

2011



REGIONAL  
SNAPSHOT

SOUTH OKANAGAN REGIONAL GROWTH STRATEGY VOL 3, 2011

2011 Report data collection and analysis credit: RDOS staff from Information Services, Finance and Planning Services.

**Photo credits**

*Front cover Photo:*  
Mike Biden



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*Okanagan River oxbow (Mike Biden)*



*Naramata Benchlands (Mike Biden)*



*Okanagan apple blossom (Cheryl Fortier)*



## Introduction

Why and how indicators are being monitored

# Indicators

### Background

The south Okanagan region has been undergoing significant changes, from population growth and declines with associated development pressure, to a fundamental shift in agriculture brought on by the emergence of the wine industry in the valley

While these changes carry with them many positive benefits, such as economic growth and tourism, they also pose new challenges and force us to ask ourselves difficult questions about what the future should be for the south Okanagan.

The purpose of the south Okanagan Regional Growth Strategy (RGS) is to create a “big picture” vision for the south Okanagan over the next twenty years. In doing so, the RGS sets common social, economic and environmental objectives.

Once a RGS is adopted, the *Local Government Act* requires that ongoing monitoring be established to assess implementation and measure progress being made towards the stated objectives and an annual report on progress.

### Indicators

In order to enable measurement of the progress being made in addressing the identified objectives, the RDOS created a set of Performance Indicators. In December of 2008, the RDOS released the RGS Baseline Study, which used the

established performance indicators to build a baseline picture of the region against which future measurement might be compared, using the baseline year of 2006 .

Each year, a snapshot report will be released that uses a selection of performance indicators to measure progress. For 2011 several adjustments were made to the data collected for the indicators that reflect the ongoing quality control of this project.

The following is the third of the annual reports on the state of the region which compares 2010 and 2011 data. Annual fluctuations and differences in data may indicate different values but it is important to realize that these may be insignificant statistically.

#### *Statistics and Indicators*

**Monitoring progress on implementing the RGS can be best accomplished with a long term perspective in mind. Annual fluctuations of data may perhaps be misleading from a statistical perspective and any trend information presented should be recognized as potentially insignificant.**

**“If you don’t measure results, you can’t tell success from failure”**

- David Osborne & Ted Gaebler



SECTION 1.

# POPULATION GROWTH

INDICATOR:  
Population Growth in the RGS Study Area

<b>Estimated population</b>	
2010: 69, 667	2011: 70, 847

### What is being measured?

The 2010 population is based on Provincial Census projections using 2006 data: these projections are estimations. The 2011 population is based on the 2011 Census data which should be considered as more accurate for the year. This indicator estimates the respective population growth rate of member municipalities and Regional District Electoral Areas that fall within the RGS study area.

### Why is it important?

Population growth brings both benefits and challenges to a community. A growing population is integral to building a strong local economy. As the population grows more jobs are created to meet the demand for housing, retail goods and services. The challenge of a changing population is managing the growth in such a way that the values and character of the community remain strong.



*If unchecked, development can have serious consequences on the environment, infrastructure, and, ultimately, on quality of life.*

### What does the RGS say?

The RGS doesn't specify whether population growth should be encouraged or discouraged.

Instead, the RGS provides policy direction that promotes sustainable development, if growth occurs.

### How are we performing?

Based on provincial population projections for 2010 and Census data from 2011, the south Okanagan has had a slight increase of 1180 people.

Presently, 76% of the population of the RDOS is situated within south Okanagan municipalities. 2011 census data confirms that while municipal populations are growing, they are declining in most rural electoral areas. The population data does not take into account the number of people who live in the area part time, often referred to as the 'shadow population' that may also play a role in future developments and often in rural areas.

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**Note:** 2011 census data indicates that population has generally been lost in rural areas while increasing within municipalities.

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SECTION 2.

# AGRICULTURE

INDICATOR:  
Amount of Land included in the ALR

Inclusions: 0 ha	Exclusions: 1.0 ha
2010	2011

### What is being measured?

This indicator tracks the success of the protection of agricultural land by measuring the amount of land that has been added or removed annually from the Agricultural Land Reserve within the RGS study area. This is determined through ALC applications approved for either inclusion or exclusion each year.

**NOTE:** farming activities also occur on agricultural land that is not in the ALR, and land in the ALR may not be actively farmed.

### Why is it important?

Only 5% of BC's land is suitable for farming, making farmland a valuable commodity. With the goal of protecting agricultural land, the Agricultural Land Reserve (ALR) recognizes the importance of agriculture as an economic driver, and an important local food source.



Wineries and vineyards now form an important component of the agriculture and agri-tourism industries in the south Okanagan.

Within the south Okanagan, farming forms and integral part of the local and regional histories and economies.

### What does the RGS say?

One of the key directives in the RGS is the protection of farmland and the agriculture industry in the south Okanagan by promoting the retention of farmland and by directing development to established town-sites.

The RGS goes further, recognizing the right to farm and promoting the enhancement of a sustainable local agriculture industry.

### How are we performing?

Between 2010 and 2011, the Agricultural Land Commission approved 1.0 hectares (ha) to be excluded from the ALR. There were no applications approved for inclusion into the ALR.





SECTION 3.

# BIODIVERSITY & NATURAL SPACES

INDICATOR:  
Annual & cumulative area of parkland and protected areas

Percentage of land base	
2010: 11.1%	2011: 10.9%

### What is being measured?

This indicator measures the total amount and percentage of total land area of parks and protected natural areas in the South Okanagan Regional Growth Strategy area. It includes lands zoned as a park and lands owned by Natures Trust of BC, The Nature Conservancy, Ducks Unlimited and The Land Conservancy. Some minor data adjustments were made for the 2011 information.

### Why is it important?

The Okanagan Valley supports some of the most rare flora and fauna in Canada. Several species exist only here and nowhere else.

From an environmental perspective parks and protected areas provide habitat and support biological diversity. Generally, the larger the park, the greater the habitat value.

From a social perspective, parks and protected areas provide focal points for community recreation, enhance aesthetic values, foster civic pride and encourage outdoor activities that contribute to personal health and vitality.

### What does the RGS say?

The RGS recognizes at a fundamental level the intrinsic value of all components of the natural environment. The Strategy further acknowledges the relationship between a healthy environment and the quality of life enjoyed by residents of the south Okanagan.



*The south Okanagan is home to many rare and endangered species, including the provincially red-listed Rusty Cord-moss shown above (photo credit: Ole Westby).*

The policies of the RGS strongly support the conservation, protection and enhancement of ecologically sensitive lands and the retention of open spaces, parks and large rural holdings.

### How are we performing?

The amount of land protected remained constant between 2010 and 2011 at around 11% of the total RGS land base

*Keeping Nature in Our Future, a biodiversity strategy for the RGS area is near completion and ready for implementation. This project was initiated as part of the RGS implementation.*



SECTION 4.

# AFFORDABLE HOUSING

INDICATOR:  
Housing starts by structural type & average house price

## Average house price

### What is being measured?

This indicator measures the percentage mix of new housing starts by structural type, that is the number of buildings that are single family and those as multi-family. The average annual housing price calculated from homes sales is also measured.

### Why is it important?

The range of housing types found within the total number has the potential of indicating overall community health.

Specifically, developing complete communities that are accessible to their residents requires a mix of housing types. Generally, multi-unit dwellings are more affordable than single detached dwellings.



Multi-family units may serve to increase housing affordability and variety. This is a Kiwanis housing project in Penticton.

**CPI adjusted: \$295,467**

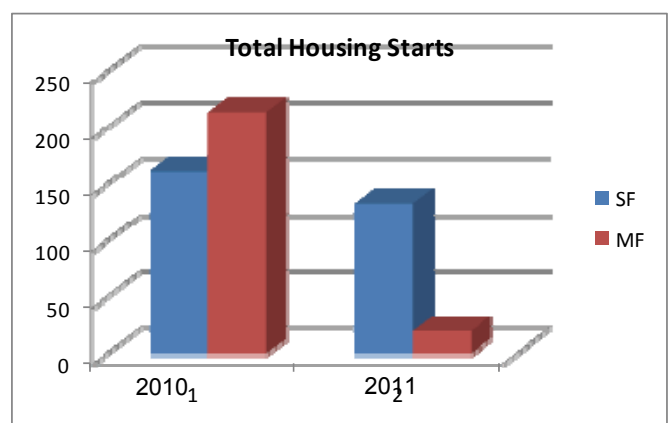
The Consumer Price Index (CPI) is an indicator in consumer prices experienced by Canadians. It is obtained by comparing, over time, the cost of a fixed good (eg Housing) using a constant base year cost. The base year used for the CPI is 2010.

### What does the RGS say?

The RGS strongly encourages the development of compact, complete communities in the south Okanagan. In order to achieve this, the RGS promotes "accessible" housing, which addresses a number of barriers to housing, including affordability.

### How are we performing?

House prices continue to decline in most areas of the RGS. The number of residential building permits decreased between 2010 and 2011, with a significant drop in number of multi-family units being constructed. The majority of multi-family units were constructed within the City of Penticton.





INDICATOR:

## total energy consumption

### Per Capita total consumption (GJs)

#### What is being measured?

In the south Okanagan, the two primary sources for energy are electricity and natural gas. This indicator measures the total amount of energy used in in the south Okanagan, both per capita and in total. One GJ is equal to 277.8 kWh of electricity or 26.1 m<sup>3</sup> of natural gas, or 25.8 litres of heating oil.

Collection of this data for 2010 was problematic. However, data and per capita calculations were confirmed for 2011 and should now be able to carry forward onto future years.



#### Why is it important?

Residential building energy consumption shows how much energy residents of the south Okanagan consume. Total energy use would include all other activities such as industrial and commercial. The generation of energy is associated with environmental impacts to land, air and water resources. However, different sources of energy have different environmental impacts. For instance, natural gas results in significant greenhouse gas (GHG) emissions and other air emissions, while hydro-electric power generation may cause harm to water resources and to habitat.

#### What does the RGS say?

The RGS supports that efficient management of community energy use and carbon emissions is one aspect of building sustainable communities. The reliance on non-renewable fossil fuels poses serious challenges to our long term sustainability.

In addition, the Strategy encourages the efficient use of infrastructure to reduce the cost burden of constructing additional infrastructure services.

#### How are we performing?

According to data collected from Fortis Gas and Electricity there does not appear to be any particular trend, given the apparent variability of information received.

It appears that the per capita consumption is slightly higher for electricity users than those using natural gas.

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#### One Gigajoule (GJ)

*Of gas will cook over 2500 burgers, or , keep a 60 watt bulb lit continuously for six months*

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SECTION 6.

# WATER MANAGEMENT

INDICATOR:

water consumption

**Litres per capita**

2011: 896 (residential and irrigation combined)

### What is being measured?

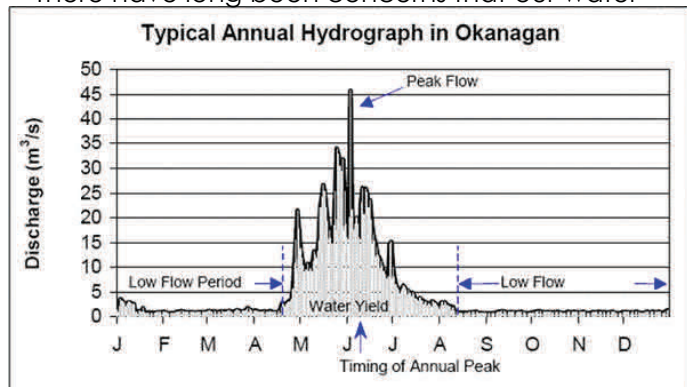
This indicator uses the data collected from eight water utilities of the South Okanagan. These utilities include: Penticton, Summerland, Osoyoos, Oliver (including rural Oliver), Faulder, Sage Mesa, West Bench, and Naramata.

### Why is it important?

In the South Okanagan, water availability is a concern. With the population growth and increases in water demand for agriculture, there is a potential shortfall in supply relative to demand in the next decades.

Outdoor domestic use accounts for about 25% of water used in the Okanagan, indoor domestic 7%, agricultural irrigation accounts for approximately 55%, with commercial and other users making up the rest of consumptive water use. The shift to viticulture in many parts of the study area may use overall less water but relies heavily on water supplies in the early fall, a time when supplies are typically at their lowest level.

There have long been concerns that our water



supply is over allocated; licenses have been given for more water than is actually available.

### What does the RGS say?

The RGS promotes water sustainability through conservation and related best practices. This policy includes 10 actions for communities, organizations and governments to work collaboratively to ensure that water remains available for all future uses.

### How are we performing?

Previous 'Snapshots' used the OBWB water supply/demand model ; however, as the model is not run annually it was decided to use data from water utilities. The new BC Water Use Reporting Centre developed by OBWB has assisted with the ability to collect consistent data information.

Residential use of water only amounts to approximately 246 litres / day per capita. The average domestic water use in Canada is 329 litres/day.



SECTION 7.

# MUNICIPAL SOLID WASTE

INDICATOR:

## Municipal solid waste disposed per capita

### Average daily waste (kg/person/day)

2011: 2.02

#### What is being measured?

This indicator provides data on the annual amount of municipal solid waste (MSW) disposed in landfills or incinerated by residential, commercial, institutional, demolition, land clearing or construction sources.

Total MSW includes amounts disposed within the regional district as well as any amount incinerated or exported via transfer stations. The definition of MSW excludes sewage sludge, agricultural waste and industrial wood waste.

More specifically, this indicator is measured in kilograms (kg) of solid waste per person per year and consists of measurements taken from the Campbell Mountain. Data does not include other diverted waste that includes propane tanks, tire, oil and oil filters, and oil containers.

#### Why is it important?

By taking measures to reduce waste, such as recycling, composting and diverting waste, we can reduce the environmental impact that solid waste represents.

In addition, reducing the volume of solid waste that goes to RDOS landfills extends the lives of the facilities, reducing the need for additional landfills and the associated capital costs.

#### What does the RGS say?

The Infrastructure section of the RGS speaks

directly to reducing solid waste production by promoting and encouraging targets for waste reduction, by developing best practices and by supporting public awareness and action around waste management.

The growth strategy also addresses waste reduction by directing the efficient use of existing infrastructure over the development of new infrastructure.

#### How are we performing?

Data for 2011 used a slightly different method for determining amount of waste, it does nonetheless indicates that there is a general downward trend in per capita waste.

In 2011, the amount of landfilled waste was 1.36 kg/pp/day and amount diverted was 0.66 kg/pp/day. This indicates that almost 50% of waste is diverted from the landfill.





SECTION 8.  
**SOCIAL, CULTURAL  
& THE ARTS**

INDICATOR:  
Crime rate

**Crime rate per 1000 population**  
2010: 296                      2011: 281

**What is being measured?**

This indicator measures the number of Criminal Code offenses (excluding traffic offenses) per 1,000 population. Criminal Code offences include property (e.g. break and enter, theft, fraud, mischief), violent (e.g. homicide, sexual and non-sexual assault, abduction, robbery) and other crimes (e.g. prostitution, gaming & betting, disturb the peace).

Crime rates are reported by policing jurisdiction. For the south Okanagan, there are four policing jurisdictions: Summerland, Penticton, Penticton Provincial (RCMP), and South Okanagan Provincial (RCMP).

**Why is it important?**

Crime rate statistics are used as an indicator of community safety, where the lower the crime rate is, the safer the community.

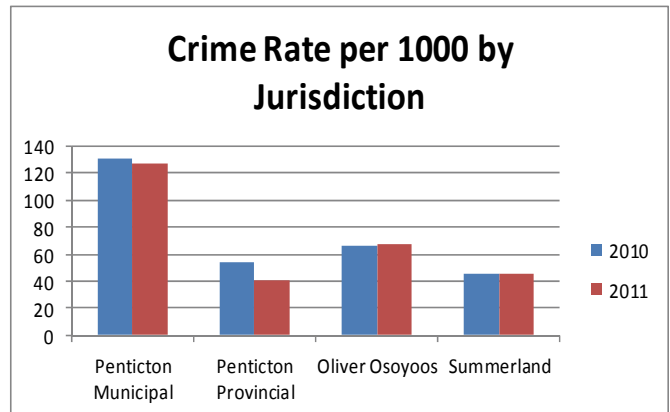


*The RCMP patrols the entire RGS study area.*

**What does the RGS say?**

One of the primary directives of the RGS is to establish “safe, culturally diverse and healthy communities.”

The RGS proposes to achieve this by supporting emergency planning and by supporting the local police authority in its awareness programs for crime reduction.



**How are we performing?**

Crime rates have generally decreased between 2010 and 2011 in all areas, with a slight increase for Oliver/Osoyoos. This trend reflects the overall trend of decreasing criminal code offences since 2006 in the South Okanagan, in BC generally.

## Trails (km)

2011: 1861 (total)

**What is being measured?**

The total length of trails in kilometers and use: cycling, mixed, motorized, non-motorized.

**Why is it important?**

Well planned trails and greenway systems contribute to a livable community by connecting people to nature and providing connections between neighbourhoods and key destinations. Trails promote a healthy lifestyle and encourage alternative transportation choices. Trails can also provide an economic benefit by attracting visitors to the area and can strengthen awareness of the heritage and natural history of an area.

**What does the RGS say?**

The RGS supports the creation of walkable neighbourhoods and pedestrian & cycle networks that offer both recreational and alternative transportation opportunities.

**How are we performing?**

Data from the Regional Trails Master Plan 2012, was used for this indicator. It provides the defi-

nition of a trail as embracing the broad range of trails primarily used for recreation but also function as transportation/ commuting corridors and tourism and economic assets.

Cycling: 313 km      Mixed: 195 km

Motorized: 449 km      Non-motorized: 449 km

It is anticipated that further classification of these trails will be part of the ongoing implementation.



*The KVR trail over Naramata attracts a number of visitors every year.*

## Percentage of budget

2011: 16.7% (inc major capital expenditures)

**What is being measured?**

This indicator measures the percentage of funding committed to the arts and culture allocated from local government's budget each year, including capital expenditures.

**Why is it important?**


Financial support for arts, culture, diversity and heritage indicates a commitment to building community and fostering civic pride. As well strong support for these activities may better position a community to attract and retain economic development.

**What does the RGS say?**

The RGS supports and encourages a strong arts community and encourages the identification and protection of important cultural places.

**How are we performing?**

There appears to have been a decline on overall spending on arts related items. The data for the RDOS amount includes capital spending which may have increase the value. It is not certain if all member municipalities included similar projects under their arts and cultural spending budget items.



# Analysis & Summary

## Indicators

This Regional Snapshot Report uses a number of performance indicators that enable us to measure the progress being made in addressing objectives contained within the Regional Growth Strategy (RGS). An indicator is a measure that reveals a condition, a trend, or an emerging issue. This report, which is the third annual 'Regional Snapshot' uses data collected for the year 2011 and compares it to 2010 data. The first 'Snapshot' combined the years 2006 through to 2009.

There are limitations to the use of indicators. A region comprises many subsystems with complex relationships and interdependencies. Many indicators are too crude to capture any type of site specific condition, they also rely on 'after the fact' data information. Data capture for indicators may also have inconsistencies. However, to be able to perceive any trends with information, monitoring indicators continues to be a worthwhile exercise, particularly over the long term.

## Trends

A number of indicators seem to point towards a positive move in meeting objectives contained in the RGS. These include: an increasing trail network, decreasing amount of waste going into the landfills, decreasing crime statistics and increasing housing affordability. However, whether these indicators will prove to be consistent in the long

term remains to be seen.

## Data

Some of the data being used for monitoring in this report needed to be adjusted from the initial baseline report using 2006 data and from the previous 'Snapshot'. RDOS staff continue to fine tune and collect data for each of the indicators to adjust for any inconsistencies. Other plans such as the Trails Master Plan also provides extra data that can be incorporated into a meaningful indicator. It is anticipated that data issues will continue to be addressed to provide more consistent collection in future years. Some indicators proved to be more challenging than others to obtain useful regional information.

One of the new positive data collection tools was the BC Water Use Reporting Centre. This Reporting Centre allows utilities to provide current water use data and access historical data for trending. Data is now collected from eight water utilities within the RGS area.

Water quality both for the 'out of the tap' water and for the ambient lake and stream water quality also proved to be challenging to collect. The Province categorizes any water system with two more users as a community system but there is no central water monitoring agency that collects water quality data.



# Looking Ahead

## Future Updates

The next Regional Growth Snapshot report will be prepared using 2012 data should be ready later in 2013 or early 2014. Data received from the 2011 census will be available in 2012 and will be useful for updating a number of the indicators. However, given the demise of the mandatory Stats Canada 'long form' much of the data traditionally collected will no longer be as accurate.

While a number of data issues have been resolved for this report, there are new methods evolving that could be employed in the future when to provide more consistency for monitoring throughout the region.

Indicators may also evolve as better information becomes available. For example, OBWB has developed a new water use reporting tool to monitor many of the larger water utilities that has proven valuable for this year's collection.

Working with member municipalities to ensure that data can be measured consistently is part of the ongoing implementation of the RGS. For example, water consumption, solid waste and building permit statistics.

The affordable housing indicator now includes a Consumer Price Index (CPI) number as well the average market price and this will continue to compare house prices to the 2010 base line.

A number of projects within the RGS area by both the RDOS and municipalities will continue to shape the future of the South Okanagan. Some of these projects, such as the Bio-diversity strategy, is a direct result of implementing the RGS, while others, such as the Trails Master Plan, melds nicely into the goals of the RGS. In order to monitor the long term trends and results of decision making based, or not based, on the goals of the RGS, annual monitoring encompassing key indicators continue to play a vital role in measuring success. The vision of the RGS is a long term commitment to manage growth that is rooted in sustainability. The RGS will help inform the shape, densities, location of future development and also informs communities on living more sustainability.

