013 (RDN Board Received)	Description of activities undertaken by the RDN and member municipalities to carry out policies in the updated 2011 RGS.

2.1 FIRST MONITORING REPORT - 1997

The first monitoring report on the RGS was produced by RDN staff in 1997. This was essentially a list of actions or projects undertaken to show progress on implementing the RGS. This first report acknowledged that it did not “measure performance of the plan” and that a priority for the following year would be “the development of performance measures to review the ‘success’.....and provide indicators of the plan’s performance”.

2.2 SECOND MONITORING REPORT - 1998

In the spring of 1998 the Performance Review Committee (PRC) was established to monitor progress towards achieving the goals of the RGS. The PRC was an RDN Board appointed committee initially made up of 13 individuals representing electoral area advisory planning commissions and the public at large from throughout the Regional District. In 2000, following the dissolution of the electoral area planning commissions the terms of reference of the PRC was amended to include sixteen members, eight from member municipalities and eight from electoral area residents.

In 1998 the PRC began a process to oversee the selection of criteria to measure progress on the RGS goals. Despite using the term ‘indicators’, the indicators used were primarily a description of activities taken to implement policies in the RGS. For example, one of the indicators to show progress for Goal 1: Strong Urban Containment was *the inclusion of Urban Boundaries in Official Community Plans*. The second monitoring report in 1998 used these ‘policy indicators’ as the basis for describing accomplishments related to implementing the plan and also provided an assessment made by the PRC on progress towards each RGS goal area.

2.3 THIRD MONITORING REPORT - 1999

The third monitoring report in 1999 used the same ‘policy indicators’ as the 1998 report and also began to introduce the use of more quantitative data. For example, a description of the indicator used for Policy 3A *“Official community plans will promote and encourage the retention of large rural holdings”* included a table to show the percentage of land under different OCP designations that conform to the minimum parcel size. The 1999 report, while still primarily a description of actions taken to implement the RGS, was the first RGS monitoring report to produce a limited amount of baseline data that could be

used to track progress on a few of the RGS goals over time. The PRC used both these quantitative and qualitative measures to assess progress made in each RGS goal area.

2.4 FOURTH MONITORING REPORT - 2000

In 2000 the RDN Board provided the PRC with financial resources to support the selection of 32 indicators and to collect baseline data on them (see Appendix 1). The process for selecting the final 32 indicators included two workshops involving representatives from Federal and Provincial levels of government, as well as two member municipalities (City of Nanaimo and City of Parksville) and members of the PRC. The fourth monitoring report in 2000 ("*2000 Annual Report on Progress Towards the Vision and Goals of the Growth Management Plan*"), can be considered the first RGS monitoring report to use a full set of true 'indicators' to measure progress towards achieving RGS goals. For example, *Population density inside and outside urban containment boundaries* was used as the indicator for Goal 1: Strong Urban Containment. The fourth monitoring report also contains tables, graphs and charts showing baseline information and in some instances compared 2000 information to baseline data collected in the 1999 monitoring report.

The fourth monitoring report clearly explained the relevance of the indicators used and provided community members with information on what actions they could take to improve progress towards RGS goals as measured by the indicators.

The Performance Review Committee was dissolved in 2002 as the RDN aimed to establish a monitoring program that was intended to provide broader opportunities for public involvement in the RGS monitoring and reporting process.

2.5 FIFTH MONITORING REPORT – 2001-2002

The fifth RGS monitoring report for 2001-2002 did not use the 32 quantitative indicators established in the 2000 report and instead focused on describing actions taken by the RDN and its member municipalities to implement the RGS (*2001-2002 Annual Report Regarding Implementation Progress, August 2003*). This report was produced after the PRC was dissolved and covered the time period of the first major review of the RGS.

2.6 RGS REVIEW & FORMATION OF THE RGMAC – 2003

Following the first major review of the RGS that resulted in the adoption of an updated RGS in 2003, the RDN established the Regional Growth Management Advisory Committee (RGMAC) with an initial mandate to monitor the regional district's progress toward the goals of the Regional Growth Strategy. Through the RGMAC, the RDN initiated the State of Sustainability project in 2003 to undertake a comprehensive monitoring program and make recommendations for how the sustainability of the region could be improved. This monitoring program represented a shift towards broader monitoring of sustainability characteristics of the whole region not all of which could be related directly to RGS Goals and policies.

The RGMAC used feedback from public workshops to identify 22 characteristics of a sustainable region under the three sub-categories, Environmental Capital, Social Capital and Economic Capital. This shift in scope resulted in the sixth monitoring report (*The 2003-2004 Sustainability Report*) describing actions

that showed progress towards the 22 characteristics of a sustainable region rather than specifically on progress towards the RGS goals.

2.7 SIXTH MONITORING REPORT – 2003-2004

The sixth monitoring report (*The 2003-2004 Sustainability Report*) was similar to the first, second, third and fifth monitoring reports in its focus on describing actions taken by the RDN and its member municipalities without using quantitative indicators to measure progress. Because it was not intended to focus on the RGS goals, the sixth monitoring report did not provide any linkages between actions taken and progress towards the implementation of RGS goals.

2.8 SEVENTH MONITORING REPORT – 2006

In 2004 the RGMAC held a public workshop attended by approximately 200 participants who helped identify over 213 potential indicators/measures that could be used to provide information on progress towards the 22 previously identified characteristics of a sustainable region. Following this workshop, the RGMAC worked with consultants to narrow the 213 indicators to a final set of 41 indicators. The selection of the final 41 indicators also included consideration of the 32 indicators selected by the PRC.

These indicators were used to produce the seventh RGS monitoring report *‘Prospering Today, Protecting Tomorrow: The State of Sustainability for the Regional District of Nanaimo’* in 2006 (see Appendix 2).

This report used the 41 indicators to analyze progress towards different aspects of Social, Environmental or Economic sustainability rather than specifically discussing progress on reaching RGS goals.

The RGMAC held a second public workshop in 2007 to discuss the outcome of the monitoring project and make recommendations for how the sustainability of the region could be improved. These recommendations were included in the report *‘Prospering Today, Protecting Tomorrow: Recommendations for a Sustainable Future.’* This report was intended to inform the second major review of the RGS that was initiated in 2007.

2.9 RGS REVIEW – 2007-2011

The seventh monitoring report and subsequent recommendations for actions to improve the status of different sustainability indicators served as a tool to inform the second major review of the RGS that was initiated in 2007 and concluded in 2011 with the adoption of an updated RGS. During the second RGS review period no monitoring reports were produced.

2.10 EIGHTH MONITORING REPORT – 2012

The 2012 annual monitoring report was produced by RDN staff in early 2013. It identifies and describes actions taken by the RDN and/or member municipalities that show progress towards implementation of the RGS since it was updated in November 2011. Similar to the first, second, third, fifth and sixth monitoring reports, this eighth report did not “... attempt to measure how effective these implementation actions are” and indicates that “the development of measures to monitor and evaluate the implementation of the RGS is a priority action for 2013”.

3. INDICATORS AND MONITORING THE RGS

This section explains what indicators are, their role in monitoring progress and how the RDN has used indicators to monitor the RGS.

3.1 WHAT IS AN INDICATOR?

Indicators are measures that can be used to show how well a social, cultural, economic or environmental system is working over a period of time. Indicators provide a focused snapshot of a small, understandable part of these complex systems.

Indicators can be used to determine to what extent progress is being made towards the goals we want to achieve.

On-going and consistent monitoring of indicators is critical to evaluating the effectiveness of policies and determining the need to change a course of action. Measuring indicators makes it possible to understand the effectiveness of policies and actions in a plan.

Indicators make it possible to demonstrate results. Indicators can also help in producing results by providing a reference point for monitoring, decision-making, stakeholder consultations and evaluation. In particular, indicators can help to:

- *Measure progress and achievements;*
- *Clarify consistency between activities, outputs, outcomes and goals;*
- *Ensure legitimacy and accountability to all stakeholders by demonstrating progress;*
- *Assess project and staff performance.*

*Signposts of Development Risk Based Management
in the United Nations Development Program*

3.2 THINGS TO CONSIDER FOR INDICATOR SELECTION:

Indicators should relate to things that the RDN has some influence or control over

Some indicators used in the past to monitor the RGS did not relate to either the RGS or the authority of the RDN. The 2006, State of Sustainability project included indicators such as motor vehicle accidents or birth weights, that while showing progress on the 22 characteristics of a sustainable region were not indicators that the RGS could directly influence. If the role of the RGS monitoring program is to measure progress towards meeting RGS goals (with a view of determining the need to adjust policies and actions taken by the RDN), then indicators that measure aspects of sustainability that are outside of RDN control may not be appropriate.

Previous Work on Indicator Selection

The RDN has done a significant amount of work on choosing indicators in previous RGS monitoring initiatives. It is important to recognize the work that has already been done and use this information in the selection of new indicators.

Commit to a set of indicators over time

A big challenge with past RGS monitoring is a lack of consistency over the indicators measured and the style of reporting since the RGS was adopted. This makes it difficult to track trends over time. Selecting indicators that will be reported consistently is essential to understanding the implications of different actions over time.

Select a practical number of indicators

The last monitoring report of the RGS done in 2006 included an in depth review of 41 indicators contained in a lengthy report. A key challenge for monitoring the RGS is selecting a practical number of indicators that allow for regular updates to be done and that also convey meaningful information to stakeholders. As has been noted in several studies *“a smaller number of indicators are more effective in communicating and mobilizing action”*.³

Make Reporting Accessible to Different Audiences

Finding effective ways of communicating the results of monitoring is essential for making information accessible and being accountable to community members. Selecting the appropriate format and technology (for example, use of written reports, versus more interactive web-based tools) will depend on the needs of different users (staff, community members, Board members) as well as available resources.

3.3 INDICATORS PREVIOUSLY USED FOR MONITORING THE RGS

While the third RGS monitoring report for 1999 began to use a few indicators and measure baseline data, the fourth RGS monitoring report for 2000 was the first report to use a full set of clearly measurable indicators. Thirty-two indicators (see Appendix 1) were selected by the Performance Review Committee (PRC) to be included in the 2000 monitoring report. The PRC worked with representatives from the Federal and Provincial governments, two member municipalities (City of Nanaimo and City of Parksville) during two workshops to select suitable indicators.

The selection of indicators was made by evaluating data according to several criteria, including availability, affordability, extent of geographic coverage, timeliness, validity, sensitivity, comparability, and credibility.

For the State of Sustainability Project work undertaken by the RGMAC, community workshops and consultants produced a list of 213 potential indicators to use for assessing the state of sustainability in the region. It is important to remember that the indicators considered and selected were intended to measure progress towards the 22 characteristics of a sustainable region and were not intended to specifically measure progress on the goals of the RGS.

³ The Sheltair Group: Indicators for Sustainable Communities: A Case Study Scan, March 2007

The following selection criteria were used to produce a smaller list of 41 ‘optimum indicators’ considered appropriate for the monitoring program: The 41 indicators selected by the RGMAC and included in the seventh RGS monitoring report in 2006, *Prospering Today, Protecting Tomorrow* are listed in Appendix 2.

2006 State of Sustainability Indicator Selection Criteria

- *Relevant.* The indicator reflects the sustainability topic of interest.
- *Linked to Action.* The indicator supports change in behaviour or improvement in decisions, goals, or policies in the region.
- *Understandable.* A diverse range of people easily understands the indicator.
- *Sensitive to change.* The indicator reveals change in the social or physical environment.
- *Integrative.* The indicator demonstrates connections among key dimensions of sustainability. This criterion is desirable but not crucial. That is, some excellent indicators pertain only to a single dimension of sustainability.
- *Comparable.* The indicator results can be compared with other regions.
- *Scale.* The indicator reveals conditions and trends at the regional or sub-regional levels.
- *Interpretable.* The indicator is free of extraneous factors that could confound its interpretation (e.g., what else could affect the indicator besides the social or physical topic of interest).

Data qualities

Sustainability indicators can only be used if data are available to support them. A good sustainability indicator is supported by data that meet all or most of the criteria listed below. These criteria were applied in the assessment of data available for candidate RDN indicators for the 2006 monitoring report.

- *Available.* Data exist to support the indicator.
- *Scale.* The data captured are at a scale appropriate for sustainability reporting needs (e.g., regional, municipal, street-level, household).
- *Temporal.* The data have been collected long enough to show trends over time and progress toward targets, and will continue to be collected in the

3.4 SUGGESTED INDICATORS IN THE 2011 RGS

During the review that resulted in the adoption of the updated RGS in 2011 a number of potential indicators related to the 11 RGS goals were identified. A list of 33 potential indicators was included in Section 5.4 with the intent that they could be used to gauge the effectiveness of policies and progress towards goals in the RGS:

Climate Change

- Reduction of GHG emissions and energy consumption indicators and targets will be established in the Community Energy and Emissions Plan.

Environmental Protection

- Water quality and quantity (surface and groundwater);
- Air quality;
- Amount of new ESA lands and riparian areas protected.

Coordinate Land Use & Mobility

- Commute to work travel mode share;
- Total length of regional trail network;
- Share of population growth within GCB;
- Share of net new dwellings located within GCB;
- Number of households within GCB that are within walking distance of transit;
- Diversity of land uses within designated mixed-use centres served by transit.

Concentrate Housing & Jobs in Growth Centres and Corridors

- Housing densities inside GCB;
- Net new dwellings located in the City of Nanaimo and major urban centres;
- Share of net new dwellings in electoral areas located within rural area GCB;
- Share of new jobs located in the City of Nanaimo and urban centres;
- Share of new jobs in electoral areas located within rural area GCB.

Rural Integrity

- Net change in land area of forestry lands (lands designated Resource Lands and Open Space excluding ALR and designated open space lands);
- Net change in land area of ALR;
- Number of new parcels subdivided in ALR lands;
- ALR range of parcel sizes;
- Gross farm receipts and number of farms by gross farm receipt category;
- Density outside the GCB.

Affordable Housing

- Housing diversity by unit type;
- Number of new affordable housing units constructed;
- Subsidized housing wait lists;
- Level of homelessness.

Resilient Economy

- Number of new jobs in the region;
- Share of jobs by economic sector.

Culture, Arts and Recreation

- Number of inventoried heritage resources;
- Kilometres of public trails and pathways.

Efficient Services

- Per capita disposal of solid waste;
- Average per capita consumption of potable water;
- Per capita length of water and sewer lines in areas with community services;
- Per capita road length.

4. THE ROLE OF BASELINES, BENCHMARKS AND TARGETS IN RGS MONITORING

Making indicators meaningful requires using baselines, benchmarks and targets to measure indicators against. Along with indicators these are key components of monitoring the RGS in order to help leaders and community members understand progress made and the need to take actions to improve performance.

4.1 WHAT ARE “BASELINES”?

Baselines represent the starting point for monitoring progress made using a set of indicators. Some baselines have been established for several of the indicators used in prior RGS monitoring programs and reports. Baselines allow us to track progress made over time, showing trends away from or towards our goals. Baselines are most useful when they are used in conjunction with targets that establish a specific level of performance or desired state that we intend to achieve over time.

4.2 WHAT ARE “BENCHMARKS”?

A benchmark is a standard, or a set of standards, used as a point of reference for evaluating performance. Benchmarks may be drawn from a local government’s own experience; using results achieved by other levels of government; or from legal requirements such as environmental regulations.⁴ Benchmarks help provide meaning or context about the performance of an indicator and can be used as a basis for setting targets.

Benchmarks allow local governments to understand how their indicator results compare with other communities of a similar size (for example, the Community Energy and Emissions Inventory allows comparison of Green House Gas energy use amongst different regional districts) or with national or provincial measures. It should be noted that using similar sized communities to establish benchmarks, has been criticized as being of limited value for comparing the level of progress between local governments, given the wide differences that typically exist in local politics, environment, economy and social contexts.

4.3 WHAT ARE “TARGETS”?

Targets represent a specific result that we want the RGS to achieve over time that is measured by indicators. While goals in the RGS describe the broad, general direction towards achieving improved sustainability or environmental performance, targets establish a specific desired level of performance or outcome of a policy or action taken to implement the RGS.

Targets can help:

- Increase Accountability – defining who is responsible for different actions to work towards a target.

⁴ <http://www.businessdictionary.com/definition/benchmark.html#ixzz1t5qX0fgf>

- Prioritize – prioritizing actions needed to reach a target including management decisions and resource allocation.
- Motivate - motivating community members and stakeholders to take actions that clearly work towards achieving a target. This may involve individuals or organizations setting their own sub-targets and taking actions in support of a broader target.⁵ For example: If the RDN established a target to reduce per capita water consumption by XX litres a day – this might be used by organizations and individuals to take actions such as: use drought tolerant landscaping, install a low flush toilet, reduce individual shower time to three minutes.

Targets are usually set by considering past performance and anticipating future capacity to improve performance over a set period of time. In order for targets to be effective they must be challenging yet achievable and also be publicly and politically acceptable.

Targets differ from benchmarks or external standards in that they are set by an organization in relation to their own goals and policies. Targets can be set internally by local governments and stakeholders implementing policies or may be developed in consultation with the public. One example of an internally set target was the RDN’s aim to divert 75 per cent of solid waste from landfills by 2010 – a target that will be re-visited as part of the next Solid Waste Management Plan review.

Targets that do not have political support are unlikely to obtain the level of funding or other resources needed for their attainment.

http://ec.europa.eu/transport/wcm/road_safety/erso/knowledge/Content/70_qrst/quantitative%20road%20safety%20targets.htm

A local government may also choose or be required to adopt targets for the environment or public health that are based on recognized health and safety standards. These are often set by senior levels of government and are typically based on research into the minimum standards necessary for the protection of ecosystems and health. Examples include the acceptable level of contaminants affecting water supplies or air quality. Another example of a target set by senior levels of government is the BC Government’s target to reduce Green House Gas (GHG) emissions by 30% of 2007 levels by 2020 and 80% by 2050.

4.4 THINGS TO CONSIDER WHEN SETTING TARGETS

Consider past and current performance

Understanding past and current performance is essential to setting meaningful targets. The aim is to set targets to improve on past performance.

Consider allocation of resources

The availability and allocation of resources may have a major impact on how achievable a target is. If resource allocation impacts the ability to maintain current

In developing targets it is important to consider how the targets will be measured or monitored, how targets and the results of monitoring fit into evaluations, and how the targets will be reported.

http://ec.europa.eu/transport/wcm/road_safety/erso/knowledge/Content/70_qrst/quantitative%20road%20s

⁵ NASCSP Targeting Field Manual, Setting and Reviewing Targets, August 2008

performance then setting a target that exceeds this is likely to be unrealistic. There needs to be an understanding of whether or not departmental budgets and plans allow for targets to be achieved or show priorities for achieving different targets.

4.5 WHAT IS THE HISTORY OF USING “TARGETS” TO MONITOR THE RGS?

Targets with specific measures to be achieved have not been used in previous efforts to monitor the RGS. However, the seventh monitoring report does include a section for different indicators called “*where do we want to go*” that introduces the idea of directional targets. Directional targets describe the desired movement towards or away from an established state rather than setting a specific number or percentage improvement to be achieved. For example:

7.7 Indicator: *Residences inside urban containment boundaries living within walking distance of a bus stop.*

7.7.3 Where do we want to go? *The region’s target is to increase the number of people residing inside the urban containment boundary that live within 400 metres of a bus stop.*

4.6 DO WE HAVE TO SET TARGETS FOR THE RGS?

Target setting is an important aspect of monitoring and evaluating the RGS. The RDN is required to set a target for reducing GHG emissions in the RGS. Aside from this, there are no other targets required to be set in the RGS. Nevertheless, as part of accountability and implementation, the 2011 RGS includes a policy (5.2.4) to “*establish a process and program to identify and establish targets to achieve key policies set out in the RGS...*” The RGS states that “*setting targets to monitor progress towards achieving the goals of the RGS is a high priority implementation action*”.

4.7 WHAT IS THE RELATIONSHIP BETWEEN TARGETS AND INDICATORS?

Targets and Indicators are closely linked. Indicators tell us whether or not the results of our actions are consistent with achieving our targets. A target that cannot be easily measured using an indicator is of limited use as it will be difficult to determine whether or not progress is being made to achieve a target and if different actions need to be taken to improve outcomes.

5. NEXT STEPS FOR MONITORING

The history of monitoring the RGS outlined above shows that since 1997 there has been considerable effort put into monitoring the RGS, including background research on indicators, data collection, public participation and the work of citizen committees in identifying and selecting suitable indicators to measure progress. These efforts serve as a solid foundation to develop a monitoring program that makes use of existing baseline information and indicators to monitor progress on the updated 2011 RGS.

The newly adopted RGS includes new goals addressing Climate Change, Affordable Housing and Food Security. Some indicators that have been researched and used in prior monitoring may be relevant to these new goals. However, there are other indicators that should also be considered as they may be more suitable measures of progress for these new goals.

As well, it should be recognized that several indicators used in past monitoring processes may not be suitable because of differences in the scope of monitoring. For example, the State of Sustainability Project included indicators that measured the impact of actions over which the RDN has limited influence rather than being focused on measuring progress towards actions taken to achieve RGS Goals.

There are many lessons to be learned from the past monitoring reports. Some reports like the 2000 Monitoring Report (a 43 page document) contained many illustrations, charts and graphs to communicate information on progress towards RGS goals. This report also included tangible actions that community members could take to improve the status of an indicator in order to make more progress towards a goal. In contrast, the last monitoring report produced by the State of Sustainability Project included a lot of technical detail. At over 300 pages, its length and format pose a challenge for use as a meaningful reporting tool for community members to understand progress towards RGS goals and the region's sustainability. Furthermore, reproducing such a report annually presents a challenge given the level of resources required.

A successful monitoring program for the RGS will involve:

- Finding the right balance between selecting a practical number of indicators that clearly provide community members and the RDN with information on progress towards the RGS goals and for which data is reliable and easily accessible on a regular basis.
- Setting politically and publically supported targets that are simultaneously challenging enough to motivate change while still being realistic.
- Engaging individuals and organizations in the monitoring process in a way that encourages them to take actions that support reaching the targets set to help achieve RGS goals.

5.1 OBJECTIVES FOR SETTING TARGETS & SELECTING INDICATORS FOR THE 2011 RGS

The proposed approach for setting targets and indicators for the 2011 RGS is based on the following objectives to:

- Build on extensive efforts to research and select indicators for monitoring earlier versions of the RGS.
- Meet requirements to monitor RGS progress and produce annual reports.
- Focus on monitoring the outcomes of actions taken to implement the 11 goals in the 2011 RGS.
- Focus on areas that the RDN has influence over rather than to more broadly monitor sustainability of the region as whole.
- Engage community members, the RDN Board and stakeholders in the process for selecting indicators and targets.
- Develop a process for monitoring that enables staff to easily produce annual reports.
- Provide innovative ways of presenting the monitoring results so that information is accessible and meaningful to community members and stakeholders.
- Present monitoring results in a way that will help to influence positive behaviour.
- Be accountable to the community and stakeholders about activities taken to implement the RGS and progress made towards the goals.
- Use monitoring as part of ongoing communication and education to encourage individuals and organizations to take actions that help work towards the goals of the RGS.

5.2 PROPOSED APPROACH FOR SETTING TARGETS & SELECTING INDICATORS FOR THE 2011 RGS

The RGS has 11 long term goals that serve to guide actions intended to achieve the vision for a more sustainable region. These goals are descriptive using words like “support, facilitate, protect and provide” and do not include reference to either measurable or directional targets (see Appendix 3).

There are generally two main approaches to setting targets:

1. Agreeing on indicators to measure progress towards RGS goals and then matching targets to these indicators or,
2. Deciding on targets for RGS goals and then finding a set of indicators that show how the target can be achieved.

In reality these two approaches are typically blended as indicators and targets cannot be selected in isolation of each other or in a sequential, linear process. Setting a target for a goal without at the same time confirming that suitable indicators are available runs the risk of not being able to measure progress towards the target. Selecting indicators first without considering potential targets may mean that the indicators selected may not be suitable for measuring progress towards an identified target. It is proposed that the process for selecting targets and indicators be integrated, blending the two approaches above.

It should be acknowledged that for some goals it may be difficult to agree on specific measurable targets that are both publically and politically acceptable. In such cases directional targets may be more appropriate and other cases targets may not be created. More than one target may be created for a goal and there may also be more than one indicator that measures progress towards meeting a chosen target.

APPENDIX 1 – INDICATORS FROM 2000 RGS MONITORING REPORT

GOAL	INDICATOR	REPORT INTERVAL (YEARS)
Goal 1: Strong Urban Containment	1. Population density inside and outside Urban Containment Boundaries.	5
	2. Amount of land inside and outside Urban Containment Boundaries.	1
	3. Number of applications to change Urban Containment Boundaries.	1
Goal 2: Nodal Structure	4. The proportion of housing types within designated nodes.	1
	5. The diversity of amenities in designated nodes.	1
	6. Housing within 400 metres of retail facilities, services, schools, Greenspace, and bus stops.	1
	7. Housing tenure, affordability, and demographic groups served by nodes.	5
Goal 3: Protection of Rural Integrity	8. Percentage of rural land in different designations.	1
	9. Actual use on rural resource lands.	1
	10. Resource industry employment by sector.	4
Goal 4: Environmental Protection	11. Drinking water – annual number of samples testing positive for fecal coliform.	1
	12. Quality of treated effluent from sewage treatment plants.	1
	13. Number of public bathing site closures.	1
	14. Number of shellfish harvesting closures.	1
	15. Percent of land protected, by type and jurisdiction.	1
	16. Air quality – Ground level zone and PM 2.5	1
	17. Percent of watercourses protected by development permit area designation.	1
	18. Percent of shoreline length having intact adjacent vegetation.	-
Goal 5: Improved Mobility	19. Number of bus riders.	1
	20. Mode of transportation to work.	5
Goal 6: Vibrant and Sustainable Economy	21. Unemployment rate.	5
	22. Migration by age and education.	5
	23. Educational attainment levels.	5
	24. Type of occupations.	5
	25. Post-secondary specialization.	5
	26. Income distribution.	5
	27. Households spending over 30% of their income on housing.	5
Goal 7: Efficient Services and Resource Use	28. Liquid waste generation.	1
	29. Amount of garbage to landfill and amount recycled per resident.	1
	30. Serviced households per kilometre of both sanitary sewer line and water line, inside Urban Containment Boundaries.	1
Goal 8: Cooperation Among Jurisdictions	31. Narrative description of senior government decisions contrary to official community plans.	1
	32. Narrative description of annual initiatives to support and implement the Growth Management Plan involving the Regional District of Nanaimo.	1

APPENDIX 2 – STATE OF SUSTAINABILITY INDICATORS, 2006 MONITORING REPORT

Indicators used in the 2006 State of Sustainability Monitoring Report

Environment

- 1-E1 Water quality for aquatic organisms in selected lakes and rivers
- 1-E2 Ground level ozone
- 1-E3 PM_{2.5}
- 1-E4 Current and projected age class distribution for Arrowsmith Timber Supply Area
- 1-E5 Amount of land and watercourses protected (nature park or DPA designation) by type

Resource

- 1-R1 Domestic water consumption trends (total and per capita)
- 1-R2 Area of private and Crown forestry land
- 1-R3 Change in amount of ALR land
- 1-R4 Sustainable farming practices
- 1-R5 Proportion of farmland in crops
- 1-R6 Amount of land outside of urban boundaries or designated industrial areas that permit subdivision minima of less than 4 (or 10) ha
- 1-R7 Number of farms reporting sale of organic products
- 1-R8 Amount of electricity and natural gas consumed, total and per capita
- 1-R9 Amount of waste to landfill per capita, amount of waste diverted from landfill in tones and amount recycled per resident
- 1-R10 Quality of biosolids from wastewater treatment plants

Community Function

- 1-CF1 Population growth, density, and amount of land in areas designated for growth and not designated for growth
- 1-CF2 Percent of residents in core housing need
- 1-CF3 Mode of transportation to work (and location of work)
- 1-CF4 Number of bus rides per capita per year
- 1-CF5 Number of residents (households) within walking distance of services
- 1-CF6 Number of residents inside urban boundaries living within 400 metres of a bus route
- 1-CF7 Vehicle ownership (total and per household)
- 1-CF8 Area of active and nature parkland for every 1000 residents
- 1-CF9 Percentage or square footage of retail inside and outside urban cores

Social

- 1-S1 Percent healthy birth weight (percent low birth weight)
- 1-S2 Life expectancy at birth
- 1-S3 Motor vehicle accident rates
- 1-S4 Teen pregnancy rate
- 1-S5 Education attainment levels
- 1-S6 Number of applicants on wait list for subsidized housing compared to number of housing units available
- 1-S7 Crime rate by crime type

Indicators used in the 2006 State of Sustainability Monitoring Report

- 1-S8 Number of, and participation in, recreational and cultural programs offered by local government and post-secondary institutions
- 1-S9 Participation in federal, provincial, and local elections

Economic

- 1-E1 Tax paid by residents and businesses
- 1-E2 Employment by class of occupation
- 1-E3 Average annual income compared to cost of living
- 1-E4 Change in number of households below low income cut off
- 1-E5 Personal income from top three industries as a proportion of total personal income in region, and personal income by industry
- 1-E6 Number of business formations and bankruptcies
- 1-E7 Unemployment rate and duration
- 1-E8 Economic health of agriculture

APPENDIX 3 – RGS 2011 GOALS

1. **Prepare for Climate Change and Reduce Energy Consumption** – Reduce GHG emissions and energy consumption and promote adaptive measures to prepare for climate change impacts.
2. **Protect the Environment** – Protect and enhance the environment and avoid ecological damage related to human activity.
3. **Coordinate Land Use and Mobility** – Ensure land use patterns and mobility networks are mutually supportive and work together to reduce automobile dependency and provide for efficient goods movement.
4. **Concentrate Housing and Jobs in Rural Village and Urban Growth Centres** – Establish distinctive activity centres and corridors within growth containment boundaries that provide ready access to places to live, work, play and learn.
5. **Enhance Rural Integrity** – Protect and strengthen the region’s rural economy and lifestyle.
6. **Facilitate the Provision of Affordable Housing** – Support and facilitate the provision of appropriate, adequate, attainable, affordable and adaptable housing.
7. **Enhance Economic Resiliency** – Support strategic economic development and link commercial and industrial strategies to the land use and rural and environmental protection priorities of the region.
8. **Enhance Food Security** – Protect and enhance the capacity of the region to produce and process food.
9. **Celebrate Pride of Place** – Celebrate the unique natural beauty, culture, history, and arts of the region.
10. **Provide Services Efficiently** – Provide efficient, cost-effective services and infrastructure.
11. **Enhance Cooperation Among Jurisdictions** – Facilitate an understanding of and commitment to the goals of growth management among all levels of government, the public, and key private and voluntary sector partners.