



Interim Report —A Snapshot on Sustainability

STATE OF THE FRASER BASIN REPORT | 2004

Proposed Topics for 2004 Snapshot

Population

Urban and Rural Interface

Strengthening Communities

Community Engagement

Aboriginal and non-Aboriginal Relations

Health

Education

Housing

Energy

Climate Change

Water Quality

Air Quality

Fish and Fisheries

Wildlife

Income and Employment

Economic Diversification

Corporate Social Responsibility

Forests and Forestry

Agriculture

Flood Management

Regional Sustainability Profiles

- Upper Fraser
- Cariboo – Chilcotin
- Thompson
- Fraser Valley
- Greater Vancouver, Squamish, Pemberton

Reporting on Sustainability

The Fraser Basin Council is a nongovernmental, not-for-profit organization that is dedicated to advancing the sustainability of the Fraser River Basin. As part of the Fraser Basin Council's mandate to measure and report on progress toward sustainability the Council published its first Snapshot on Sustainability: State of the Fraser Basin report in January 2003. This report profiled a wide variety of social, economic and environmental sustainability issues and related indicator trends.

At this time, the Fraser Basin Council is initiating research and data collection to update the various indicator trends for the 2nd Snapshot on Sustainability, which is scheduled for publication in November 2004. Where possible, the Council is also working to improve on the Snapshot information. At this time, we are identifying new indicators and sources of information, which may help to profile a broader picture of sustainability within the Fraser Basin and its five regions.

This Interim Report outlines the proposed scope and methodology of the Fraser Basin Council's 2nd Snapshot on Sustainability. The report includes some examples of the types of indicator trends and sustainability stories that will be developed for final publication in November 2004. Where more significant changes are proposed for the Snapshot, these are outlined in more detail within the Interim Report.



Kamloops

What is proposed for the 2004 Snapshot?



The Fraser Basin Council will be developing three different types of trend analysis for the 2004 Snapshot on Sustainability, building on the scope of the 2003 Snapshot.

1. Indicator Trend Updates

The Council will be updating all of the indicator trends that were profiled in the 2003 Snapshot, where there is more current data available. Some examples of indicator trend updates include:

- Population
- Health
- Education
- Housing
- Community Engagement
- Air Quality
- Water Quality
- Wildlife
- Income and Employment
- Economic Diversification
- Forests and Forestry
- Agriculture

2. New Approaches to Indicators

The Council is working to improve and enhance the sustainability information reported within the Snapshot by including new sustainability topics, developing new indicators, and identifying new information sources. Some examples of sustainability topics that are being assessed using new approaches include:

- Aboriginal and non-Aboriginal Relations
- Fish and Fisheries
- Strengthening Communities
- Energy
- Climate Change
- Urban and Rural Interface
- Sustainability in Business / Corporate Social Responsibility
- Flooding and Flood Management

3. Regional Profiles

The Council will be developing sustainability indicator profiles for each of the five regions of the Fraser Basin. In the 2003 Snapshot, regional trends were available for about two-thirds of the indicators. The Council is working to identify new information sources and new approaches to expand the scope of regional trends within the 2004 Snapshot. The regional data will be consolidated within a summary for each region. In addition to regional indicator data, relevant regional case studies will also be included for each of the five Fraser Basin regions including:

- Upper Fraser
- Cariboo – Chilcotin
- Thompson
- Fraser Valley
- Greater Vancouver, Squamish, Pemberton

4. Sustainability Stories

The Fraser Basin Council will be developing a variety of sustainability stories as examples of initiatives that are working to advance sustainability within the Fraser Basin. These stories are intended to illustrate, or “put a face on” sustainability in a way that indicator data trends are not suited to do. These stories would be included within each of the sustainability topics. Some stories would be developed specifically for the regional sustainability profiles. Below are some preliminary examples of the types of stories that may be developed for the 2004 Snapshot.

Indicator Trend Updates



The Fraser Basin Council will be updating all of the indicator trends that were profiled in the 2003 Snapshot, where there is more current data available. For example, several of the social and economic sustainability indicators that were based on data in the Population Census, were only available up to and including the 1996 Census. The Council has recently acquired the 2001 Population Census to enable updates of several trends. Some examples of indicator trend updates include:

- Population
- Health
- Education
- Housing
- Community Engagement
- Air Quality
- Water Quality
- Wildlife
- Income and Employment
- Economic Diversification
- Forests and Forestry
- Agriculture

The following two pages are intended to illustrate some of the ways in which the sustainability indicator trends are being updated. This is an Interim Report, and thus is not intended as an exhaustive review of all Fraser Basin Council indicators. Several data sources have releases of updated data scheduled for the near future. Data collection and analysis will continue through the spring and summer of 2004.

Indicator Trend Updates – Health

Life Expectancy

- BC Statistics is scheduled to release life expectancy data for 1998-2003 for local health areas in the first two weeks of April 2004.
- This data will be amalgamated into Fraser Basin regions and compared across regions and over time.

Leading Causes of Death / Rates of Morbidity

- Data to 2002 have been received and is being input and analyzed.

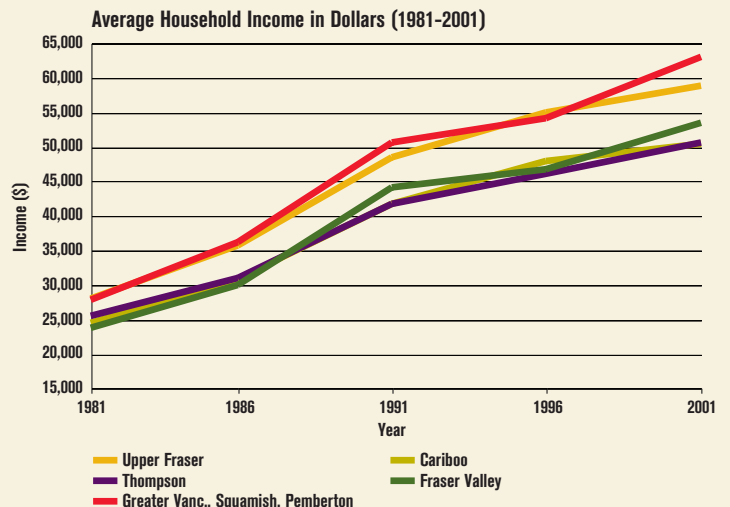
Low Birth Weight

- Data to 2002 have been received and is being input and analyzed.

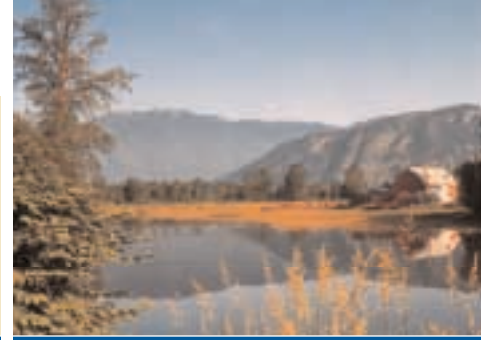
Indicator Trend Updates – Income

Average Household Income

- Data have been updated using the 2001 Population Census. Effort is still required to adjust the income values for inflation.
- Income data may be cross-referenced with the Market Basket Measure, which attempts to estimate the cost of a common basket of goods.



Indicator Trend Updates



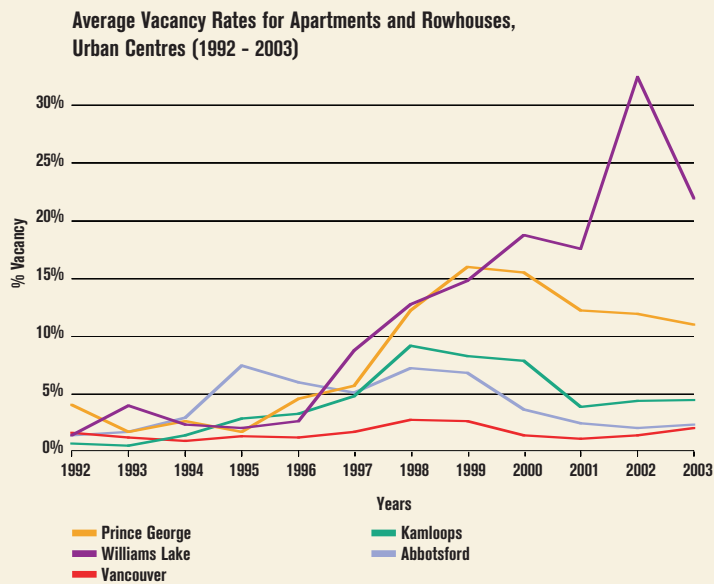
Indicator Trend Updates – Housing

Core Housing Need

- Canada Mortgage and Housing Corporation data will be used to update this indicator trend. Data will be available in summer of 2004.

Rental Housing Vacancy and Rental Rates

- The majority of communities in the Basin have been experiencing a drop in vacancy rates in recent years. The exceptions are the urban centres of Vancouver, Abbotsford, and Kamloops, each of which have shown slight rate increases in the past two years.



Indicator Trend Updates – Air Quality

Particulate Matter

- An update on the leading sources of particulate matter in each of the regions is expected with the release of the Health and Air Quality Report in July 2004
- Updates on the percent of time communities are exposed to PM10 levels with known health risks over 5% of the time is also expected to be contained in the Health and Air Quality Report.
- Expanded data on PM2.5 levels are also expected and will be included.

Smog and Other Pollutants– Ground Level Ozone

- An update on levels of ground-level ozone and smog pollutants is expected with the release of the Health and Air Quality Report in July 2004.



Industrial pollution contributes to urban smog.

New Approaches to Indicators



The Fraser Basin Council is working to improve and enhance the sustainability information previously reported within the 2003 Snapshot by including a few new sustainability topics, developing new indicators where appropriate, and identifying new information sources. Some examples of new approaches include:

- Aboriginal and non-Aboriginal Relations – More information is being developed regarding interim and treaty-related measures, protocols, agreements and other arrangements.
- Fish and Fisheries – More information is being developed to profile fish habitat issues and fish species in addition to salmon.
- Strengthening Communities – The Council is exploring the development of information pertaining to public and stakeholder engagement in community development processes, as well as key community sustainability trends.
- Energy – The Council is developing better regional data regarding energy consumption, as well as a breakdown by different sectors of energy use. This is being developed using new information sources such as BC Hydro.
- Climate Change – This topic was previously included within the Energy indicators in the 2003 Snapshot. More information is being developed regarding climate change indicators, including greenhouse gas emissions, impacts of climate change, and actions that communities and individuals are taking to address climate change issues.
- Urban and Rural Interface – More information will be developed to consider issues related to the interface between rural and urban communities such as regional growth strategies, consumption, waste, transportation, etc.
- Sustainability in Business / Corporate Social Responsibility – More information will be developed to consider the social, environmental and economic responsibilities of businesses such as participating in, and reporting on, sustainability and corporate social responsibility.

- Flooding and Flood Management – More information will be developed to assess the flood hazards within the Fraser River Basin as well as best practices and policies intended to manage those hazards.

Additional details may be found on the following pages regarding the proposed scope and methodology for some of these “New Approaches”, including:

- Aboriginal and non-Aboriginal Relations
- Fish and Fisheries
- Strengthening Communities

These are provided as examples, to illustrate some of the ways in which the sustainability indicator trends are being expanded or enhanced. This is not intended as an exhaustive review of all “New Approaches”.

New Approaches Aboriginal and non-Aboriginal Relations



Proposed Scope for 2004

1. Update Aboriginal population trends.
2. Provide more details and a broader scope of social, economic and environmental indicators as guided by interested First Nations individuals and communities.
3. Update on legal decisions.
4. Update on the status of the BC Treaty Commission process.
5. Conduct an inventory of interim measures, protocols, agreements and other arrangements developed between Aboriginal and non-Aboriginal groups in the Fraser Basin between 1980 and 2004. Information could be gathered and categorized with input and guidance by First Nations and other advisors. Further thought is required regarding an assessment of the quality and substance of the agreements, i.e. are they meaningful and effective, have they fostered improved Aboriginal/non-Aboriginal relations? Preliminary categories for consideration include:
 - a. **Treaties and AIPs** (ratified treaties and treaty agreements in principle negotiated through the BC Treaty Process by First Nations, the federal government and the provincial government.)
 - b. **Cooperative Management Agreements** (formal agreements between two or more parties to participate through a recognized mechanism - e.g. Board, Council, Society - in joint decision-making and ongoing communication on the management of a certain issue or area; e.g. Charter for Sustainability; Salmon River Roundtable, Stein Valley Nlaka'pamux Heritage Park etc.)
 - c. **Protocols and MOUs** (formal processes and procedures mutually established by two or more parties to clarify the mechanisms by which they will interact, communicate and/or collaborate – e.g., Provincial government / St'at'imc Nation Government to Government Protocol; Lheidli Teneh First Nation / City of Prince George / Fraser-Fort George Regional District Protocol Agreement; BC Aboriginal Fisheries Commission Communication Protocol with various provincial environmental non-government organizations, etc.)
 - d. **Consultation and Accommodation Agreements** (general or specific agreements between two or more parties to consult and accommodate Aboriginal rights and title affected by a particular activity in a particular region, e.g., revenue sharing agreements; joint ventures etc.)
 - e. **Interim and Treaty Related Measures** (relatively short-term measures put in place between provincial and/or federal governments and individual First Nations for temporary resolution of issues to be clarified through treaty negotiation – e.g., allocation and co-management of natural resources such as fisheries, wildlife, forests, parks and protected areas, etc.)
 - f. **Other Agreements** (general or specific agreements between two or more parties to clarify roles and responsibilities on matters of mutual interest e.g., delivery of health, education, or family services, municipal service agreements)
6. Case studies to illustrate lessons learned, collaboration, best practices, etc. for fostering good relations between Aboriginal and non-Aboriginal groups (e.g., follow-up actions from Community-to-Community Forums).
7. Other issues for consideration (traditional language, traditional ecological knowledge, out-migration of youth, informal working relations).

Proposed Methodology for 2004

1. Dialogue session with First Nations advisors (March 19 workshop - ongoing)
2. Preliminary research and data acquisition (April - May)
3. Further scoping, development, data acquisition and analysis with First Nations and other advisors (May – September)
4. Publication in Snapshot on Sustainability (November)

New Approaches Fish and Fisheries



Summary of 2003 Snapshot

- Previously fish and wildlife were combined as a single topic heading.
- Reported on Fraser River salmon stock escapement (including trend analysis for different regions and fish species).
- Salmon stocks were considered as increasing if the average recent escapement was greater than the long-term average and stocks were considered to be decreasing if the recent average escapement was less than the long-term average.

Proposed Scope for 2004

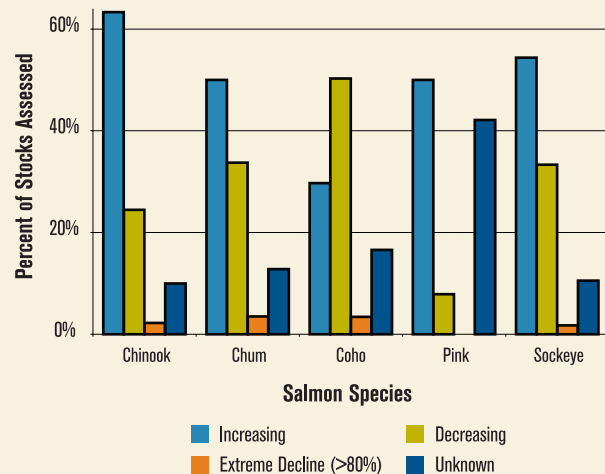
1. Separate fish and fisheries issues from wildlife issues.
2. Update Fraser River salmon stock escapement and provide a more detailed scientific analysis (including regional and species trend analysis).
3. Develop data and trend analysis for other fish species such as Fraser River steelhead, sturgeon and eulachon.
4. Develop data and trend analysis for aquatic habitat (e.g., water quality and quantity i.e. instream flows, distribution of suitable habitat i.e. maps).
5. Case studies on management and stewardship (e.g., Fraser River Sturgeon Conservation Society tagging program, freshwater fisheries, basin-wide stewardship activities, species at risk recovery planning, integrated harvest management planning).

Proposed Methodology for 2004

1. Dialogue session with fisheries advisors (April workshop - ongoing)
2. Preliminary research and data acquisition (April - May)
3. Further scoping, development, data acquisition and analysis with Fisheries advisors (May – September)
4. Publication in Snapshot on Sustainability (November)

Sample of data from 2003 Snapshot

Status of Salmon Stock Escapement Levels by Species
(Recent vs. Historical Records)



Strengthening Communities



The Fraser Basin Council recognizes the importance of strong, vibrant communities as an underpinning of sustainability. Therefore, a new topic, “Strengthening Communities” will be added to the 2004 Snapshot to facilitate the gathering and analysis of relevant information.

Proposed Scope for 2004

Some of the indicator ideas and concepts that are being explored with respect to Strengthening Communities include:

- An indicator of public and stakeholder engagement in community planning and development processes;
- An indicator or indicators that consolidate key social, economic and environmental aspects of strong communities (e.g., economic diversification, health, education, air quality);
- Local case studies and sustainability stories to profile initiatives that are working to advance strong, sustainable communities.

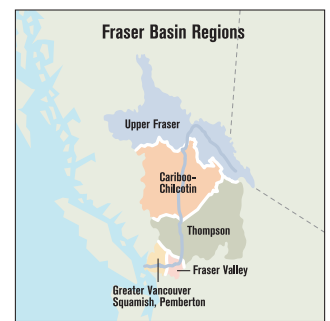
Proposed Methodology for 2004

1. Dialogue session with advisors such as community leaders, citizens, and community development organizations and practitioners.
2. Preliminary research and data acquisition (April - May)
3. Further scoping, development, data acquisition and analysis with advisors (May – September)
4. Publication in Snapshot on Sustainability (November)



Participants at a planning workshop

Regional Profiles



The regional profiles are intended to provide a regional synopsis based on the FBC's indicators, and also to provide more detail where possible. The profiles will encompass social, environmental and economic elements in presenting the picture of how each of the FBC's regions is doing in pursuing sustainability.

For any of the indicators used by FBC (listed below), a particular aspect could be featured for a region. For example, trends could be presented on a region's change in population showing actual Census data for the past 20 years. As another example, air quality could be illustrated by changes in particulate matter (PM 10) over time, rather than just showing results for one year as done in the first report. This type of more detailed reporting will be guided by each region advising which indicators are of greater interest and importance to that region.

Graphs will be used to illustrate how each region compares to the Basin and the province, and to reveal significant differences - both positive and negative in nature. The profiles will also include stories to showcase local projects and initiatives related to a particular indicator.

Community/Social Indicators:

- Population
- Health
- Education
- Housing
- Community Engagement
- Aboriginal and Non-Aboriginal Relationships
- Strengthening Communities
- Urban and Rural Interface

Environmental:

- Climate Change
- Water Quality
- Air Quality
- Fish and Fisheries
- Wildlife
- Forests and Forestry
- Flooding and Flood Management

Economic:

- Income and Employment
- Economic Diversification
- Sustainability in Business / Corporate Social Responsibility
- Agriculture
- Energy

Sustainability Stories



The Fraser Basin Council will be developing a variety of sustainability stories as examples of initiatives that are working to advance sustainability within the Fraser Basin. These stories are intended to illustrate, or “put a face on” sustainability in a way that indicator data trends are not suited to do. These stories would be included within each of the sustainability topics. Some stories would be developed specifically for the regional sustainability profiles. Below are some preliminary examples of the types of stories that may be developed for the 2004 Snapshot.

Sustainability Story – Education

▶ The Learning Grounds Initiative

The Learning Grounds Initiative, a project of the Evergreen Foundation, provides professional support to schools undertaking school ground greening projects. Evergreen works in partnership with local Associates and School Boards to guide schools through a participatory design process that leads to the implementation of a healthy, safe and natural greening project on their grounds. In 2003/04, there were six schools in Vancouver taking part in the initiative to green their grounds.
<http://www.evergreen.ca/en/lg/help-hands.html>

Sustainability Story – Energy

▶ Eagle Lake Green Energy Project

The District of West Vancouver is working in partnership with Pacific Cascade Hydro Inc. to generate “green” energy by harnessing water flow from the Eagle Lake water supply. Hydroelectricity is generated as the water flows down through a turbine installed above the water reservoir and into the distribution system. The micro generation facility for the project was designed and constructed by Pacific Cascade Hydro and Pacific Cascade is now operating the facility. It generates an estimated 1.1 gigawatt-hours per year, or 20 percent of the power used by the municipality's operations.

Over the twenty-year term of the agreement, the project will yield \$700,000 in net revenue for the District. The initial \$328,000 investment will be recouped within five years from the project's start-up in 2002. Part of that investment has already been offset by a \$50,000 grant towards a feasibility study, provided through the Green Municipal Funds -- a

partnership between the Government of Canada and the Federation of Canadian Municipalities to stimulate projects to cut pollution, reduce greenhouse gases and improve municipal services.

Sustainability Story – Community Engagement

▶ The Citizens' Assembly on Electoral Reform

The Citizens' Assembly is an independent, non-partisan assembly of randomly selected citizens from across the province. It was formed with the unique mandate to examine the province's electoral system, specifically, how our votes determine who gets elected to sit in the provincial legislature.

The 160 members of the Assembly will spend 11 months in 2004 studying electoral systems in use around the world, holding public hearings, accepting public submissions, and finally reaching a recommendation. For the Assembly members, 2004 is divided into three phases: From January-March, they learn about electoral systems. In May and June, they hold 49 public hearings held throughout B.C., for members to hear diverse public views. From September-November, members meet to decide if they believe B.C. should have a new electoral system, or retain the current one.

If members propose a change in the system, their recommendation will be put to the voters in British Columbia as a referendum question at the next provincial election, on May 17, 2005. In the event that the referendum receives the support of 60% of all voters, and by a simple majority of voters in 60% of the 79 electoral districts, the government has indicated it will be in place for the following provincial election, in 2009.

This initiative is unique. Nowhere else in the world have randomly selected citizens been so empowered to shape the electoral process. The Assembly has been unanimously endorsed by the parties in the legislature, and parties and community leaders outside it.



Interim Report – A Snapshot on Sustainability

The Fraser Basin Council would like to acknowledge the following organizations that contributed funds toward the Council's Sustainability Indicators Program in the 2003 / 04 year, including:

- Environment Canada
- Western Economic Diversification Canada
- Vancouver International Airport Authority

The Fraser Basin Council would like to thank the various advisors that have helped shape the 2003 Snapshot on Sustainability, as well as its evolution for the second Snapshot report to be published in 2004 – as outlined within this Interim Report. Collectively the advisors have made a significant contribution to the Council's Sustainability Indicators Program, particularly representatives from the following organizations who have participated on the Council's Sustainability Indicators Advisory Committee over the past two years:

- Aboriginal Policy Institute
- Anielski Management Inc.
- Centre for Community Enterprise
- Environment Canada
- Greater Vancouver Regional District
- Ministry of Communities, Aboriginal, and Women's Services
- Ministry of Forests
- Ministry of Sustainable Resource Management
- Ministry of Water, Land, and Air Protection
- Social Planning And Research Council of BC
- United Way of the Lower Mainland
- University of British Columbia
- University of Northern British Columbia
- West Coast Environmental Law
- Western Economic Diversification Canada

A special thanks goes to Fraser Basin Council Directors and staff as well as Global Frameworks Ltd. for their invaluable assistance with the Council's Sustainability Indicators Program and the preparation of this Interim Report.

For more information about the Fraser Basin Council and its programs and activities, contact:



Fraser Basin Council

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