

STRATEGY

for a Sustainable Similkameen Valley

(2011-2020)

FINAL REPORT
14 April 2010



Prepared for
**Similkameen Valley
Planning Society**

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Contents

PART 1: MAIN REPORT

Acknowledgments.....	iii
Executive Summary	v
Introduction.....	1
<i>Change In The Valley</i>	1
<i>The Larger Pattern</i>	2
<i>Taking Action</i>	3
Platform for a Successful Strategy	4
The Strategy (2011-2020)	8
Strategy Implementation (2011-2020)	17
<i>Two Tasks</i>	17
1. <i>Action Planning</i>	17
2. <i>Evaluation: Scanning, Monitoring & Assessment (SM&A)</i>	17
Responsibility for Strategy Implementation.....	18
1. <i>Stewardship of the Strategy</i>	18
2. <i>Coordination of Action Planning (Phase 3)</i>	19

Figures

Figure 1: The Similkameen Valley, BC, Canada.....	1
Figure 2: How Will the World Likely Impact Similkameen Valley (2011-2040)?....	6
Figure 3. Systemic Linkages of Key Valley Issues with Strategic Aims.....	10

Appendices

Appendix A: Multiple Scenario Strategic Planning (MSSP) Process.....	21
Appendix B: Similkameen Valley Watershed Human Settlements.....	22
Appendix C: <i>External Analysis: Key Decision Factors</i>	23
Appendix D: <i>Internal Analysis: Key Decision Factors</i>	26

Appendix E: *External Analysis: Opportunities & Threats of “Gradual Shift” Scenario (2011-2040)*..... 31

Appendix F: *SWOT Analysis* 33

Appendix G: *Land Use in Similkameen Valley Watershed (2009)*..... 36

Appendix H: *Strategy Implementation*..... 37

PART 2: SUPPORT DOCUMENT

- A: Alternative Future Scenarios: Strategy for a Sustainable Similkameen Valley (22 pp)
- B: Natural Environment & Biodiversity of the Similkameen Valley (Report) (18 pp)
- C: Amenity Migration in the Similkameen Valley, BC, Canada: Amenity-led Migration Survey Final Report (115 pp)

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- South Okanagan-Similkameen Conservation Program
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<i>Strategic Planning Panel</i>	<i>Strategic Planning Steering Committee & Advisory Group</i>
<ul style="list-style-type: none">• Nancy Allison• Melanie Bagley• Duncan Baynes• Kelsey Colpitts• Walter Despot• Baljit Dhaliwal• George Elliott• Christopher Garrish• Doug Haayer• Marilyn Harkness• Brad Hope• Satinder Lidher• Sarah Martin• Joan McMurray• Brian Mennell• Judy Short	<ul style="list-style-type: none">• Walter Despot <i>(Mayor, Village of Keremeos)</i>• Christopher Garrish <i>(Planner, Regional District Okanagan-Similkameen: RDOS)</i>• George Hanson, <i>Steering Committee Chair</i> <i>(Electoral Area B Director, RDOS)</i>• Marilyn Harkness <i>(Councilor, Town of Princeton)</i>• Brad Hope <i>(Electoral Area H Director, RDOS & Chair, Similkameen Valley Planning Society)</i>• Carrie Terbasket <i>(Council Member, Lower Similkameen Indian Band)</i>• Susanne Theurer <i>(Sustainability Facilitator, Smart Planning for Communities: Southern Interior BC)</i>• Bryn White <i>(Program Coordinator, South Okanagan-Similkameen Conservation Program)</i>

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Similkameen Valley Planning Society

The Similkameen Valley Planning Society (SVPS) is a not-for-profit organization composed of 7 governing bodies from Keremeos and Princeton, British Columbia, Canada: Municipalities of Keremeos and Princeton, Regional District of Okanagan-Similkameen Electoral Areas of B, G, & H, and the Indian Bands of Lower Similkameen and Upper Similkameen.

Executive Summary

- ❖ This is a report on Phase 2 of a larger project to develop and implement a strategy for the social, environmental and economic sustainability of the Similkameen Valley.
 - Phase 1 developed essential information on in-migration into the Valley, especially about those coming to enjoy its rich natural environment and rural ambiance. See project report: *Amenity Migration in the Similkameen Valley, BC, Canada: Amenity-led Migration Survey Final Report (2010)*.
 - Phase 2 formulated a strategy for the sustainability of the Similkameen Valley. See this report.
 - Phase 3 will entail implementation of the strategy.

- ❖ Community participation has been at the core of crafting the Valley's sustainability strategy and will continue to be essential for its successful implementation. In addition to the work of the 16 volunteer members of the project's Strategic Planning Panel, many other Valley residents were involved through:
 - 20 community meetings for discussing the project and gathering people's contributions.
 - 7 consultations with community representatives.
 - 10 radio interviews, 11 media releases, continuous posting on the project's website of its proceedings and results and listeners and readers responding mainly by e-mail.

- ❖ The 10-year sustainability strategy (2011-2020) is composed of 3 strategic aims and their 15 means developed to address the 8 key issues that were identified for achieving the project's mission:

To establish a socio-cultural, economic and environmental sustainability strategy for the Similkameen Valley that will maintain and enhance the quality of our rural and small town lifestyle. This mission was crafted with

care and specificity by the Panel, taking a holistic and bioregional view of the Valley watershed and including all its human communities.

❖ The project used a multiple scenario strategic planning approach. It identified and assessed the Valley's human and physical resources for achieving the above mission, along with key factors outside the Valley likely to impact the mission. Using these external factors, four alternative future scenarios were formulated for approximately the 2011-2040 time period. From them the Valley residents chose the one they considered most likely to unfold (Scenario B: *Gradual Shift*). Although Valley residents have limited control over the unfolding of this scenario, a well-crafted and skilfully executed strategy can influence its effects. The scenario is driven by two societal forces 1) a decreasing local role in public policy decision-making for sustainability; and 2) an increasing demand for places rich in natural and socio-cultural amenities. Its key characteristics are:

- Moderate in-migration for quality natural environment and rural lifestyle with fewer second home than primary residence amenity migrants.
- Low citizen's role in governance (federal, BC & regional) for supporting sustainability.
- Low and slow societal value and behavioural shift for supporting sustainability.
- Low and slow economic development with moderate rural-urban distribution of benefits.
- Low to moderate First Nation's self-determination.
- Low to moderate global consensus and collaborative action to address climate change with limited shift to alternative energy. Medium global warming with BC Interior temperature increased 2.4° C by 2040 (from year 1900 base).

❖ Strategy to take advantage of the likely opportunities and avoid the constraints of Scenario B (*Gradual Shift*) while managing the strengths and weaknesses of the Valley's resources requires:

- Valley residents maintain and rehabilitate the Similkameen's key attributes (beauty, high quality natural environment and resources and rural, small town lifestyle), while building on existing sustainability values and practices, and adding greater knowledge and innovation.
- Increase residents participation in local affairs to strengthen and solidify the Valley socially, culturally and economically, relying heavily on volunteers working through informal and formal organizations.

- Attract and keep especially environmentally responsible and economically active in-migrants.
 - Develop housing with a range of type and cost, especially appropriate to the needs and means of the young and old.
 - Harness the power of a region, wherein the Valley's communities take advantage of the social, political and economic strengths that come from their collaboration.
- ❖ The strategy should be adopted and implemented by the Valley's key stakeholders, and its successful execution will depend on the active involvement of residents from throughout the Valley. We recommend that SVPS be the steward of the strategy and take the lead in introducing it further to the Valley-wide community and seeking funding for its implementation.
- ❖ Project information, including key results obtained during the six-month planning process, planning session notes and media releases are posted on the Regional District of Okanagan-Similkameen's website: www.rdos.bc.ca/ssp.

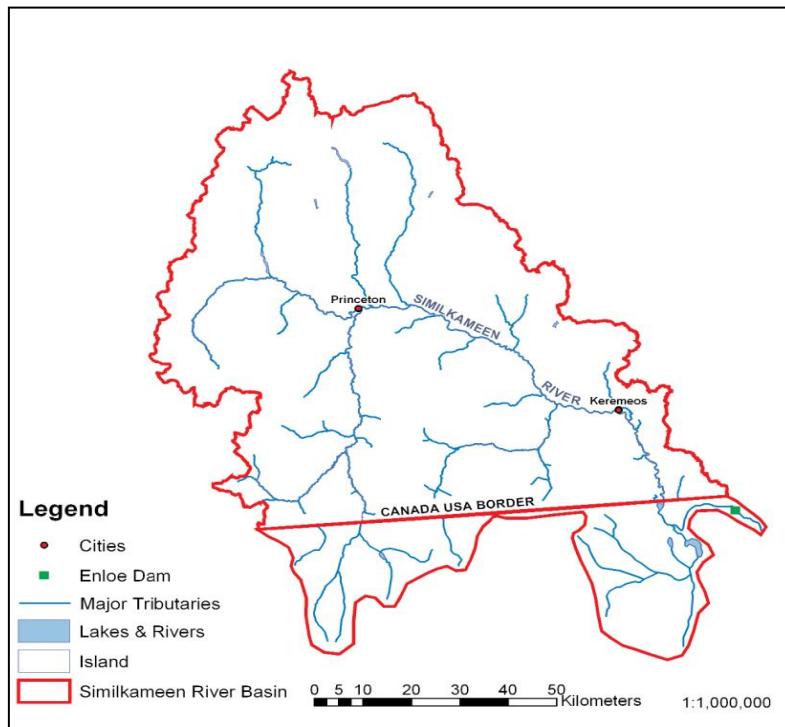
Strategy for A Sustainable Similkameen Valley

Introduction

Change In The Valley

The Similkameen Valley (Fig.1, Appendices B & G maps) in south central British Columbia (BC) is centred on the life-sustaining Similkameen River that runs west to east between the beautiful Coast and Cascade mountains. The north-western part of the Valley is higher in elevation and has a cooler, moister climate than its dry, south eastern area (the Sonoran Desert's northern extremity). It is a fertile place of some 7,600 sq km, with a rich biodiversity and the residence of some 9,800 culturally diverse people, along with another 3,000 or so part time residents (BC Statistics 2006).

Figure 1: The Similkameen Valley, BC, Canada
(Fisheries & Oceans Canada 2005:75)



While the Similkameen Valley has always experienced change, over the last decade or so both social and environmental change have increased and become more obvious to Valley residents, along with a greater sense of uncertainty about the future. Perhaps most reflective of this has been the Valley's changing population. Between 2001 and 2006 its residents increased 5.9%, and for the first time in decades this growth surpassed both the

neighbouring South Okanagan and the province (3.4% and 5.3% respectively). Most of the increase came from in-migration -- some 2,600 people, making up 27% of the total Valley resident population in 2006. Electoral Area H had the largest increase in in-migration (37.6%), followed by Keremeos (36.2%), then Area G (31%) and Princeton (7.4%). At the same time Area B experienced a decrease in in-migration by 53.3%. Consequently, total population grew in all these places except for Area B, with most occurring in Area G (12.5%), followed by Area H (12.1%). Keremeos grew modestly at 7.7%, and Princeton at 2.6%.

This change has brought some additional economic activity, along with increasing pressure on the natural environment, especially from residential development and water use. The Valley is also experiencing an increase in the cost of living, particularly for housing. Area B has been the hottest housing market with the average dwelling value between 2001 and 2006 increasing by 67%, or from \$143,981 to \$404,525 (see Support Document B & C).

The Larger Pattern

Changes in the Similkameen Valley fit a pattern that has been unfolding around it especially from the 1990s. At present the best information about such change comes from the US West. Due mainly to in-migration population of rural areas in this region dramatically increased, with amenity-rich rural places characterized by mountains and their valleys growing the most. A primary driver of this change is *amenity migration* — the movement of people to places primarily for their high quality natural environment and rural lifestyle. The 2007 Similkameen Valley random household survey undertaken for this project found 64% of its respondents were amenity migrants (see Support Document C: *Amenity Migration in the Similkameen Valley*).

The amenity migrants, and others who follow primarily for economic reasons, can bring opportunities, such as economic development and jobs, improved services and facilities, and their savings, new ideas and experiences. While some high amenity rural communities experience such benefits, there have also been serious negative effects. Socio-economic ones include lack of affordable housing, increasing cost of living, widening income disparity between earlier inhabitants and amenity migrants and social and physical dislocation of people of modest means. The most common environmental results are landscape fragmentation with land conversion to low-density sprawling residential development, increasing urban-wildland interface and depletion of water

resources, along with general stress on ecological systems. The Similkameen Valley is part of a very unique region of Canada, recognized provincially and nationally as a biodiversity hotspot for the richness and rarity of species and habitats, many of which are sensitive to human disturbance. A high proportion of the Valley's species and habitat are iconic to BC's Southern Interior, and are designated by the governments of BC and Canada as being at risk. Support Document B has more information on the Valley's natural environment and biodiversity.

Taking Action

Reflecting a growing concern over change and uncertainty in the Similkameen, the Valley-wide not-for-profit organization, Similkameen Valley Planning Society (SVPS) decided it was time for a much better understanding of what was happening, and in a proactive manner harness opportunities while avoiding potential negatives. Therefore, in 2007, partnering with other organizations, the SVPS led a long-term strategic planning process to develop a strategy for the social, environmental, and economic sustainability of the Valley.

The project has three phases. In Phase 1 practical information was gathered about what more clearly was happening in the Valley, focusing on population change. Surveys were done to inform Valley's residents and decision-makers especially about of the role and impacts of amenity-led migration. Phase 2, the focus of this report, engaged Valley residents in further assessment and crafting a *Sustainable Similkameen* strategy. In this process other change agents were identified as key to the Valley's future, particularly global climate change, economic recessions and alternative energy sources. Along with population these were integrated into a 10-year strategy for achieving sustainability for the Valley.

In Phase 3, the last part of the project, the sustainability strategy will be used to guide Valley residents and their organizations to come together and in a collaborative manner detail the implementation of the strategy: what specifically will be done, where, when, who will be responsible, using what funds.

Phases 1 and 2 have been successfully completed. The strategy for the sustainability of the Valley is set-out below, ready to be executed. But in doing so, it is important to understand a little more of how the strategy was arrived at, as implementation is a continuation of the larger, integrated project process.

Platform for a Successful Strategy

The planning process used in this project, called *multiple scenario strategic planning* (MSSP) (Appendix A), is especially appropriate and successful when dealing with conditions of considerable uncertainty and complexity, and where reliance is placed on the local community for solutions – here crafting and implementing a strategy for the social, environmental and economic sustainability of the Similkameen Valley. First, Valley residents provided critical information for Phase 1 of the project, and then in Phase 2, volunteered their time and skills as a planning “Panel” or team, project steering committee and planning advisors. Over a six-month period, with the assistance of two strategic planning facilitators and a project community liaison/ manager they skilfully worked through the MSSP process. In addition, local and Valley-wide community meetings added important knowledge. The *Acknowledgements* of this report lists the project’s participants.

The volunteer Panel of 16 members first worked out the particular objectives or mission of their strategic task. Here is the *mission* statement and objectives.

Mission Statement

To establish a socio-cultural, economic and environmental sustainability¹ strategy for the Similkameen Valley² that will maintain and enhance the quality of our rural and small town lifestyle.

Mission Objectives

1. Celebrate the socio-cultural and bio-physical diversity of our Valley.
2. Protect our Valley’s water, land, air quality and biodiversity³.
3. Promote a diverse Valley economy with multiple opportunities.
4. Maintain a physically, culturally and spiritually healthy Similkameen Valley.
5. Propose a means to implement, monitor and evaluate our Valley’s sustainability strategy.
6. Increase the participation of Similkameen Valley residents in achieving this mission.

Mission Notes

1. **"Sustainability"**: Improving the quality of human life while living within the carrying capacity of supporting eco-system" (UNDP/IUCN/WWF, 1991). This indicates an interdependent, systemic relationship among the three dimensions of sustainability -- environmental, social and economic, one in which "The economy is in the first instance, a subsystem of human society ... which is itself in the second instance a subsystem of the totality of life on Earth (the biosphere). And no subsystem can expand beyond the capacity of the total system of which it is a part" (Porritt, 2006; see also Support Document B).
2. **"Similkameen Valley"**: The Similkameen Valley River watershed, including the communities and the surrounding areas of Allison Lake, Apex, Ashnola, Bankier, Cawston, Chopaka, Coalmont, Crown Land, East Gate, Hedley, Keremeos, Lower Similkameen Indian Band, Manning Park, Missezula, Nighthawk, Olalla, Princeton, Tulameen, Upper Similkameen Indian Band (see Appendices B & G).
3. **"Biodiversity"**: The variety of life in all its forms, which includes the diversity of ecosystems, species and genes and the natural processes that link them (*Biodiversity BC*, 2008; see also Support Document B).

Next the Panel sought to clearly identify what main factors needed to be taken into account to achieve the mission. This activity had two parts: 1) what key factors and forces external to the Valley in the province, Canada and the world beyond would likely help or hinder people of the Valley achieving the mission (Appendix C); and 2) what are the Valley's own resources, the strengths and weaknesses of the Valley and its residents for fulfilling the mission (Appendix D).

Part 1 was the most unfamiliar aspect of the planning process for the Valley volunteers. Facilitated by the strategic planning consultants/ facilitators in their deliberations and assessments, a set four alternative, internally consistent and plausible future scenarios were crafted of how the world of the Valley's mission would likely unfold over the next 25 to 30 years. All four scenarios used the same *key external decision factors* (Appendix C) that the Panel had identified, but has them come together in different, quite logical and realistic ways. Support Document A includes the four alternative future scenarios in narrative form, and Figure 2 below summarizes comparatively their six key characteristics.

Figure 2: How Will the World Likely Impact the Similkameen Valley (2011-2040)?

The two common logics of the four alternative future scenarios likely affecting mission achievement are: 1) local role in public policy decision-making for sustainability, and 2) demand for places rich in natural and socio-cultural amenities.

SCENARIOS KEY CHARACTERISTICS	A: Rural Engagement	B: Gradual Shift	C: Tough Times	D: 5 Grand Cities
In-migration (mainly for natural environment & rural lifestyle)	HIGH	MODERATE	VERY LOW	LOW high migration to urban centres
Local role in governance federal & BC (for supporting sustainability)	HIGH decentralized governance	LOW centralized governance	LOW centralized governance	HIGH (Urban) LOW (Rural) decentralized urban governance
Shift in societal values (for supporting sustainability)	HIGH resource conservers predominate	LOW & SLOW mixed	VERY LOW resource consumers predominate	MODERATE mixed
Economic development (with rural/urban distribution of benefits)	MODERATE high rural/urban equality	LOW & SLOW moderate rural/urban equality	VERY LOW favours cities	HIGH & LOW high urban, low rural
First Nations self-determination	HIGH	LOW to MODERATE	LOW	MODERATE
Climate change action (collaborative action & shift to alternative energy) • Global warming • Interior BC temperature increase (1900-2040)	HIGH <i>MODERATE</i> + 2.0°C	LOW to MODERATE <i>MEDIUM</i> + 2.4°C	LOW <i>HIGH</i> +3.5°C	MODERATE to HIGH <i>MEDIUM</i> +2.5°C

Following a standard MSSP method (Appendix A), at a public meeting residents of the Valley were presented with the four alternative scenarios and chose the one they considered to be the most likely world that would need to take into account in crafting a strategy to achieve the mission. Although the Valley would have limited influence on the unfolding of the scenario, a well-crafted and executed strategy can influence its likely effects. Valley residents chose Scenario B as most probable; referred to as *Gradual Shift* (earlier in the planning process, *Extended Drift*). The driving forces of this scenario are 1) decreasing local role in public policy decision-making for sustainability, and 2) increasing demand for places rich in natural and socio-cultural amenities. Its main characteristics are outlined below:

Key Characteristics of the Most Likely Future Scenario (2011-2040)

- **Moderate** in-migration to rural areas mainly for the quality of natural environment and local lifestyle, with fewer 2nd home than primary residence amenity migrants.
- **Low** citizen participation in public decision-making regarding sustainability in the context of centralized federal and provincial governance.
- **Low** and **slow** shift in societal sustainability values and behaviour, with the mixture of resource consumers and conservers changing more to the latter through the scenario period.
- **Low** and **slow** economic development, accompanied by moderate rural-urban balance in distribution of benefits.
- **Low to moderate** shift through the scenario period in the improvement of First Nations self-determination.
- **Low to moderate** improvement over the scenario period in global consensus and collaborative action to address climate change and limited shift to alternative energy sources. Medium average global warming, with BC Interior temperature increased 2.4°C by 2040 (from a year 1900 base).

Key Events In the Most Likely Future Scenario (2011-2040)

- Building of Similkameen Falls (Canyon) and Site C dams: 2014-2015
- Canadian “foreign resident lifestyle” visa: 2015
- Strong China/Japan/Russia trading and security union responsible for Middle East peace: 2020 +

- Canadian & BC housing market crash: 2022
- Signing of accord to moderately cut world GHG emissions: 2025
- Major improvement of Hope-Princeton Highway: 2030.

At the same time the Panel proceeded with Part 2: identifying and ranking in importance the most likely strengths and weaknesses of the Valley for achieving sustainability – *key internal decision factors* (Appendix D). This activity was aided by obtaining similar knowledge for integrating into the Panel’s work from meetings with sixteen community groups throughout the Valley (the Upper and Lower Similkameen Indian Bands, organic growers, ranchers, seniors, etc.).

After the most probable opportunities and threats of the *Gradual Shift* scenario were assessed (Appendix E), the Panel and facilitators then brought the strengths and weaknesses and threats and opportunities together and identified the most likely issues a strategy would need to address to be successful in achieving a *Sustainable Similkameen*. Appendix F details the *SWOT analysis* and the key issues identified in this analysis are set-out in the box below.

Eight Key Valley Issues Strategy Must Address

- Adapting & mitigating climate change effects
- Attracting migrants that assist mission achievement (from potential amenity, economic & climate change migrants)
- Conserving use of natural resources & environment (water, air, land, forest, range & wildlife)
- Increasing residents’ participation in governance
- Providing appropriate housing
- Community development of Indian Bands
- Building a Valley-wide community
- Developing sustainable economic activities

The Strategy (2011-2020)

A *strategy* is the basic approach to achieving a *mission or objective*, in our case the sustainability of the Similkameen Valley. It is the heart of our strategic

planning exercise where all the previous deliberations and findings were synthesized. It is the foundation and guide for the *action planning* that follows in Phase 3 of this project, in which detailed action plans are designed and executed.

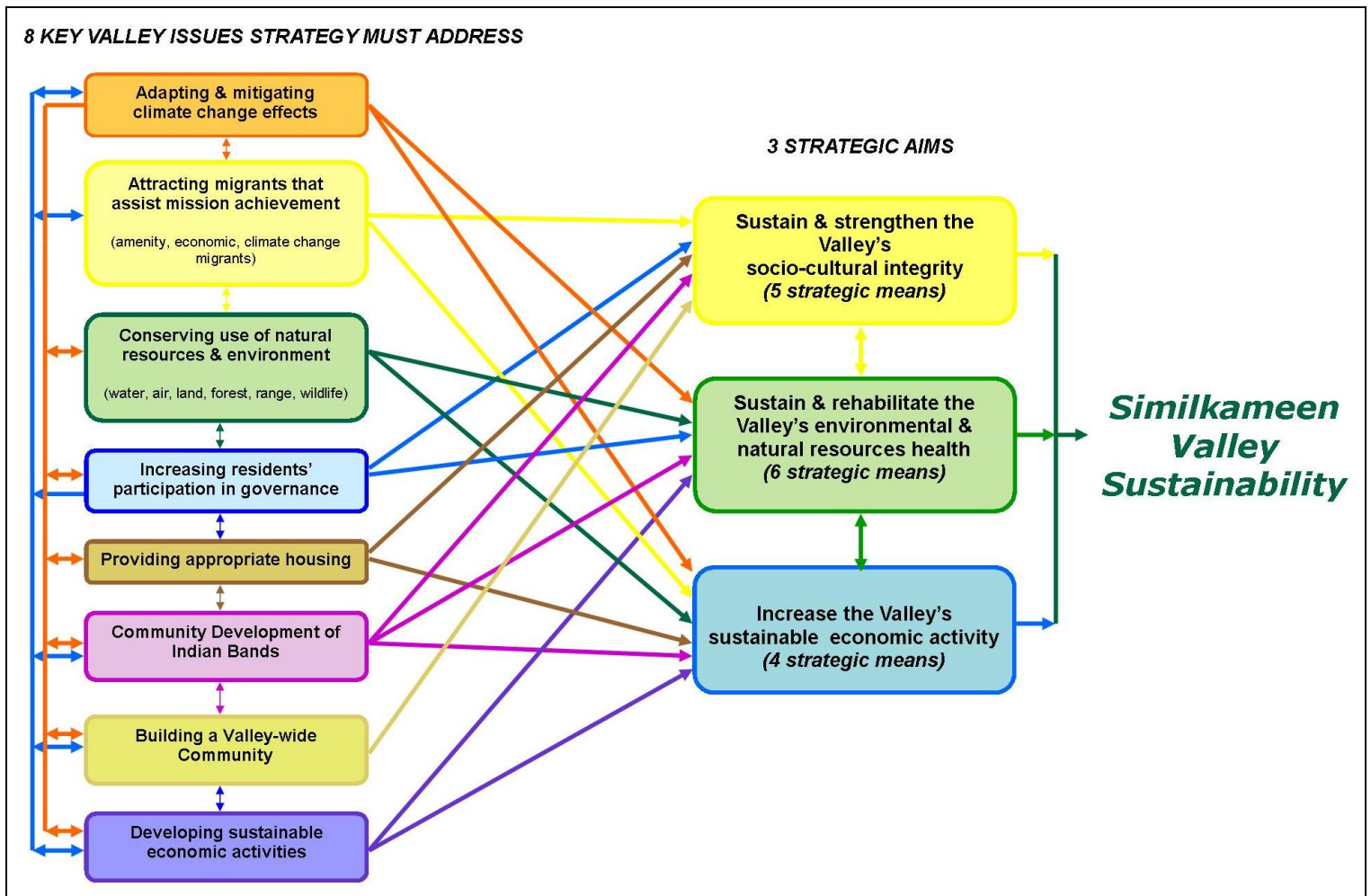
The strategy set out below was crafted specifically for the *Gradual Shift* scenario, the most likely global context of the Valley (2011-2040) that was chosen by Valley residents.

Sustainable Similkameen Strategy (2011-2020)

Valley residents maintain and rehabilitate the Similkameen's key attributes (beauty, high quality natural environment and resources and rural, small town lifestyle), while building on existing sustainability values and practices, and adding greater knowledge and innovation. This demands an increase in residents participation in local affairs to strengthen and solidify the Valley socially, culturally and economically, relying heavily on volunteers working through informal and formal organizations. In addition, the Valley attracts and keeps especially environmentally responsible and economically active in-migrants. This includes special attention to developing a range in housing type and cost. The power of a region is harnessed, wherein the Valley's communities take advantage of the social, political and economic strengths that come from their collaboration.

Following a common strategic planning process, the strategy is translated into strategic *thrusts* or *aims* and *means* that then guide and inform the action planning (such as land use plans, economic development action plans, wetland and range rehabilitation programs, transit and tourism investment projects). Our strategy has 3 strategic aims and 15 means to address the key issues residents of the Valley face in achieving its sustainability (Fig. 3). Distinguishing between strategic means and details of action planning is typically imprecise and depends on differing perspectives and available resources. Some of the details found in the means here may be considered to cross into action planning, especially the specific examples requested at the public meeting held to review the draft strategy (means #6.1, #12.1 and #14.1).

Figure 3. Systemic Linkages of Key Valley Issues with Strategic Aims



While the three aims appear to be equally important, in executing the strategy the 1st AIM will likely prove to be the more fundamental, or first among equals. Similar to the strategic aims, their means are closely interwoven with each affecting the others' role in accomplishing the mission of sustainability. Therefore, all are important. Their ranking and scheduling will occur in the next phase of the project (Phase 3: *action planning*).

<p><i>Strategic Aim 1</i></p> <p><i>Sustain and strengthen the Valley's socio-cultural integrity</i></p>	
<p><i>Strategic Means</i></p>	
<p>1. Increase involvement of Valley residents in especially strengthening local social and cultural institutions and activities (and secondarily, in influencing senior governments decisions), through social engagement and participation in elections, and volunteer community development and conservation organizations and government committees and boards.</p>	<p>1.1. Identify or establish a Valley-wide organization to lead in implementing this means, one with a strong collaboration capability and strategic planning and management.</p> <p>1.2. Develop and use educational material on social, economic and environmental benefits of collaborative community self-help and self-sufficiency (especially in the Scenario B context of restrained public spending and centralized decision-making).</p> <p>1.3. Expand engagement and participation through especially attracting and involving new in-migrants and youth.</p>
<p>2. Attract (compete for) in-migrants having values that complement the mission objectives of sustaining the</p>	<p>2.1. Promote the Valley as a home of people who are sustaining their socio-cultural &</p>

<p>quality of environmental amenities and small-town lifestyle. (Means similar to #9 & #13 but focus differs.)</p>	<p>environmental amenities. This includes agricultural land for its rural ambiance. Programs and projects likely need to skilfully differentiate the type of new resident being targeted, such as younger amenity migrants and climate change migrants (those moving because of increasing risks from climate change's negative impacts), economic migrants.</p> <p>2.2 Undertake a demographic forecast for Scenario B. This task should be undertaken early in Phase 3 (action planning), as it is a necessary prerequisite for many strategic means.</p>
<p>3. Provide housing that helps the Valley develop a balanced population (especially children, workers and retirees). (Means similar to #10 & #14 but focus differs.)</p>	<p>3.1. Develop a range of housing types and cost (for purchase & rent), especially targeting housing market entry-level young families and elders (those with little equity, modest incomes, down-sizing or willing to modify single family dwelling units).</p> <p>3.2. There is a considerable variety of land use and financial mechanisms to increase appropriate housing and residential development (density bonuses, long-term public land leasing, development cost charges, title transfer charges, inclusionary zoning, social housing, etc.). What is the best mix for the Valley needs further analysis, including assessing the benefits of a Valley-wide regional Appropriate Housing Action</p>

	Plan and housing agency (specific to Scenario B).
4. Strengthen a Valley-wide sense of community belonging through heightening awareness and value of Valley's rich cultural and biological diversity and natural & cultural history.	<p>4.1. Design & use formal and informal curricula, especially for school age children & new immigrants.</p> <p>4.2. Identify or establish a Valley-wide sponsor to promote all-Valley cultural events.</p>
5. Build collaborative relationships between the Indian Bands and other communities in the Valley.	5.1. Establish inter-cultural programs and protocols of mutual benefit.

Strategic Aim 2

Sustain & rehabilitate the Valley's environmental and natural resources health

Strategic Means

6. Increase environmental conservation, efficiency of resource use and shift to alternative energy, with particular consideration for mitigating and adapting to climate change effects.	<p>6.1. Assess the impacts of climate change in Scenario B on forest, range and farm crops and adapt for sustained productivity.</p> <p>6.2. Increase resident and corporate conservation behaviour, including meeting or exceeding BC government's greenhouse gas emissions targets & the Valley's Biodiversity Strategy standards (see #8.1).</p> <p>6.3. Attain Valley food and water self-sufficiency/security. This includes: identifying, securing and</p>
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	<p>maintaining agricultural lands; protecting Valley floor for agricultural use; building an Agricultural Land Bank Database which consists of both active and inactive agricultural land (Appendix G: <i>Land Use in Similkameen Valley</i> can be used to begin this activity); and assess suitability of <i>100-Mile Diet</i>.</p>
<p>7. Improve water management significantly and integrate management into Valley-specific climate change, especially for Scenario B context (see Appendix B & G).</p>	<p>7.1. Complete inventory of Valley water quality & quantity.</p> <p>7.2. Formulate a Water Management Action Plan (including assessment and action for water impoundment and strengthening of international coordination).</p>
<p>8. Develop environmental management.</p>	<p>8.1. Complete Valley biodiversity strategy of SOSCP (including fitting the strategy to SS Strategy).</p> <p>8.2. Formulate a Valley Environmental Management and Conservation Action Plan (including biodiversity, land, water and air quality measurement capability, biological carrying capacity, with particular consideration of ALR, Crown land and public parks (see Appendix G).</p>
<p>9. Attract (compete for) in-migrants having values that complement the Valley's mission objectives of sustaining the quality of its environmental amenities and small-town lifestyle. (Means similar to #2 & #14, but focus differs.)</p>	<p>See especially means # 2.1.</p>

<p>10. Regulate housing & residential development for conservation of especially land, water, energy and air quality. (Means similar to #3 & #14 but focus differs.)</p>	<p>10.1. Focus on building LEED (Leadership in Energy & Environmental Design) compliant individual housing units and planned residential developments, generally for higher density with clustering in new developments and infill in older neighbourhoods, along with energy efficient design.</p>
<p>11. Undertake spatial planning for sustaining cultural, social, environmental and economic health, including growth management, supported by improved collaboration between local and regional decision-makers and greater community engagement (see especially means #10 and Appendix G).</p>	<p>11.1. Undertake more extensive land use planning throughout the Valley to appropriately manage and direct future growth (see Appendix G).</p> <p>11.2. Greater integration of parks and protected areas, especially for their role in sustaining biodiversity and economic development.</p> <p>11.3. Greater integration of land use planning with strategic, economic and social planning, and environmental planning, especially through integrating the means set-out in this strategy.</p>

<p><i>Strategic Aim 3</i></p> <p><i>Increase the Valley's sustainable economic activity</i></p>	
<p><i>Strategic Means</i></p>	
<p>12. Increase economic activity and</p>	<p>12.1. Add value to particularly</p>

<p>jobs principally through focusing on Valley resource-conserving and sustainable products and services and substitution of imported goods and services.</p>	<p>farming, forestry, mining and health care processes and products, especially expanding sustainable economic activities. Examples are organic farming, home-stays agro-tourism, hand-crafted furniture and speciality architectural components, engineered wood products, green certification for forest products, biomass fuels, etc.</p> <p>12.2. Improve knowledge-intensive components of Valley education & training (both physically located in the Valley and virtual), and the workforce.</p> <p>12.3. Develop higher quality and more complementary eco-, agro- and cultural tourism and public parks and protected areas use, within a Valley-wide collaborative program or organization.</p>
<p>13. Attract (compete for) knowledge-intensive, innovative and resource-conserving in-migrants (from among potential amenity migrants, economic migrants, climate change migrants.) (Means similar to #2 and #9 but focus differs.)</p>	<p>13.1. Use attraction of the Valley’s natural and socio-cultural amenities and residents’ commitment to conservation (such as LEED building requirements).</p> <p>13.2. Improve the quality of Valley’s telecommunications and regional air service.</p>
<p>14. Increase access to housing, especially for families of younger in-migrants and local born with modest incomes. (Means similar to #3 and #10 but focus differs.)</p>	<p>14.1 Develop a housing assistance program to keep in residence workers earning modest incomes. Particular attention to lower cost rental units is needed, especially using “incentive zoning” such as allowing and promoting “secondary suites” in present single family dwellings.</p>

15. Formulate a Valley-wide Sustainable Economic Development Action Plan and a mechanism to implement it (including especially means #12 through #14).	
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Strategy Implementation (2011-2020)

Two Tasks

Phase 3 of this project is the implementation of the strategy through 1) action planning and 2) evaluating the continuing appropriateness of the strategy and its progress in achieving the mission.

1. Action Planning

Action planning is the tactical level of the strategic planning process, where the strategy is executed in detail. This planning sets out how, when, where, who is responsible and what financial resources are needed and budgeted to implement the strategy. The action plans of the organizations responsible for strategy implementation are usually disaggregated into more specific programs and projects.

2. Evaluation: Scanning, Monitoring & Assessment (SM&A)

Scanning & Monitoring

The planning method we have been using (multiple scenario strategic planning) has a powerful scanning and monitoring system. This activity should be carried on throughout the entire planning and implementation process, at intervals appropriate to the planning and implementation organizations' resources, with

emphasis usually given to the external analysis and the chosen “most likely” scenario. This will assist evaluating the validity of the chosen scenario through time by reviewing its key characteristics, and in knowing if and when the chosen *scenario*, or an alternative one, is the continuing global environment of the mission. See Appendix H for distinction between scanning and monitoring.

Assessment

A critical component for achieving the mission is assessing implementation of our strategy. The main purpose is to evaluate the effectiveness of the strategy, including identification of issues or problems in its execution, appropriateness of its programmes and projects and strengthening the strategy through its 10-year period of implementation. It is important that a set of indicators for Valley sustainability is developed and used for assessing the strategy. The project’s external and internal key decision factors will be the principal inputs for developing the indicators. Appendix H includes further details about assessment.

Responsibility for Strategy Implementation

The Valley residents and their elected representatives that gathered at the public meeting to review and discuss this strategy late in March 2010 clearly agreed that the Valley’s residents need to take the lead in implementing it. Local governments and their elected officials and professional staff have key roles to play, and champion the strategy, but the hands-on involvement of residents Valley-wide will be critical for realizing a *Sustainable Similkameen*. Without their concerted effort, innovative and appropriate strategy and action planning had failed elsewhere.

1. Stewardship of the Strategy

The strategy set-out in this report should first be endorsed in principal by the Steering Committee of the Similkameen Valley Sustainability Project. This committee will then remain active until the Similkameen Valley Planning Society (SVPS) endorses the strategy document.

Subsequently, the SVPS should be the steward of the strategy and introduce it to regional governments and the Valley community via public and other organizations' meetings, including schools, clubs, etc.

2. Coordination of Action Planning (Phase 3)

The SVPS should initiate the coordination of the strategy's implementation through seeking funding and other resources to undertake Phase 3, the action planning.

It is recommended that to maintain momentum the SVPS soon convene a meeting of resource organizations, such as the regional district, Valley municipalities, and non-governmental agencies both in and outside the Valley interested in assisting with the Valley's sustainability (such as South Okanagan-Similkameen Conservation Program, Real Estate Foundation of BC) to work out the details of swiftly advancing with action planning. It is likely that some core funding will be needed for this coordination activity, especially for hiring a part time coordinator to manage this task for the SVPS. In addition to considerable coordination skills this person should clearly understand the strategy and strategic planning.

There are a number of ways to organize the action planning phase of this project. Appendix H outlines three general approaches for consideration.

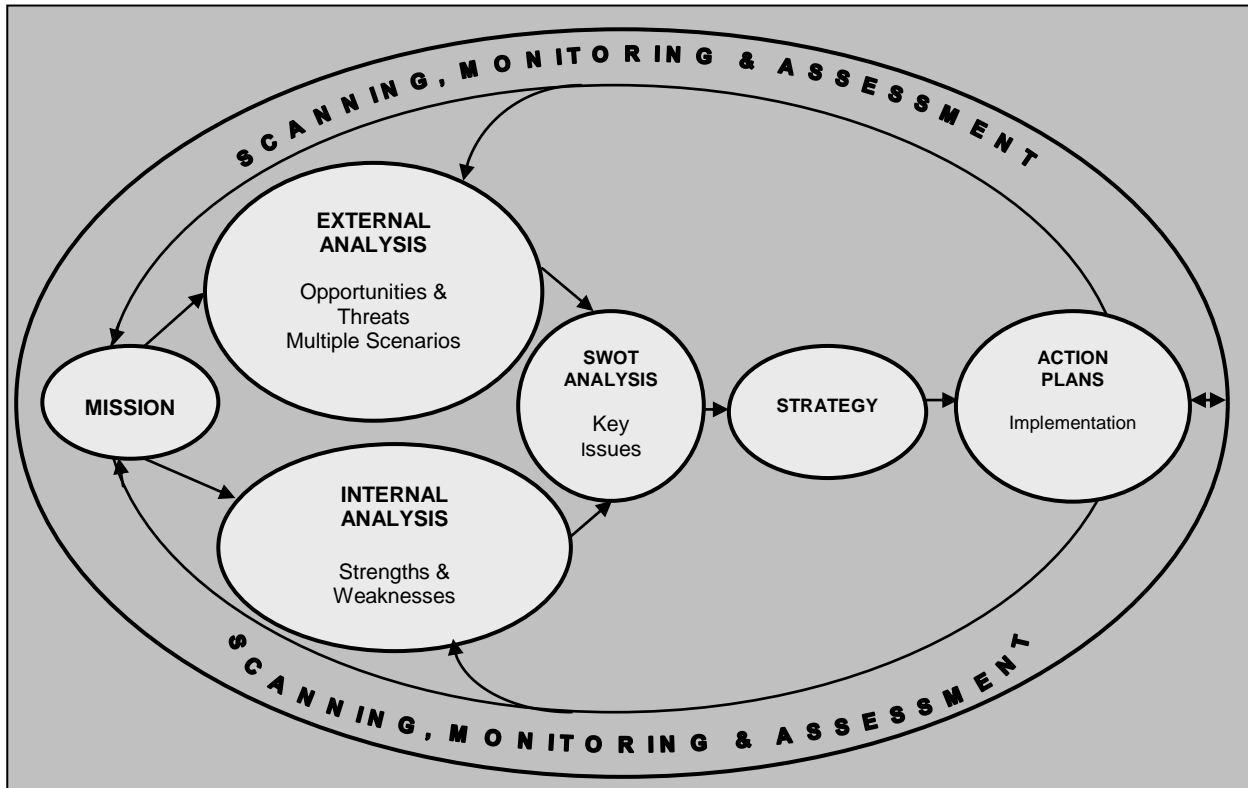
APPENDICES

Strategy for a Sustainable Similkameen Valley

Note: To print the maps in Appendices B & G please download it directly from source's website and use wall size mapping paper, such as ANSI E 34 by 44 in.

Appendix A:

Multiple Scenarios Strategic Planning (MSSP) Process



Source: Adapted from *Glorioso and Moss (2006, p.88)*

For detailed explanation of the MSSP strategic planning method and its applications the following publications are recommended:

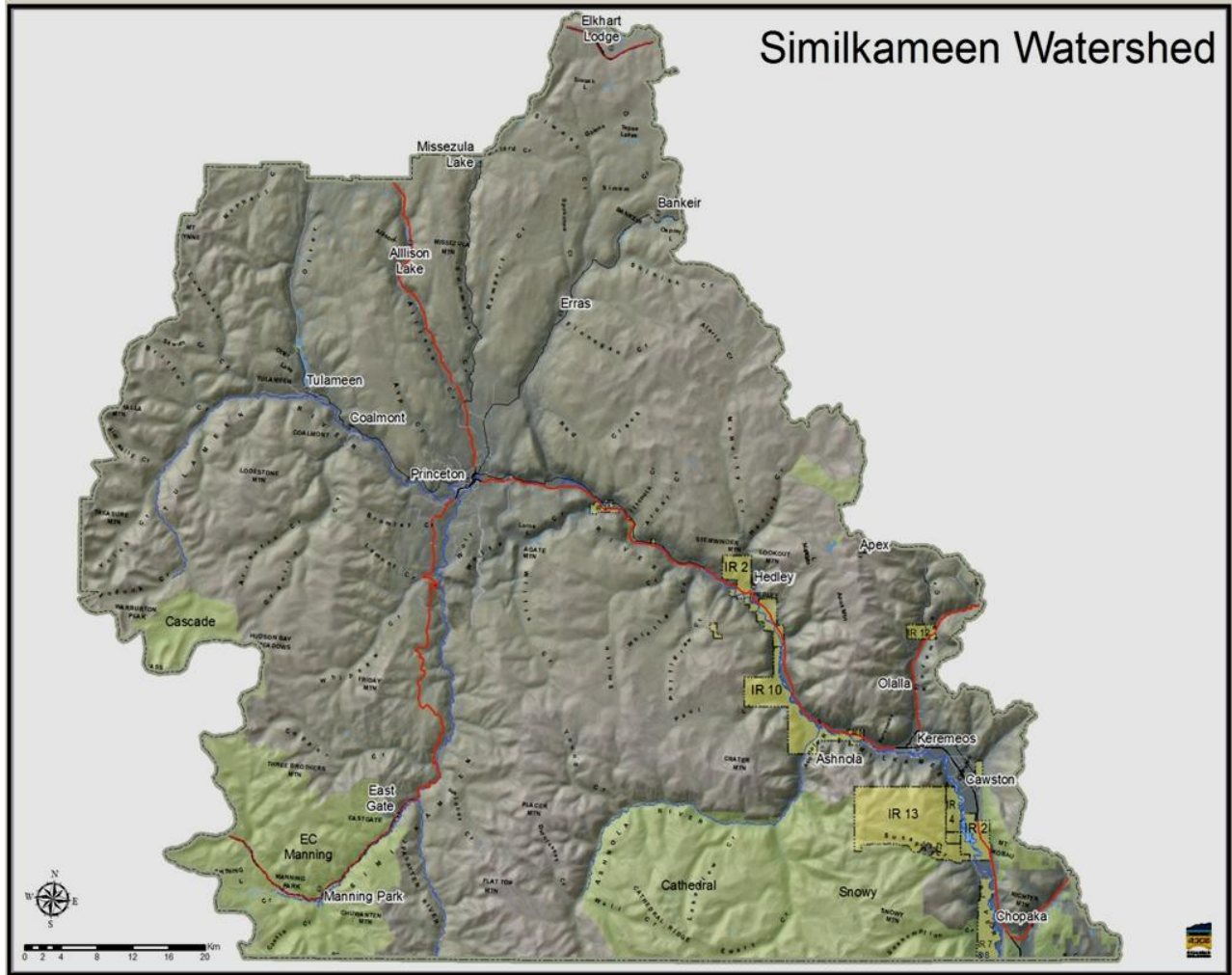
Glorioso, R.S. & L.A.G. Moss (2006) Santa Fe, a Fading Dream. In: Moss, L.A.G. (Ed.) *The Amenity Migrants: Seeking and Sustaining Mountains and Their Cultures*, CABI Publishing, Wallingford, UK & Cambridge, USA (pp 73-93).

Glorioso, R.S. (2009) Toward a Strategy for Managing Amenity Migration: The Role Of Multiple Future Scenarios, *Die Erde (The Earth)*, Journal of the Geographic Society of Berlin, 140:3 (pp 293-315).

Appendix B:

The Similkameen Valley Watershed Human Settlements

Source: Regional District Okanagan-Similkameen



Appendix C: External Analysis: Key Decision Factors

The Panel identified the following 25 external key decision factors that will likely influence achieving the project’s mission. The table includes an approximation of the positive (opportunity) and negative (threat) impact of the factors and the principal locus of their influence. Note that some factors are likely both an opportunity and threat to mission achievement. Colours represent clustering of factors.

<p align="center">KEY DECISION FACTORS (external to the Similkameen Valley)</p>	<p align="center">Opportunity (+) / Threat (-)</p>	<p align="center">Socio-cultural = S Economic = Ec Political = P Technological = T Environmental =E Global = (G) National = (N) Regional = (R)</p>
<p>1) Increased in-migration w/ majority amenity migrants (AMs), due principally to:</p> <ul style="list-style-type: none"> - generally perceived Valley higher quality of natural and cultural amenities and “better” climate - comparatively more affordable cost of living (esp. real property purchase price and property tax) - proximity of Metro-Vancouver and OK Valley pop. centres - perceived rural/ frontier “pioneering” opportunity - attraction of rural West image of rugged individuality & independence <p>dominant AM characteristics:</p> <ul style="list-style-type: none"> - impermanence of residence, w/ 2nd home owners a significant percentage - usually older adults (high % baby boomers) w/out children at home - want higher quality public services & infrastructure (especially health services) - some bring or create new economic opportunities - predominant value of low density settlement pattern and land ownership <p><i>(see related SV- specific IA factors list)</i></p>	<p>-/+</p>	<p>S, Ec, E (R,N)</p>
<p>2) Continuing global population growth</p>	<p>-</p>	<p>S, Ec, E (G,R)</p>
<p>3) Prov Gov’t income generating policy for agricultural & forest lands (farm tax status, cheap logs for export, etc)</p>	<p>-</p>	<p>Ec, P (R)</p>
<p>4) Fed Gov’t policies that increase cost and negatively affect food sustainability:</p> <ul style="list-style-type: none"> - wine industry - meat processing - food safety - certification - trade policies 	<p>-</p>	<p>Ec, P, E (N)</p>
<p>5) Fed & Prov Gov’t policies that threaten organic farming:</p>	<p>-</p>	<p>P, T, Ec (N,R)</p>

<p align="center">KEY DECISION FACTORS (external to the Similkameen Valley)</p>	<p align="center">Opportunity (+) / Threat (-)</p>	<p>Socio-cultural = S Economic = Ec Political = P Technological = T Environmental =E Global = (G) National = (N) Regional = (R)</p>
<ul style="list-style-type: none"> - GMO - nanotechnology - seed control 		
<p>6) Fed & Prov Govts policies w/ greater centralized authority yet local responsibility:</p> <ul style="list-style-type: none"> - natural resources use & development (w/ Valley environmental/ sustainability impacts -- coal, coal fire, water) - health care management & services (w/ MD & RN shortage, shift to family practise, larger catchment areas) - other social services similar issues - transportation services (air, rail, road) (maintenance and technology lag/ inadequacy; public and private -- Greyhound) - forest & range management (fire, etc) - climate change 	-	P, Ec, E,S (N,R)
<p>7) Fed & Prov Govts decision-making culture:</p> <ul style="list-style-type: none"> - bureaucratic/ slow - politically discretionary - leadership & policy perspectives short term (4yrs horizon) w/ Valley 40-yr scenario & 13-yr strategy) 	-	P, Ec (N,R)
<p>8) Fed & Prov Govts Parks & Protected Areas</p> <ul style="list-style-type: none"> - policies & management insensitive to local wants & needs 	+/-	P, E, Ec (N,R)
<p>9) Fed & Prov Govts First Nations policies <i>(see related SV-specific IA factors list)</i></p>	+/-	P (N,R)
<p>10) Fed Govt immigration policies</p>	+/-	P, S, Ec (N)
<p>11) Fed and Prov Govts political parties in power affects policy and funding allocation</p>	-	P, Ec (R,N)
<p>12) Fed & Prov Govts large Valley land ownership and land management policies</p>	-	P, Ec (N,R)
<p>13) Fed Gov't monetary policy (value of Cdn currency, especially vis-à-vis US dollar)</p>	+/-	Ec, P (N)
<p>14) RDOS policies that effect Valley <i>(see related SV-specific IA factors list: Valley internal jurisdictions)</i></p>	+/-	P, Ec (R)
<p>15) Access to water quality and quantity:</p> <ul style="list-style-type: none"> - increasing use (including in USA) - watershed originates & terminates in USA - dams (in Valley and USA) <p>(water security, irrigation, flood control, waste management)</p>	-/+	E, Ec,P,S (G,N,R)
<p>16) Energy production & technology adaptation (cost, type, rate of adaptation -- significant transition gap, location and ownership)</p>	+/-	T, P (N,R)
<p>17) Climate change</p>	+/-	E (G,N,R)

<p align="center">KEY DECISION FACTORS (external to the Similkameen Valley)</p>	<p align="center">Opportunity (+) / Threat (-)</p>	<p>Socio-cultural = S Economic = Ec Political = P Technological = T Environmental =E Global = (G) National = (N) Regional = (R)</p>
<ul style="list-style-type: none"> - agriculture, forest & range impacts - recreation impacts (e.g. winter sports) - pop in-migration (from flooding and desertification elsewhere) 		
<p>18) Boom & bust economic cycle (global and regional dependency cycle):</p> <ul style="list-style-type: none"> - real estate - construction - agricultural products & services - forestry & mining products & services 	+/-	Ec,P (G,N,R)
<p>19) Retail “drift” <i>(see related SV-specific IA factors list)</i></p>	-	Ec, S (R)
<p>20) Seasonal in-migration for Valley jobs (guest workers)</p>	+/-	S, Ec (N,R)
<p>21) Low cost, high amenity location for national/ international NGO service providers</p>	+/-	Ec, P (G,N)
<p>22) Illicit products & people</p> <ul style="list-style-type: none"> - intl. border proximity - some local production <p><i>(see related SV-specific IA factors list)</i></p>	-	Ec,S,P (R)
<p>23) National media ownership:</p> <ul style="list-style-type: none"> - outside control of local voice - watered down local info. and content - loss of record of local socio-cultural events <p>(affects local attitude, loyalty, participation)</p>	-	P (N)
<p>24) Broadband & cell service low</p>	-	T, Ec (R)
<p>25) Youth out-migration for external attractors:</p> <ul style="list-style-type: none"> - education - non-agric. alternative employment - larger job market - socio-cultural amenities (incl. “to see the world”) 	-	E, S (R)

Appendix D: Internal Analysis: Key Decision Factors

Below is a list of the Similkameen Valley’s 35 key strength and weakness factors for achieving the *Sustainable Similkameen* mission, along with their main traits. Also included in parentheses in the Strengths & Weaknesses column is the Panel’s ranking of the most important strengths (green) and the most important weaknesses (red), with the higher the number the more important. Each Panel member had 5 votes for each of the 2 types of key factors. Note that some factors will likely function as both a strength and weakness for mission achievement.

<p>Existing KEY DECISION FACTORS <i>(originating within the Valley)</i></p>	<p>Strength = + Weakness = - both S&W = +/- or -/+</p>	<p>Dominant Characteristic: Socio- cultural (S) Economic (Ec) Political (P) Technological (T) Environmental (E)</p>
<p>1) Demographic imbalance: high - aging high, especially w/ high % amenity migrants (AM) being retirees & 2nd home resident types - youth out-migration high, from low opportunity for post secondary & specialized education, employment (including non-agricultural jobs, socio-cultural amenities) - school age population: low <i>But</i> LSV pre-school age seems increasing w/ agricultural activity & alternative lifestyle in-migrants</p>	<p>- (6)</p>	<p>S, Ec</p>
<p>2) attractiveness to in-migrants (especially amenity migrants): high due to comparatively - high quality natural amenities - good climate (mild, short winters) - continuing rural life-ways (laid-back, friendly, small communities, etc.) - low cost of living (incl. property tax) - proximity to Vancouver Metro Area <i>But</i> high cost of land for young families & new farmers</p>	<p>+/- (5)</p>	<p>S, Ec, E</p>
<p>3) Retirees as % of in-migrants: high - medium to high role in communities - mostly modest to middle income (and unlikely to vote for property taxes increase to improve services & facilities)</p>	<p>-/+ (1)</p>	<p>S, Ec</p>
<p>4) water quality & quantity: medium to high - water management : medium to low (protection of sources especially inadequate) - wind for alternate clean energy generation: high <i>But</i> to what extent is quantity & quality decreasing?</p>	<p>+/- (12)</p>	<p>Ec, E, S, T</p>
<p>5) air quality: medium to high <i>But</i> Princeton has some industrial pollutants</p>	<p>+ (10)</p>	

<p><i>Existing</i> KEY DECISION FACTORS <i>(originating within the Valley)</i></p>	<p>Strength = + Weakness = - both S&W = +/- or -/+</p>	<p>Dominant Characteristic: Socio-cultural (S) Economic (Ec) Political (P) Technological (T) Environmental (E)</p>
<p>6) natural amenities quality: high attracts AMs and keeps local born & raised</p> <ul style="list-style-type: none"> - for aesthetics - for recreation (walking, hunting, fishing, skiing, all water activities, etc.): high w/ trails under development (volunteer driven) <p><i>But</i> biodiversity of Valley is a provincial “hot spot”, w/ development pattern especially creating risks</p>	<p>+/- (7)</p>	<p>E, S, Ec</p>
<p>7) Valley 1st Nations: high significance</p> <ul style="list-style-type: none"> - land tenure (about 30 %) - long term perspective and Elders brings imp’t. historical and cultural perspective - land in comparatively natural state - land use environmental implications high - inter-community relations: good - land claims implications: significant (especially for crown lands) 	<p>+/- (1)</p>	<p>S, Ec, P, E</p>
<p>8) Volunteerism: high significance, w/medium to high quality</p> <ul style="list-style-type: none"> - availability of clubs, social groups & community structures (fall fairs, fire dept, music festivals): high <p><i>But</i> indications of decreasing involvement; need for larger cultural facilities (but lack of economic base)</p>	<p>+/- (8)</p>	<p>S, Ec, P</p>
<p>9) Health & social care: moderate (good on Valley per capita basis)</p> <ul style="list-style-type: none"> - adequate physical infrastructure to meet population needs - adequate personal and equipment for effective service - good communication, info and patient transfer to outside health providers and institutions - good access to outside SV specialists & services, delivered timely and equitably compared to the rest of the region 	<p>+/- (4, 2)</p>	<p>S, P, Ec, T</p>
<p>10) Social safety nets (food banks, safe houses, programs for victims of mental, violent and social abuse): high <i>But</i> low for south Valley</p>	<p>+/-</p>	<p>S, Ec, P</p>
<p>11) Crime: low</p> <ul style="list-style-type: none"> - illicit economy growing w/ intl. border proximate, but increased surveillance 	<p>+</p>	<p>S, Ec</p>
<p>12) Comfort amenities: low to moderate</p> <ul style="list-style-type: none"> - limited shopping selection - limited big cultural events (on venue to accommodate) <p><i>But</i> perhaps increasing internet-shopping increasing</p>	<p>-</p>	<p>Ec, S</p>

<p><i>Existing</i> KEY DECISION FACTORS <i>(originating within the Valley)</i></p>	<p>Strength = + Weakness = - both S&W = +/- or -/+</p>	<p>Dominant Characteristic: Socio-cultural (S) Economic (Ec) Political (P) Technological (T) Environmental (E)</p>
choice		
<p>13) Housing - availability of good quality to own or renting: low - physical condition: often sub-standard - regulation and enforcement: low - cost increasing (especially for young and moderate income families) - cost to many in-migrants: reasonable</p>	-/+ (9, 2)	Ec, S, P
<p>14) Availability and freedom of religious expression: high</p>	+	S
<p>15) Divisiveness in communities: low to moderate, varying w/ issue (may be disaggregated by type: local born & raised, amenity migrant, retiree, etc?)</p>	+/-	S, P
<p>16) Attitude of many in-migrants is keep the Valley quaint and “country”</p>	-/+	S
<p>17) Long term residents (2 and 3 generations in the Valley) sense of belonging: high <i>But sometimes resistant to change and to recognize need for change</i></p>	+/-	S, P,
<p>18) Ability of Valley politicians to increase local role in BC & federal decision-making: low to moderate</p>	- (2)	P,S
<p>19) Ability of Valley politicians to implement a sustainability strategy: weak</p>	-	
<p>20) Residents participation in the political process: low to moderate Recent Princeton municipal election voter turnout good, but provincial & federal election turnout poor.</p>	- (5,1)	P,S
<p>21) Public planning & management role: low to moderate - 3OCPs, 2 Electoral Areas without OCPs, 1 CDP (LSB) - ALR, Irrigation Districts, SVPS, ICS Planning - more rural areas have some dissatisfaction w/ land use restrictions & quality of use enforcement of regulations</p>	-/+ (7, 2)	S, P, Ec
<p>22) Economic development: moderate to medium - w/ new economic activity typically amenity and health based products & services, w/ some natural resources products & services. Continuing shift to more diversified economic base - entrepreneurial activity: some growth - increase in well paying jobs, but high reliance on few employers and automation <i>But low development of creative/ innovative sector, especially “green” enterprises</i></p>	+/- (5, 2)	Ec
<p>23) Rural employment availability: low</p>	- (6)	Ec, S

<p><i>Existing</i> KEY DECISION FACTORS <i>(originating within the Valley)</i></p>	<p>Strength = + Weakness = - both S&W = +/- or -/+</p>	<p>Dominant Characteristic: Socio-cultural (S) Economic (Ec) Political (P) Technological (T) Environmental (E)</p>
<ul style="list-style-type: none"> - especially for youth - needs flexibility/ skill for multi-job employment 		
<p>24) “Pioneering opportunity”, real or perceived, in part due to low regulations in some Valley areas</p>	+/-	S, Ec
<p>25) Farming activity: medium to high</p> <ul style="list-style-type: none"> - support infrastructure accessible with little up-front cost for new entrances - conventional and organic TF producers have storage/ packing / sales available through co-ops & private companies - production information very accessible - large enough industry for consolidated & good transport to outside markets - consumer population not large enough for profitable local farmers market - cattle producers lack local processing Facilities - on-farm wineries, other fruit products & B&Bs: growing regional significance (tourism: first stop from urban centres for local wine, fruit and ground crop sales; amenity migrants: attractive to many) 	+/- (5, 1)	Ec, S, T
<p>26) Forestry: low</p> <ul style="list-style-type: none"> - pine & spruce beetle mortality: high - log & timber market: low (but w/ highly cyclical history) - value added: low - fire hazard: increasing risk due to global warming & prevailing low-density residential development pattern; 	- (8)	Ec, E
<p>27) Mineral resources: high (USV)</p>	+/-	Ec, E
<p>28) Dirty energy resources (CBM and coal): high</p>	-/+ (1)	Ec, E, T
<p>29) Industrial activity: low w/ highly uncertain potential</p> <ul style="list-style-type: none"> - role in changing global, Canada & BC economy: quite uncertain because of dominating external decision factors - value added activities: Valley wood inputs & competitiveness uncertain 	-/+	Ec, P, T
<p>30) Management of increasing human waste: medium to high <i>But increasingly difficult and costly</i></p>	+ (1)	E, P, T
<p>31) Historical access to natural amenities through private land w/ amenity migrant ownership and increased use and abuse: decreasing</p> <ul style="list-style-type: none"> - traditional access on private & 1st Nation land being curtailed 	-/+ (1)	E, S, Ec, P
<p>32) Valley crown land: high</p>	+/- (1)	E,S,P,Ec

<p>Existing KEY DECISION FACTORS <i>(originating within the Valley)</i></p>	<p>Strength = + Weakness = - both S&W = +/- or -/+</p>	<p>Dominant Characteristic: Socio-cultural (S) Economic (Ec) Political (P) Technological (T) Environmental (E)</p>
<ul style="list-style-type: none"> - magnitude: high - management (rangeland, pest and fire, forestry, water storage, parks and trails: moderately compatible - national park reserve issue: high (LSV), moderate (USV) 		
<p>33) Communications services: medium to high <i>But for cellular: low</i></p>	<p>+/- (4, 2)</p>	<p>T, Ec, P, S,</p>
<p>34) Transportation services: low to moderate</p> <ul style="list-style-type: none"> - poor public transport within and connecting with outside SV - lack of taxi service (LSV) 	<p>-</p>	<p>Ec, P, S</p>
<p>35) Increasing “through” traffic effect: high</p> <ul style="list-style-type: none"> - increasing business opportunities off-set by social costs (accidents and illicit transient activities) & environmental risks (air and noise pollution) 	<p>+/-</p>	<p>Ec,E</p>

Appendix E: External Analysis: Opportunities & Threats of “Gradual Shift” Scenario (2011-2040)

Scenario Logics: **Decreasing** local role in public policy decision-making for sustainability
Increasing demand for places rich in natural and socio-cultural amenities

OPPORTUNITIES	THREATS
<p>Migration <i>In-migration (Global, Canada, BC)</i></p> <ul style="list-style-type: none"> Valley continues attracting amenity migrants, esp. in 1st & 3rd periods (some have knowledge &/or capital, resource-conserving behaviour, high active participation in community); decrease in 2nd home AM type in 2nd period; increase of alternative lifestyle “back-to-land” AMs + farming families (strong land conservation ethic & opportunity for land rehabilitation/local food security, more stable population w/ more children) New Canadian lifestyle resident visa likely to bring more foreign amenity migrants. economic migrants continue (w/ some younger, skilled) increasing climate migrants (some young & skilled) housing construction increases, w/ technology for resource-conserving housing available (e.g. LEED building materials & energy efficiency) <p><i>Out-migration (Global, Canada, BC)</i></p> <ul style="list-style-type: none"> some will return w/ higher education, capital & knowhow 	<p>Migration <i>In-migration (Global, Canada, BC)</i></p> <ul style="list-style-type: none"> Valley continues attracting amenity migrants, esp. in 1st & 3rd periods (some old, moderate wealth retirees, resource-consuming behaviour, few school age children) New Canadian lifestyle s resident visa likely to bring more foreign amenity migrants. economic migrants continue (w/ some low skilled, old) increasing climate migrants (some low skilled, old) housing construction increases w/ likely historically preferred land use pattern: land extensive, low density ground oriented single-family type greater pressure on natural, environment/biodiversity loss of farm land possible and loss of crown land likely with continuing preferred land use development pattern and dominant BC Gov’t orientation <p><i>Out-migration (Global, Canada, BC)</i></p> <ul style="list-style-type: none"> youth for jobs, socio-cultural amenities, higher education climate migrants & amenity for more desirable amenities (including climate)
	<p>Public Sustainability Policy & Local Role (<i>Global, Canada, BC</i>)</p> <ul style="list-style-type: none"> centralized decision-making (local participation constrained to electing public officials) confusing public policy focus especially for rural communities: natural resource extraction and AM & tourism policies have underdeveloped indicators for sustainability (not explicit in the scenario) selling of Crown land (not explicit in the scenario)
<p>Shift in Societal Values (<i>Global, Canada, BC</i>)</p> <ul style="list-style-type: none"> slow may be more thoughtful, careful strong land conservation in-migrant type influences their local communities behaviour 	<p>Shift in Societal Values (<i>Global, Canada, BC</i>)</p> <ul style="list-style-type: none"> slow, gradual increase for households and corporations
<p>Economic Development (<i>Global, Canada, BC</i>)</p> <ul style="list-style-type: none"> slow may be better – time to develop well- 	<p>Economic development (<i>Global, Canada, BC</i>)</p> <ul style="list-style-type: none"> modest performance w/ smaller budgets for

OPPORTUNITIES	THREATS
<p>considered strategies & plans; develop more self-sustaining, self-sufficiency for Valley, especially in view of limited governmental support for rural areas</p> <ul style="list-style-type: none"> considerable old wealth in the USA for purchasing 2nd homes and specialty forest products (esp. in 1st period) due to the peace in the Middle East & withdrawal from Afghanistan Federal Govt's defence expenditure likely smaller and so possibly more funds for domestic expenditure some public infrastructure funded (Similkameen Falls Dam & Hope-Princeton Highway funded) moderate urban/rural equality 	<p>Federal and BC Govts and likely lower funding of education, health care & infrastructure</p> <ul style="list-style-type: none"> higher BC Govt valuing of resource extraction than environmental and socio-cultural sustainability; confusion/conflict w/ tourism & amenity migration expansion; and threat to quality of natural environment
<p>First Nations Development (<i>Canada, BC</i>)</p> <ul style="list-style-type: none"> growing control by First Nations over land stewardship less constrained by Federal government regulations 	<p>First Nations Development (<i>Canada, BC</i>)</p> <ul style="list-style-type: none"> Federal financial support continues, but reduced
<p>Climate Change (<i>Global, Canada, BC</i>) (temperature increase: BC Interior + 2.4 °C; plateaus in 2040)</p> <ul style="list-style-type: none"> lower impacts risk than more southern latitudes and coasts (BC interior) warmer temperatures w/ increase in growing degree days (BC Interior) increasing, shift (but slow) to renewable energy, along w/ than hydropower (BC) 	<p>Climate change (<i>Global, Canada, BC</i>) (temperature increase: BC Interior + 2.4 °C; plateaus in 2040)</p> <ul style="list-style-type: none"> warmer w/ more seasonal fluctuations (BC interior) more erratic storms (BC) low snow pack w/ earlier run-offs and extended low flow periods in summer (BC Interior) (see related O&T titled WATER) forest and crops need to adapt (BC Interior) slow human adaptation to more resource conserving behaviour more northern regions likely have more attractive climate compared to southern SimilkameenValley ?
<p>Water: (<i>Global, Canada, BC</i>)</p> <ul style="list-style-type: none"> Western US increase in water demand 	<p>Water: (<i>Global, Canada, BC</i>)</p> <ul style="list-style-type: none"> scarcer due to hydrological change : lower snow pack, stream flow & annual cycle growing competing use (hydropower, agricultural, forestry, recreation, wildlife, residential) water rights issues increase (between First Nations & Province; between Canada and USA; between BC & Washington State) Western US increase in Water demand
<p>Adjacent Jurisdictions Strategies & Plans: (<i>Regional</i>) SO Growth Management Plan? SO Climate Change & Water Management Study, ONA Plans? Oroville/ Okanogan County Plans?</p>	<p>Adjacent Jurisdictions Strategies & Plans: (<i>Regional</i>) SO Growth Management Plan? SO Climate Change & Water Management Study? ONA Plans, Oroville/ Okanogan County Plans?</p>

Appendix F: SWOT Analysis

SWOT Matrix: Key Factors of Medium & High Significance for Mission Achievement

Valley STRENGTHS		Valley WEAKNESSES	
	<ul style="list-style-type: none"> • water quality & quantity • air quality • volunteerism • natural & socio-cultural amenities quality • farming activity 	<ul style="list-style-type: none"> • local participation in the political process • economic development • rural employment availability 	<ul style="list-style-type: none"> • demographic imbalance • housing • forestry • public planning & management role
scenario B OPPORTUNITIES		scenario B THREATS	
<ul style="list-style-type: none"> • out-migration • shift in societal values • economic development • climate change • water • adjacent jurisdictions strategies & plans 	<ul style="list-style-type: none"> • in-migration • First Nations community development 	<ul style="list-style-type: none"> • First Nations community development • adjacent jurisdictions strategies & plans 	<ul style="list-style-type: none"> • in & out migration • public sustainability policy & local role • shift in societal values • economic development • climate change • water

Notes: Colour intensity indicates medium and high significance to mission achievement, with stronger colour representing high significance.

KEY ISSUES Identified in SWOT Analysis

❖ Adapting & mitigating climate change effects (High Priority)

(medium significance impacts: 2.4°C + for south interior BC)

- low local participation in national & BC governmental decision-making (due to both centralization by these authorities and medium local participation)
- medium impacts on water, crops, forest, range
- slow, increasing conservation behaviour of households and corporations
- increasing climate migrants (“climate refugees”)

❖ Attracting migrants that assist mission achievement (High Priority)

- in-migration (increasing amenity migrants and climate migrants; economic migrants?)

(these 3 in-migrants types are not mutually exclusive; e.g. there are amenity migrants who are also motivated by economic opportunities and *vice-versa*):

- skill, age, wealth of in-migrants (including creativity/ innovativeness)
- what mix of in-migrant type is preferred?

- how to manage for migrant types (e.g. resource conservers, comparative higher % of economic migrants, economically active amenity migrants, entrepreneurial climate migrants)
- Canadian Gov't immigration regulations for economic & climate migrants?
- b) out-migration (continuing youth; climate migrants?)
 - leave for more amenities (urban lifestyle, higher education, see-the-world)
 - leave for higher quality natural & socio-cultural amenities (from south Valley especially for climate change?)
 - how to dissuade or attract back to Valley?

- ❖ **Conserving use of natural resources & environment (water, land, air, forest, range, wildlife) (High Priority)**
 - a) increasing pressure on environment resources (resource extraction, recreation, residential development, agriculture)
 - inadequacies of public planning & management, parks and protected areas (including ALR) & household and corporate conservation behaviour
 - b) information/ analysis needed:
 - water (hydrological) inventory and management plan (general & Scenario B)
 - land carrying capacity (eco-systems/biodiversity, human preference) (general & Scenario B)
 - climate change implications for crops, humans, and wildlife (Scenario B)
 - population forecast (w/ main age cohorts and migrant types) (Scenario B)

- ❖ **Increasing residents' participation in governance (High Priority)**
 - centralized decision-making of national & BC Gov'ts
 - low Public participation in national & BC elections
 - medium to high local community participation (local elections & volunteerism)

- ❖ **Providing appropriate housing (High Priority)**
 - a) increasing need
 - spectrum of affordability
 - owner and renter occupied
 - location and type (environmental, economic & social effects)

- ❖ **Community Development of Indian Bands (High Priority)**
 - a) increasing land & water use self-determination
 - b) information/ analysis needed:
 - land use & development strategies (have LSIB CC Development Plan)
 - population forecast (w/ main age cohorts; work force for self + Valley ?)
 - education & skills (work force for self + Valley ?)
 - magnitude of land under jurisdiction (probability of increase?)
 - mining rights

- ❖ **Building a Valley-wide community (High Priority)**
- ❖ **Developing sustainable economic activities (Medium Priority)**
 - slow and limited shift to green and knowledge economy and jobs, which is uncompetitive with other rural places

Appendix H: Strategy Implementation

1. Scanning, Monitoring & Assessment

Scanning deals with uncertainty and alerts analysts and decision-makers to signs of change. It attempts to detect what the futures analyst Igor Ansoff termed the "weak signals" of emerging new conditions, and to do so sufficiently early and accurately that the responsible organization(s) has lead-time in which to modify or develop strategy. The earlier scanning detects these weak signals, the more resources an organization can save. It may also indicate the need to shift to an unfolding more likely scenario and its implications for strategy modification.

Monitoring is the "day-to-day" tracking of known characteristics (identified in the external analysis). Compared with scanning, monitoring is concerned more with the present and near future.

Assessment typically includes evaluating the following through time:

Awareness – Measuring the Valley residents' over-all awareness of the mission, strategy, and related projects and programmes.

Attitudes – The degree to which the Valley residents support the mission, strategy, and related projects and programmes.

Participation – The degree to which the Valley residents participate in the implementation of the strategy through its projects and programmes results.

Satisfaction – The degree to which the Valley residents are satisfied with the strategy through its projects and programmes.

Utilization – The degree to which Valley local governments, NGOs, and private organizations have adopted the strategy for their planning and operations.

Impacts – The degree to which the strategy is achieving mission objectives.

2. Notes on Strategy Implementation

There are a number of ways to structure the implementation of the Similkameen Sustainability Strategy (SS Strategy) – Phase 3 of this project. In whichever is chosen the parties involved need to have clearly understood tasks and responsibility, and strive to coordinate their actions within agreed upon time lines. Guided by the 10-year strategy, this detailed "action planning" (economic development action plan, Valley self-sufficiency action plan, greater Valley-wide cohesiveness program, etc.) should be designed for specified periods that vary from 2 to 5 year periods governed by the nature of the task.

Below is some preliminary thinking about structuring of authority and responsibility for implementing the strategy. Three basic approaches are outlined, and there is of course a 4th to be considered, some combination of the three. All need further investigation.

- 2.1 The strategy is formally or informally recognized by municipalities, and/ or the regional district and/or electoral areas of district as an approach to, and guidelines for achieving social, economic and environmental sustainability in their plan making and implementation. As the strategy is for environmental, socio-cultural and economic sustainability, it likely qualifies under the BC Government's request for local government to undertake "integrated community sustainability planning" (ICSP). If, as the consultants have been advised, ICSP is now required for local governments to continue to receive gas tax funding, the strategy would have added weight and eligible for Phase 3 funding.

Likely essential to this approach to the strategy's implementation would be the existence of a regional Valley entity, likely a not-for-profit society, taking responsibility for the scanning, monitoring and assessment part of strategy implementation (see above), and also promote the strategy's implementation. Further, this organization may take on the role of strategic coordination of the strategy's implementation. SVPS may wish to take on this role.

Some local and regional jurisdictions in BC (e.g. Grand Forks, Castlegar, Rossland, New Denver, Nelson, RDEK, RDCK) have or are formulating ICS Plans. Where complete they have been formally adopted as plans to be used for guiding other more specific plans, such as OCPs, economic development action plans and affordable housing plans. The use of the SS Strategy as an ICS Plan may take little or no modification.

- 2.2 The strategy is formally enacted by local governments as Regional Context Statement (RCS), that would function similar to Regional Growth Strategy (RGS). There seems to be provision for such as mechanism under *The Local Government Act*. Kamloops, Pit Meadows and Sidney have adopted RGS. There may be no formal mechanism available to the participating local governments to ensure adherence to (or even adoption of) the RCS by the other members once a Statement has been crafted. This situation may also be the case for the approach outlined in 2.1 above.

It is suggested that the strategic nature and scope of the SS strategy would not fit well within an OCP, but rather needs to be situated to guide the OCP (as well as other plans and decisions being made by a local government). This is one of the arguments made by local governments for ICS Plans. However, it is also suggested that a considerable strength of the SS Strategy is that it is a strategy, not a plan, and so can function with greater similarity to Growth Management Strategies.

While uncertain at this stage of inquiry, it is suggested that similar to approach 2.1 above, this one would benefit from a separate not-for-profit regional Valley organization dedicated to promoting the strategy's implementation. Its comparative role under these two approaches needs further analysis.

- 2.3 A third approach is where the primary responsibility for strategy implementation is taken on by a not-for-profit society. Its *modus operandi* would be promotion and persuasion. It may or may not have legal regional and local governmental recognition, but their “blessing” and support. In addition, it would undertake the important tasks of the surveillance and assessment (see sections 1.2 and 1.3 above), as well as related analyses that seem needed through time. Three regional non-profits that function similarly are the *Greater Valley Center* (Sacramento, CA), the *Sierra Business Council* (Truckee, CA), and the *Charture Institute* (Jackson Hole, WY). The Institute’s four-year old “Sustaining Jackson Hole” program focuses on sustaining the environment, economy and rural ambience of Teton Mountains region, principally through voluntary non-governmental community participation. Financially it relies mainly on donations to its “1% For the Tetons” fund, with this amount coming from annual gross sales of private entities.

In using this mechanism in particular, there may be possibilities for establishing a collaborative relationship with a university research institute or centre focused on sustainability and regional development. Such a joint approach could include a university “satellite facility” in the Valley that would in advance a number of the strategic means.

PART 2: SUPPORT DOCUMENT

Strategy for a Sustainable Similkameen Valley

Support Document: A

***Alternative Future Scenarios:
Strategy for a
Sustainable Similkameen Valley***

**Prepared for:
Similkameen Valley Planning Society**

20 January 2010

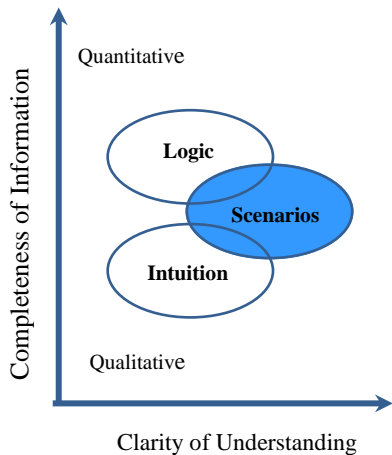


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Alternative Future Scenarios

About multiple future scenarios

Fig. 1: Scenarios Link Logic and Intuition



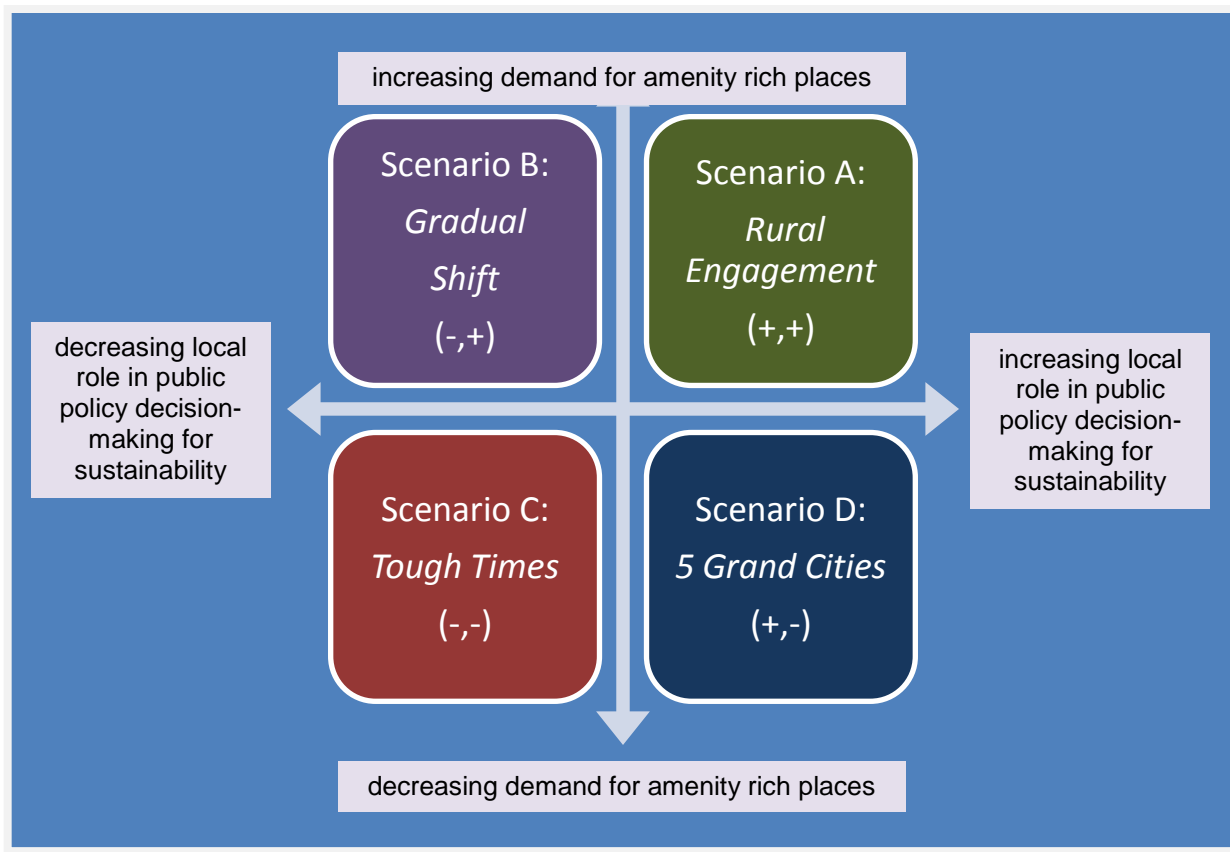
Multiple or alternative future scenarios are coherent narratives of alternative plausible futures, based on complex, interacting socio-cultural, political-economic, environmental and technological factors and forces that constitute the external, strategic environment of an enquiry or entity being planned for.

Scenarios are used as a tool to deepen our understanding of complex issues. Some issues are well understood and can be represented by quantitative models. But more often than not, especially in the public realm, data are too limited or of poor quality, unquantifiable or there are just too many unknowns. In this situation, as the influential 20th c. social scientist *Herbert Simon* said, both intuition and logic must be used. Scenarios can be viewed as a tool to bring together logic and intuition (Fig. 1).

Guide to the Similkameen Valley's 4 alternative future scenarios

1. The alternative future scenarios for the *Sustainable Similkameen* mission are not “*what if*” scenarios. They were developed through a process the project Panel began by crafting an appropriate *mission*, then identifying key opportunities and threats (*25 key decision factors*) that will likely impact achieving the mission. They were then clustered and coalesced into the likely main forces out there in the world (*societal driving forces*) likely to drive the unfolding futures of the mission. For the mission of this project they are: 1) decreasing local role in public policy decision-making for sustainability; and 2) increasing demand for places rich in natural and socio-cultural amenities. Subsequently, the *societal driving forces* were made neutral, or non-directional, and positioned in an axial relationship called *scenario logics*. The number of scenarios that will be developed depends on the number of *scenario logics* generated. In our case, 2 scenario logics generated 4 scenarios (see Figure 2).

Fig. 2: Scenario Logics for Sustainable Similkameen



Scenarios	Local role in public policy decision-making for sustainability	Demand for places rich in natural and socio-cultural amenities
A: Rural Engagement	increasing	increasing
B: Gradual Shift	decreasing	increasing
C: Tough Times	decreasing	decreasing
D: 5 Grand Cities	increasing	decreasing

The characteristics of the scenarios (what happens in each scenario) are based on the outcome of combining the two *scenario logics* for *Sustainable Similkameen's* specific mission. We went back to the *key decision factors* the Panel identified and used them to play dominant roles in each scenario. Although some factors are not discussed in all scenarios, we used a common set in all four: political-economic conditions, societal

values and behaviour, climate change and human action, energy sources, amenity migration, citizen's role to governance, First Nations' self-determination. There are two reasons for doing this: 1) for comparing the scenarios; and 2) for later monitoring the scenarios to see if the chosen most likely one continues to unfold or an alternative one is emerging. This method should result to alternative future scenarios that are distinct from each other, internally consistent and plausible (not beyond the imagination of decision-makers that a scenario has a chance to unfold). Please review the draft scenarios for distinctiveness, consistency and plausibility.

2. All the scenarios have two levels: global and national contexts; and provincial and local contexts. Why do we need the global context? Our world has become more and more integrated, so that especially key global occurrences will probably affect Canada, BC and then Similkameen Valley's sustainability — your mission. Although we cannot control what happens globally, we need to identify as early as possible and understand the global opportunities and threats to our mission so that we can develop a practical, implementable, and resilient strategy for sustainability of the Similkameen Valley (the Valley).
3. Little is said about the Similkameen Valley specifically in the scenarios, because it is the entity or subject the mission was formulated for, and what happens in the Valley is not part of the external scenarios. Conditions inside the Valley of particular importance for achieving the mission are being separately analyzed and will be brought together with the most likely scenario of the world outside the Valley later (in the SWOT Analysis). The scenarios have three approximate time periods: 2011-2015, 2016-2025, and 2026-2040. Information is more detailed in the first period and becomes more vague as we move further into the future. This is typical since our ability to picture the future in detail diminishes the further away we are from the present.
4. Fig. 3 below sets-out the key characteristics of each of the four scenario. In addition each scenario narrative begins with a summary of its main characteristics and events.

Fig. 3: How Will the World Likely Impact the Similkameen Valley (2011-2040) ?

SCENARIOS KEY CHARACTERISTICS	A: Rural Engagement	B: Slow Shift	C: Tough Times	D: 5 Grand Cities
In-migration (mainly for natural environment & rural lifestyle)	HIGH	MODERATE	VERY LOW	LOW high migration to urban centres
Local role in governance federal & BC (for supporting sustainability)	HIGH decentralized governance	LOW centralized governance	LOW centralized governance	HIGH (Urban) LOW (Rural) decentralized urban governance
Shift in societal values (for supporting sustainability)	HIGH resource conservers predominate	LOW & SLOW mixed	VERY LOW resource consumers predominate	MODERATE mixed
Economic development (with rural/urban distribution of benefits)	MODERATE high rural/urban equality	LOW & SLOW moderate rural/urban equality	VERY LOW favours cities	HIGH & LOW high urban, low rural
First Nations self-determination	HIGH	LOW to MODERATE	LOW	MODERATE
Climate change action (collaborative action & shift to alternative energy) • Global warming • Interior BC temperature increase (1900-2040)	HIGH <i>MODERATE</i> + 2.0 ^o C	LOW to MODERATE <i>MEDIUM</i> + 2.4 ^o C	LOW <i>HIGH</i> +3.5 ^o C	MODERATE to HIGH <i>MEDIUM</i> +2.5 ^o C

Scenario A: “Rural Engagement” (2011-2040)

Key Characteristics of the Scenario

- **High** rural in-amenity migration for quality of natural environment and community lifestyle (*both 2nd home and primary residence amenity migrants*).
- **High** local citizen’s participation in public decision-making (*federal, BC and local government*).
- **High** shift in societal values & behaviour that promote sustainability (change to consumption and more conservation).
- **Moderate** economic development (*accompanied by high rural/urban equality in distribution of benefits: health, education, transportation services etc.*).
- **High** First Nation’s self-determination.
- **High** collaborative action addressing climate change and shift to alternative energy sources (*moderate global warming: interior BC +2.0 °C in by 2040*).

Key Events in the Scenario

- Signing of international agreement to cut world’s GHG emissions: 2011, with Canada joining 2018.
- BC implements three important conservation treaties : 2020-2024
- Middle East Peace: 2025
- 2030 UN 50% reduction in global GHG emissions target reached: 2037

Scenario A Narrative

Scenario Logics: 1) increasing local role in public policy decision-making for sustainability; and
2) increasing demand for places rich in natural and socio-cultural amenities

Global and National Contexts

2011-2015

The December 9, 2011 *Globe and Mail* headlines read, “*Finally, A Binding Treaty to Cut 40% GHG by 2020, A Victory for All*”. The presidents of China and the USA, the World’s two most green house gas (GHG) emitting nations, signed the 2011 Sidney Climate Change Accord that set real targets for all developed nations (G7) to cut their GHG emissions 40% below the current levels by 2020 and all developing countries a 25% cut by 2020. Included in the binding treaty, the developing countries (G77) would receive for 10 years 1.5% of the wealthy nations’ GDP to fund climate change adaptation and mitigation programmes. Only Russia and Canada did not sign the treaty.

At home, many Canadians, particularly British Columbians were dismayed by their

Conservative Prime Minister's almost unilateral decision. Since 2007, British Columbia led the nation and North America in climate change policy and moderate follow-through. Many people believed that the US President's decision to enter a full binding treaty, unpopular with much of the US Public, was based on Canada's continued development of tar sands with more pipe line capacity to the USA. If true, then the Prime Minister's decision not to sign the treaty made sense to him, as Canada could not likely achieve a 40% reduction in GHG emissions if Alberta continued to increase its oil production to satisfy the US fossil fuel demand. The needs of the future generations still seemed at stake and many Canadians were dissatisfied with their government's role. In 2012, a *no confidence* vote passed, and in the following election the Green Party, led by the popular and charismatic Elizabeth May, won 7% of the seats. Although Stephen Harper remained head of his party, the majority passed to a Liberal/Green coalition.

The global economy continued weak through this period with big swings in its financial markets. This was mainly due to the continuing fear of the unknown results of the huge debt governments had taken on in 2008-2009 and continued escalation in energy prices. In 2012 Canada, who seemed earlier to be doing better, clearly showed similar signs. And for the period the global average temperature had increased 0.5 °C.

2016 - 2025

By 2018 a Liberal Prime Minister of Canada signed the Sidney Climate Change Accord. It was his first and probably most significant act for implementing *Sustainable Canada*; his Party's 2015 campaign platform. With the support of the Green Party the new PM moved forward with changes in federal policies centered on green industry and employment. The economic picture improved modestly in this period, but it was still accompanied by considerable fear of the uncertain outcome of the economic shift, maintained especially by TV's talking heads, and through their blogs and twitters. This PM believed that *sustainability* could only be achieved through considerably wider public and real local involvement in governmental decision-making. Three most important changes for public involvement were the implementation of Chapters 25 through 27 of the UN *Earth Summit* Agenda 21 of 1992:

- Chapter 25 – *Children and Youth in Sustainable Development*
- Chapter 26 – *Recognizing and Strengthening the Role of Indigenous People and Their Communities*; and
- Chapter 27 – *Strengthening the Role of Non-Governmental Organizations: Partners for Sustainable Development*.

Due to these positive changes in federal policies, from 2020, youth delegates regularly addressed Parliament. In addition, the *First Nations Governance Act*, which was first introduced in 2002 and died in 2003, became law in 2022. Different from the 2002 proposed Act, the new *First Nations Governance Law* gave them genuine decision-making power over their own internal affairs: governance and resources, and institutions that fit aboriginal customs and traditions. These could not have been achieved without significant, local public involvement and support. This local emphasis was also being followed through on, with some of its historical, and often criticized time consuming nature being reduced through a federal programme of blanket distribution and low cost access to interactive, electronic communications. Particular emphasis

was placed on rural areas, and was accompanied by free training for especially the elderly and youth.

Out of Afghanistan, Canada had returned to its historical mediator's role and assisted in brokering a fragile but manageable Middle East peace, including the establishment of a Palestinian state and a nuclear agreement with Iran. This significantly aided shifting global attention and resources to climate change and renewable energy. The 2020 40% and 25% drops in global GHG were met in 2023. This entailed a promising shift to alternative energy sources. But due to triggering of permafrost melt in the earlier period, global temperatures continued to increase by 0.5⁰ C for this period.

2026-2040

With some significant set-backs along the way in using new green technologies and working through associated local collaboration, during this period the world experienced a general modest increase in economic activity and employment. There was of course some frustration in the more developed nations as part of their earned income was allocated to poorer countries and to poorer rural areas within their own nations. Although the shift to a green economy was basic for sustainability, a more primary societal value shift was occurring: from conspicuous consumption to resource-conserving behaviour; from citizen participation to citizen collaboration in governance; from ecological exploitation to ecological sustenance. These changes also marked the end of most long distance tourism and especially international second home ownership. Permanent amenity migration continued strongly, but with considerably reduced travel by these migrants. Globally, and in Canada, the change to a green economy accompanied by its modest but expanding activity reinforced this reduced mobility.

In 2037 the UN IPCC 2030 50% reduction in GHG emissions target was achieved, and the 2050 target of 80% reduction seemed possible. Most scientists thought this would hold global warming stabilized just below the plus 2°C target.

Provincial and Local Contexts:

2011-2015

BC had led the nation in sustainability policy going into this period: *BC Climate Action Charter* (carbon neutral by 2012), *Gas Reduction Targets Act* (reducing GHG emissions by at least 33% by 2020), and *Green Communities Act*, were fine examples of regional climate change policies, all developed with public participation and active engagement. However, the 2008 BC Gov't *Living Water Smart Plan* that targeted improvement in water efficiency by 33% in 2020 was still not well received specially in rural areas. Firstly, too much responsibility for building of green infrastructure was passed on to local governments and First Nations without sufficient funding to implement its programs and projects, and was especially burdensome for rural areas. In addition, this plan continued the Gov't's "do little" approach to environmental effects of the independent hydro-electric dams proposed across the province (many of which were in First Nations unsettled land claims areas). For example the Gov't continued to push ahead with multi-million dollar projects, including a cross border treaty with the USA for the Shanker's 240-ft

high dam on Similkameen River just across the US border and the Butte Inlet and Glacier-Howser IPPs, saying the resulting income would help cover the severe shortfall in health, education and generally infrastructure budgets. Widespread and general participation in non-violent protests resulted from 2013, led by newly regionally coordinated non-governmental organizations (community development, environmental, First Nations, youth and elderly). There was civil disobedience and some people were arrested.

2016-2025

BC's civil condition reflected the shifting national mood toward a desire for greater sustainability with greater local involvement in the related difficult decision-making. But the continuing provincial debt and accumulated debt taken on to combat the 2008 recession, along with expected greater cut backs in health and education programmes, focused a frustrated electorate on electing midway through this period an NDP/Green/Conservative coalition. As in northern Europe before, the stigma associated with party coalitions had waned.

The first thing the new BC Gov't did was to reverse Bill 30, giving to local government the right to stop energy projects through giving them review powers. It also stopped building hydro-electric dams while the cumulative local and regional impacts were carefully studied (like the 2004 Okanagan climate change and water management analysis). The McIntyre Dam located downstream of Vaseux Lake, near Oliver was also removed in 2020 to benefit the Chinook Salmon Okanagan population that were designated an Endangered Species. More generally, BC policies shifted to a fairer distribution of the limited public funds available to rural places and a more serious focus on low carbon technology. Included was the full implementation of the:

- Pacific Salmon Treaty
- Boundary Waters Treaty
- Native American Water and Fisheries Rights

In 2024, based on the First Nation's Governance Act, the Okanagan Nation Alliance (ONA) won its case against a large logging company for trespassing, illegal logging, and interference to Aboriginal Rights. ONA was awarded 20 million dollars which was used for Band members' higher education, improving water and waste water infrastructure and health services. More generally the BC government successfully lobbied Ottawa to start shifting the actual costs of environmental conservation on reservation lands from First Nations to the federal and BC governments.

2026-2040

With the considerable increase of local community direct participation in political decision-making, at the sub-provincial regional and the provincial levels, early in this period a waning of party politics became apparent, as a more fluid and rapid coalescing around opportunities and issues by especially local community volunteer organizations emerged. BC society became even more focused on how to contribute to global climate change mitigation while having a reasonably comfortable life, but one more ensuring sustainability of the ecological systems all life was dependent on. The operational base was further shifting to conserving from consuming, while supporting oneself and community by creating greener jobs.

Steady-state not growing economies became the objective. Generally, there was considerable economic and socio-cultural experimentation in how to pull this off, and not without failures. Nearly half of the BC workforce had left the congested highways of rush hour traffic and developed skill to telecommute from home. For those workers who still traveled to work, mass transit had become the preferred or accepted mode; light rail in denser urban areas and hydrogen fuel cell buses connected more rural communities with their service and business nodes.

BC's changing climate and still comparative richness of natural and socio-cultural amenities continued to attract in-migrants from both Canada and elsewhere. With about a 2°C temperature increase in the BC interior, the north now offered a more benign climate, and warmer southern BC also continued to attract people, especially from coastal and hotter areas. Both had relative water security. The newcomers were mainly of two types: those seeking the higher quality natural amenities and a more rural life style, and the growing numbers of "climate refugees". While the BC interior had some climate change problems, they remained relatively manageable, and advances were being made with crop adaptation. Also, with the seemingly stabilized temperature it was a comparatively rather attractive place. Through much improved local community-based governance conserving behaviour was publically acknowledged and rewarded. BC public policy also supported youth in-migration specifically with assistance with ear marked rural employment opportunities. These changes were reflected in an agreement on the new SOLS National Park Reserve, in which both management and operations were jointly undertaken by the Syilx communities, other local residents, First Nations and Parks Canada.

The Chosen Most Likely Scenario

Crafting a viable strategy for dealing with the mission's external environment usually demands the selection of one scenario that is considered the most likely to emerge. On 9 December 2009 the four scenarios were presented to the Similkameen Valley Public and Scenario B, "*Extended Drift*" (now called, "*Gradual Shift*"), was chosen as the one most likely to unfold over approximately the 2011-2040 period. At this time it seems to be the probable global environment for which a strategy must be crafted for the Similkameen Valley's sustainability (see the project's mission for the definition of "sustainability" being used).

Scenario B: "*Gradual Shift*" (2011-2040)

Key Characteristics of the Scenario

- **Moderate** rural in-migration for quality of natural environment and rural lifestyle (*fewer 2nd home than primary residence amenity migrants*).
- **Low** local citizen's participation in public decision-making.
- **Low** and **slow** shift in societal values and behaviour that promote sustainability.
- **Low** and **slow** economic development (accompanied by moderate equality in rural/urban distribution of benefits).
- **Low to moderate** First Nation's self-determination.

- **Low to moderate** collaborative action addressing climate change and shift to alternative energy sources (*medium global warming: interior BC + 2.4 °C in 2040*).

Key Events in the Scenario

- Building of Similkameen Falls (Canyon) and Site C dams: 2014 & 2015
- Canadian “foreign resident lifestyle” visa: 2015
- Strong China/Japan/Russia trading and security union responsible for Middle East peace: 2020 +
- Canadian & BC housing market crash: 2022
- Signing of accord to moderately cut world GHG emissions: 2025
- Major improvement of Hope-Princeton Highway: 2030.

Scenario B Narrative

Scenario Logics: 1) decreasing local role in public policy decision-making for sustainability; and
2) increasing demand for places rich in natural and socio-cultural amenities.

Global and Canadian Contexts

2011-2015

The global economy during this period remained almost flat, but on the other hand another financial disaster did not occur. Trade slightly improved, with small demand for automobiles, natural resource and food products accompanied by cut-throat pricing by the poorest producers. Obama was mired in internal Democratic Party politics, and barely managed to pull-off a 2nd term in 2012. Immediately after re-election he pulled out of Afghanistan, following NATO’s judgement (led by Germany) that the Afghan police and army, along with regional Asian support (China, Pakistan and India), were prepared to take over managing the situation. Canada had honoured its 2011 commitment, and back home it continued to be led by weak, minority Gov’ts, with Conservative followed by Liberal, then a coalition of a little different colour, and so on. It was a lack-lustre and frustrating period for most Canadians.

Global climate change continued with an increase in greenhouse gas (GHG) emissions, mainly causing to rise in the average global temperature of 1.3°C by 2015 (from the zero base of 1900). China and India in particular increased their GHG emissions, while the USA and the EU marginally reduced theirs. Canada performed slightly worse with an average temperature increase a little higher, mostly due to increased production and export of tar sands oil and methane release from the warming tundra. Globally there was a limited and slow shift from oil to hydro, wind, solar and 1st generation bio-mass renewable energy, along with some nuclear power development. Russia, India and China had the funds and greater social control to add nuclear to their mix, with some of the technology purchased from France, USA and Canada; who were grateful for the income. Global population continued to its increase accompanied by increasing economic migrants, mainly illegal, with Canada becoming a greater target.

2016-2025

There were two significant up-ticks in the global economy in this period of 3 and 4 months each, but uncertainty continued high, accompanied by only slight improvement of in the wealthier nations economies, including Canada's. The economies of the new world economic powers (India, Brazil, China, and Russia) performed a little better. The USA's image slid with further weakening of its dollar, paralleled in 2018 by the emergence of the *Eurasia Union*, a strong China/Japan/Russia trading and security bloc. This development swiftly followed with the *Union* negotiating a nuclear weapons free Iran after it destroyed its principal nuclear plant. Then the *Union* successfully negotiated a Palestinian State, and by the end of the period the Middle East was at relative peace.

Generally in response to increasing frustrating regional disagreements within countries and continuing lack-lustre economies, national and regional governments around the world were shifting to greater centralization in decision-making, including policy and action for environmental and economic sustainability. Canada followed suit. The primary rationale was more central control would produce more efficient and effective results both for national and regional governments, such as BC's. The seeming resolution of the above two long standing Middle East issues by more centralized political-economies, along with their growing economic performance, seemed to influence this shift.

Despite this general centralizing force, some headway was made by well organized First Nations pressure on the Canadian Gov't for self-determination. Importantly, the smaller budgets of Indian & Northern Affairs, Environment Canada and Parks Canada moved them to trade-offs with increased control over land stewardship and use by First Nations. This played-out best for the latter communities in western Canada.

The global climate continued its increase in temperature accompanied by more erratic and violent storms and coastal inundation. In 2022 a binding climate change accord with moderate GHG emissions targets was signed in Moscow, led by the *Eurasia Union*, USA, and a new world political-economic force, the trading bloc *Southern Hemisphere Alliance* (Argentina, Brazil, Bolivia, Chile, Peru and Venezuela). But at the same time climate refugees had joined amenity-seeking migrants pressuring particularly Russia, Canada and the Nordic nations. In the USA, a warming Alaska's popularity replaced the "sunshine states", with in-migration especially the drought stricken southwest (including much of California).

2026- 2040

Declining discretionary wealth became more apparent in this period, including for Canada, the USA and EU, and with this some reduction in migration for natural and socio-cultural amenities, especially a drop in 2nd home demand. But the decline was also due to continuing degradation of the natural environment, so that many rural places had lost their attractiveness. By mid-period wealthier amenity-seekers were being replaced by a 1970s migration type; people with modest or no capital wanting to leave large cities, generally people with a strong land conservation ethic. It was most evident in Canada, USA and Western Europe. This movement grew during the rest of the period, but reached only about half the magnitudes of

the amenity-led rural in-migration of the 1990s and 2000s. First Nations benefited some from the accompanying reduced pressure on rural land development, along with a continuation of the trend in their relations with the Canadian government of the previous period. Climate refugees also increased through most of this period, and with them global immigration issues. It needed a world-wide agreement, one that was more seriously discussed but not concluded in this time period.

While weather continued to be erratic and highly unpredictable, global warming slowed about 2035 and then seemed to plateau, with an average global temperature increase of 2.4°C (over the 1900 base); slightly lower for Canada. This seemed the result of a mix of economics and ethics -- the combination of low, slow economic development, central and regional governments' tight conservation of traditional fuels, and of equal or greater importance, gradual and increasingly greater household and industrial conservation practises. Included was slow but increasing use of renewable energy. From mid-period, with some commercialization of 2nd generation cellulosic-based bio-fuels, there was increasing growth in market share of these alternative energy sources. This shift continued to face the political muscle of the carbon industry and generally quite limited, local political power. This condition prevailed in spite having past "peak oil", including new Arctic sources the polar melt brought to market.

Provincial & Regional Contexts

2011-2015

In BC the Liberals remain the Gov't with a bare majority for two elections. The province's economy and governance behaviour mirrored the nation's and the developed world beyond. The 2010 Olympic debt was modest, and through unpopular tax increases budget deficits began to be reduced. But BC's image as a natural resource exporter with magnificent landscapes was of limited help in a global financial context of tight and expensive money. Yet, demand for electric power was still slowly rising in especially the USA and Canada, so BC's Gov't, with some federal support, focused particularly on new hydro-power production. This argument, along with potential new recreation income and an optimistic copper outlook got the Similkameen Falls Dam and Site C in northern BC built in 2014 and 2015. There was also a limited market for cheap forest and mineral products. In addition, around the world, and again south of the 49th Parallel, there was still considerable personal, old wealth to spend, such as on speciality wood products and 2nd homes.

The BC Gov't, in collaboration with a hungry private sector, became shrewder about identifying such niches. This included aggressively pursuing the smaller yet continuing demand for nature and rural tourism. But more importantly, considerable effort was put into the still increasing demand of the wealthier to migrate to places with comparatively higher quality natural amenities and distinctive rural socio-cultural character – amenity migration. Gov't ramped up its earlier focus on resort development, and extending it more generally to promote this migration. Following the lead of some developing countries, BC and Alberta got the Federal Gov't to bring in a new "foreign resident lifestyle" visa for amenity investors and migrants in 2015. To implement this strategic thrust the BC Gov't increased its control over local development decision-making.

But implementing the strategy created something of a dilemma for the Gov't — how to exploit the natural environment through logging, mining and damming while sustaining it for amenity migration and tourism? The result was confusion in policy implementation through this period, along with exploitation of the natural environment, particularly where it was comparatively less physically attractive. Communities in the latter locations, including many First Nations, got the short end of two sticks – little amenity migration and tourism and a concentration of natural resources extraction. This was accompanied by very little help for those areas of the province experiencing greater effects of climate change. For example the BC southern interior's average temperature had increased to slightly above the national average.

2016-2025

Key characteristics of the provincial economy, environmental and energy the previous period continued through this one. But in 2022 there was an unfortunate, but for some pundits an inevitable surprise — the collapse of the Canadian housing market. Simply, led by CHMC, too much credit had been extended for too little equity for too many years, and the lack-lustre economy, along with wealthy “boomers” beginning to die off, had finally called a halt. The big city markets were hit first followed by a strong ripple through smaller centres, especially those in BC and Alberta most dependent on 2nd home development.

This was followed in BC by shift to a populist, greener coalition Gov't with a more decentralized, belt-tightening self-sufficiency socio-economic and governance model, including attempting to increase public decision-making at local levels. The coalition was functioning in a very difficult economic environment, with its bureaucracy resistant to change; especially averse to the slimming of its centralized authority.

2026-2040

The coalition's moderate success was extended into a second term, but came to a halt with a reversal of policy led by a Gov't being elected that was headed by new party, born from a union of Liberals and Conservatives, who convinced the electorate things could improve much faster with the earlier centralized governance system. A well exploited sexual indiscretion of the coalition's Premier lent critical weight to this argument.

By late in this period lower real property prices were again stimulating a moderate increase in amenity migration to especially places with higher quality natural environment, particularly those also having comparative water and food security. Among them were the continuing land ethic type, both leaving metropolitan areas. They were joined by climate refugees. This movement stimulated higher construction activity.

In 2040 the BC interior average temperature was up 2.4°C over the 1900 baseline. All seasons were generally warmer, with less and more unpredictable precipitation and storms, lighter snow pack and earlier run-off. Water was generally scarcer, with crop and forest management needing adaptation skills. The southern interior of BC was struggling with appropriate water management for multiple, often competing uses, including the BC's government's high priority hydro-power export policy, joined now by a marked increase in

demand for water *per se* in the US West. The Similkameen Falls dam was an asset, particularly in the context of constrained public expenditures and quite centralized decision-making that was characteristic of the past three decades. Due especially to the fiscal constraint no decision had been made on many significant public projects, including a National Park in the south Okanagan-Similkameen region, which was also embroiled in claims on crown land and heightened water rights issues. The politically much less complex Hope-Princeton Highway had been improved.

Following the global and BC pattern, change in social values and behaviour had generally been slow and limited, reflecting reluctance to adapt to climate change and economic limits. However, in-migrants seeking places comparatively rich in natural and socio-cultural amenities, especially the land ethic migrants, had strongly influenced life in some interior communities. Looking back to 2009, it seemed part of the reason for the slowing of global climate change was likely due to the moderate human economic activity that prevailed, and likely more because of the gradual increase in peoples conservation behaviour. Regarding the comparatively moderate impacts of the climate change on the province and more locally (with the exception of some coastal settlements), luck had also played a significant role – being located in Earth’s northern latitudes.

Scenario C: “Tough Times” (2011-2040)

Key Characteristics of the Scenario

- **Very low** rural in-Amenity migration (*with few, increasing back- -to-the-land migrants*).
- **Low** local citizen’s participation in public decision-making (*with highly centralized governance*).
- **Very low** shift in societal values and behaviour to support sustainability.
- **Very low** economic development (distribution of benefits favouring cities).
- **Low** First Nation’s self-determination.
- **Low** collaboration on global climate change and shift to alternative energy sources (high global warming: *interior BC + 3.5 C in 2040*).

Key Events in the Scenario

- 2nd global economy crash and housing markets collapse: 2012
- USA and Russia oil & gas drilling in Arctic territory claimed by Canada: 2016+
- Building of Shanker’s Dam with flooding of agricultural land in Lower Similkameen Valley: 2022
- BC sells Crown land for development: 2031 +

Scenario C Narrative

Scenario Logics: 1) decreasing local role in public policy decision-making for sustainability; and
2) decreasing demand for places rich in natural and socio-cultural

amenities.

Global and National Contexts

2011-2015

In 2012 there was a 2nd global economic collapse, due to little real change to more equitable working of the financial sector, especially in the USA. “Regulation reform” had many loop holes, and the global rescue packages of 2008-2009 had merely transferred private liabilities to governments. In 2011 public debt exploded to 350% of GDP in US, 130% in the European Union (EU), and 270% in Japan. Canada seemed the envy of all wealthy nations, with public debt only 40% of its GDP in 2011. However, per capita this public debt was actually closer to 85% of GDP. The seemingly global recovery from the recession in late 2009-early 2010 was superficial, as it was based on stimulus in a massively inflationary credit environment. The latter was also true in Canada. Hence, when the housing market collapsed for the second time in the US in 2012, the world followed suite and Canada did not escape. Over this period the collapse was exacerbated by the significant decrease in 2nd home, and more generally migration to rural places rich in amenities. This occurred principally because of decreasing discretionary income, tight credit, and high future financial uncertainty, especially for the middle classes – which continued to shrink.

Obama lost the 2012 US presidential election to the former Republican speaker of the House, Newt Gingrich of Georgia. Gingrich’s platform of protectionism, do little about climate change, deregulation of the financial industry, and allowing off-shore drilling seriously diluted worldwide efforts for global sustainability (including climate change and alternative energy), and particularly negatively impacted Canada’s tightly integrated economy. In 2013 the opposition party brought down the Canadian government on a vote of no confidence, and the Liberal Party, running on a platform *Don’t Buy America* won a narrow majority. During this five year period the Earth’s average temperature rose 1.4°C, mainly because of increased GHG emissions. Canada’s rose slightly more.

2016 – 2025

Trade wars, protectionism, and little collaboration on global climate change policy implementation dominated this scenario period. By 2020, the world’s atmospheric carbon dioxide concentration reached 440 parts per million (20% over the target of 350 ppm), and the average temperature rose another 1°C. For Canada, again this resulted in higher average temperature, especially in the Arctic, resulting in faster expansion of warmer ocean water that increased the rate of world wide rise of sea-level. The Alliance of Small Island States (AOSIS) protested to the United Nations on the non-implementation of their Climate Change Declaration of 2009.

The Canadian Govt’s hands seemed tied. The economy was still well integrated with that of the USA. In addition, Canada was not able to noticeably grow its high technology sector, but remained dependent on exporting natural resources: lumber, oil, gas and water, which, with the exception of water were heavily taxed by the USA. NAFTA had been no asset. Further, a more

predatory relationship toward Canada had developed since the re-election of Gingrich in 2016. The USA continued to manipulate US-Canadian border treaties and claims especially Canada's Arctic territorial claims. In 2020 the USA began its 2nd oil drilling in that area. From 2016 Russia had already been exploring for oil and gas on what it claimed was its continental shelf; territory Canada also claimed as its Eastern Arctic.

2026-2040

With almost four decades neglect of world climate change, the world's temperature increased 3.4°C by the end of this period, perhaps exceeding the "tipping point" of plus 2.5°C suggested for 2050. However, because it was not a binding treaty the most affected countries, such as developing ones exposed especially to drought and coastal and estuary inundation and small islands states, could do virtually nothing. There was little hope. After further philandering natural resources, especially fossil fuels domestically and in Canada, in 2032 the USA elected by a decent majority a Democrat president who promised to lead the world again in fighting climate change and energy reform, and repair its relations with allies, especially Canada. This however would have been quite difficult to achieve especially with a dollar that was significantly devaluated against all other major currencies and only half the global reserve currency of two decades earlier, a bankrupt social security, a 20-trillion dollar debt, along with the eroded confidence of most nations. While all shared a stagnant global economy, the US gross domestic product (GDP) had slipped lower than behind that of the EU and China.

By the middle of this period the global in-migration to rich rural amenity places was virtually non-existent. The middle class could afford neither 2nd homes nor relocation upon retirement (those still able to actually "retire"), the elite economic class mainly remained and recreated in their urban glass towers and immediate surroundings, and not out of the rural countryside, financially ignored in the urban centres of power. On the other hand, in this period one could discern in such rural places the beginnings of a seeming replay of the 1970s return-to-the-land "volunteer simplicity" in-migration. This time some they had the political-economic skill necessary to survive.

Provincial and Local Contexts:

2011-2015

The Liberal party maintained a small majority through this period. Most of BC's public programmes and projects that dealt with education, health, climate change and water infrastructure were grossly under funded. The province was \$ 3 billion in debt. The forestry sector industry was of little help, as it was unable to recover even when the housing market did extraordinarily well from 2009 before it burst in 2012. Before this the average price of a single-family detached house in the Greater Vancouver area was 1 million dollars. This was 60% higher than the national average and 40% higher than that of Toronto's; and incomes were lower than in Toronto. It was not surprising that BC had the highest number of foreclosures in the nation.

To top it off, the BC Ministry of Forest and Range spent 90% of its total budget for 2012 for wildfire suppression. Due to increasing impacts of climate change and wildland-urban

interface, wildfires became a major problem in BC. And because of shortage of funds, the province fast-tracked the EIA approvals of a number of controversial projects, despite massive public protests. Included were the Glacier-Howser project in the Kootenays, the Shell coalbed methane development project at Sacred Headwaters in northern BC and the Flathead River. Its promotion of resort-like developments proved hollow and by the end of this period with especially the marked down-turn in 2nd home ownership in amenity rich BC places – those still with green trees.

2016-2025

Three years into this period an increasingly popular centre-right Conservative Party resulted in a Conservative/ Liberal coalition Gov't, and in the following election the latter party disappeared and the former dwindled to a slim majority by 2025. The BC government focused on economic survival, which it claimed “demanded” the effectiveness of more centralization of public decision-making. *Sustainability* was *de facto* put on the back-burner, with relevant policy remaining on the books without funding. While the Federal government economic policies alienated Canada from USA, the BC government tried to work with Washington State. In 2016, Washington State revived the 240-ft Shankers dam project on the Similkameen River. The provincial government delegation to the International Joint Commission in Washington DC did not include regional representation, such as the Syilx communities. Many believed it was a done deal prior to the meetings.

Public protests were widespread in both rural and urban BC. The Okanagan Nation Alliance sued the provincial government to stall the project. Environmental organizations (local, national and international) picketed the IJC hearings. But all these efforts were to no avail. In 2022, the Shankers Dam flooded about 9,000 acres of prime riverine habitat, including substantial lower Similkameen agricultural land.

2026-2040

Beginning with a seemingly strong mandate Progressive Democratic Party (new party born of NDP, Green and Liberal members), found conditions too difficult for them to really influence in one term. Further frustrated the voting electorate then turned again to the promises of cost-efficient small government and low taxes. The period was characterized by a see-saw of partisan politics, with fluid coalitions forming, breaking and realigning.

By the end of this period in general BC's natural and socio-cultural amenities and biodiversity, particularly that of its interior valleys, had been significantly diminished due to unsustainable natural resources use and distant, poor and insensitive centralized decision-making. Some migration for greater amenity still continued, but it was limited to small number of wealthy Canadians and foreigners that purchased the most attractive Crown land that the BC Gov't began marketing in 2031 to raise its revenues. The temperature in the interior of the province was much warmer compared to three decades earlier, typically 3.5°C. Wildfires started early in the Spring and typically lasted until late Fall. Water supply was erratic, with sudden, violent storms, low snow packs and summer months problematic to critical.

Scenario D: “5 Grand Cities” (2011-2040)

Key Characteristics of the Scenario

- **Low** rural in-migration for quality natural environment and community rural lifestyle, with **high** migration to larger cities for high-tech employment and excellent urban amenities & services (*health, education, transportation entertainment, communications, green urban environment*).
- **High** local participation in public decision making by urban residents; **low** participation by rural residents.
- **Moderate** societal values and behaviour shift, with greater green technology-driven sustainability in key urban centres.
- **High** economic development in key urban centres and **low** in rural areas. **Moderate** First Nation’s self-determination.
- **High** global collaborative action to address climate change and shift to green technology for alternative energy (*medium global warming: interior BC + 2.5° C in 2040*).

Key Events in the Scenario

- Global Monetary Fund and World Environment Organization established to facilitate shift to green economy and moderate reduction of GHG: 2015 & 2016
- Rapid advancement in commercialization of biotechnology and nanotechnology with low environmental impact: 2016-2020
- Marketing of microcomputer chip to restore solar energy: 2025
- Major investments in upgrading of Cranbrook and Kelowna airports, US-Vancouver-Prince George rail links and tertiary education in Cranbrook and Prince George: 2016+

Scenario D Narrative

Scenario Logics: 1) increasing local role in public policy decision-making for sustainability; and
2) decreasing demand for places rich in natural and socio-cultural amenities.

Global and National Contexts

2011-2015

The world seems to finally learned an important lesson from the 2008 global financial collapse: we are all vulnerable to weaknesses in any part of the system. If one goes down, all do. So, with the USA, EU, Japan and Canada’s strong support a new global lender-of-last-resort system, the *Global Monetary Fund* (GMF) was established in 2012 setting clear global rules for

regulating, auditing, accounting and bankruptcy. A significant advantage of this new system was if there was a global crisis like that of 2008, no member nation would have to solve its problem alone. This resulted in considerable renewed confidence to invest and take risk with global economic growth. However, BIC (Brazil, India and China) the newest and largest world trade and security union, did not join GMF.

While there seemed to be a relative agreement among developed nations how to make the financial market more sustainable, in the next year the 4th United Nations Climate Change Conference on the Least Developed Nations, held in Fiji, produced no agreement. The developed nations as well as China and India found the targets proposed by Intergovernmental Panel on Climate Change (IPCC) too limiting. But pressure to do something about climate change was high. Severe droughts, extreme weather events, severe flooding, rise in sea level were problems the increasingly powerful BIC nations were experiencing with no effective agreement on global climate action.

In 2014, BIC announced they intend to release sulphur balloons into the stratosphere to increase the reflection of the sun and slow down global warming. The world was shocked. Yes, there was some scientific basis for this geo-engineering, however, long-term effects were highly uncertain. We knew that when Mt. Tambora erupted in 1815 there was a year without summer crops. The USA, EU and Canada swiftly called an emergency climate change summit in Beijing which resulted in a legally binding agreement to cut GHG emissions by 50% by 2030, by the G8, except Russia. In addition, they agreed to a 30% GHG target for BIC, mainly because in the emerging green technological race, the G8 countries stood a better chance of reaping the rewards, particularly with GMF member states. By the end of this period average global temperature had increased 1°C, with Canada slightly lower.

2016-2025

The 2015 Beijing Climate Change Accord (BCCA) led to the formation of the *World Environment Organization* (WEO) in 2016 which emerged from working groups of NGOs, national governments, private sector, and international organizations such as UNEP and FAO. It encouraged market mechanisms such as cap and trade to reach BCCA objectives and was an important market mechanism for driving out subsidies and increased reliance on rules-based systems that reduced fear about energy security. The effect was the critical reduction of coal in the energy mix, a main risk factor for global climate change.

The race to green economy, particularly by shifting to alternative energy, was led by the USA who dominated the world in biotechnology and nanotechnology research and development. Among these inventions were the successful commercialisation of 1) a new generation of highly-sought after vehicles with three times the fuel efficiency of late 1990 models in 2016; and 2) *bioplastics* (non-petroleum derivative plastics) used for manufacturing computers, cell phones, car parts, etc. in 2020. Although the rate of transition from fossil fuels to alternative energy seemed to have been faster than anticipated a decade earlier, the world still relied on hydrocarbon fuels, although renewables and nuclear power were gaining. Middle East oil producers kept the oil price low (US\$ 50/barrel), however due to the region's historical political instability, and the passing of "peak oil" the world's energy sourcing had shifted. One-half of USA's energy was

supplied by Canada, but a microcomputer chip that stores solar energy went market in 2025 foretelling the quick mothballing of Alberta's tar sands. In this period a restructuring, reasonably integrated global economy performed moderately well.

2026-2040

The USA was back. The forecast 2 decades earlier that China will replace USA as the world's economic superpower did not happen. Although its population was three times of the USA, which was supposedly a key factor for overtaking USA, China again was plagued by internal dissention; among its regions and at the centre. What most economic analysts did not consider was China's historical weakness in governing its vast area of many ethnicities, further stressed by democracy demands aided by high-tech communications. India was still satisfied to partner with the USA, and also received a 1st power defence umbrella. Not unlike Canada. What also helped the USA's return was the GMF's policies. What most people did not understand was this international financial regulator's policies shifted the function of the state from an earlier nation-state model, based on the welfare of its citizens, to a nation-state that only ensures a minimal social security safety net to those in real need, while maintaining a "level" economic playing field for its citizens. In short, the USA, like England under Margaret Thatcher, continued to believe economic fairness would, in the main, trickle down from the top. With modified climate change, global warming in 2040 had increased 2.5°C.

Provincial and Local Contexts

2011-2015

Comparatively BC had little GHG emissions to cut; there were few industries producing significant GHG emissions and the highly controversial proposed PertoBank coal-bed methane mining in Sacred Headwaters in 2010 was stalled due to well organized environmental and community-based organizations that protested around the province. But this also meant less potential for resource based revenue. On the other hand, BC had an image for "most liveable" cities. Vancouver, Victoria and Kelowna topped the lists of the world's knowledge sector workers. These cities already enjoyed the locational characteristics knowledge workers loved: access to superior outdoor recreation and landscape, good and improving climate, quality higher education and research, good health care and LEED-certified buildings, public transportation, restaurants, galleries, theatre and the like. Knowledge companies followed human resources — who located for amenities. Hence in 2012 the *5 Grand Cities Strategy* was born. This *Strategy* was a technology-driven, high private sector take on the greening of BC economy. It discouraged urban to rural migration by focusing on cities and making them more desirable places to live. The province targeted five cities: Vancouver, Victoria, Kelowna, Cranbrook and Prince George, and earmarked the *5 Grand* for major infrastructure investment to support a doubling or tripling of population with comfort, efficiency and beauty. The funding Phase 1 platform for the strategy came from Olympics revenues, gas tax funding, the Western Climate Initiatives cap and trade programme that started in 2012 and reduced public services and infrastructure for rural areas. In Phase 2 the take-off of the economy's greening would kick in. Non-governmental urban community organizations were brought in early and played a strong collaborative role in crafting this *Strategy*. They had the skills and determination. The three smaller urban centres especially

harnessed their knowledge sector and amenity developers, many of whom had experienced organizing for increased participation in public decision making elsewhere. These cities stole the march on the more rural BC communities, and maintained their lead when the Strategy was in place.

2016-2025

5 *Grand Cities* took advantage of “provincial nominee” immigration programme and further targeted scientists, medical doctors and businessmen mainly from India and China, but also the EU. BC universities focused more on funding developing countries’ best graduate students as they would bring longer term benefits by remaining in BC or occupy friendly influential political and economic roles on their return home. Close to the end of this period, the urban first strategy brought on the commercialization of algae-based fuel energy, excellent knowledge-sharing relations with California and Washington states, BC’s own promising knowledge sector, a national leader on cap and trade (on track for achieving its target GHG emissions reduction) – all basically tied to attractive, state of the art, liveable urban focus.

While BC’s cities, especially the 5 *Grand*, seemed to be on the road to *sustainability*, rural areas were not doing well. They continued to lose their small economic surplus and also their population, including seasonal ones. Part of this slide was due to shift from higher valuing of rural places’ natural and socio-cultural amenities to urban amenities and associated lifestyles. Second home ownership in rural areas had considerably decreased due to more and more people retiring to better managed, more attractive and high service cities, both medium-sized and metropolitan. Those still valuing highly natural amenities moved to or remained in the medium sized cities like Prince George, or visited resort communities such as Whistler and Golden, both then having amenities approaching those of large cities (restaurants, galleries, theatres, hospitals, etc). As in the earlier period, very little funding remained for rural areas. For example major improvement of the Hope–Princeton Highway and more generally the Crownsnest Highway were postponed again in favour of further upgrading the Cranbrook and Kelowna Airports and the Vancouver – Prince George rail link. Local rural organizations found little space at the public funding table. There were some economic opportunities for rural areas from forestry, especially after the American successful commercialization invented bio-plastics. However, the province preferred more standing trees due to profitable and less problematic cap and trade income. In addition, simplification of food export procedures to Alberta and the USA helped especially growers near the borders, particularly toward the end of this period with increased summer drought in the US south-west and California Central Valley. First Nations participated in this larger agro-trade. Further income opportunities for the Syilx people were increased from 2023 when a modest SOLS National Park Reserve was established that included their shared management.

2026-2040

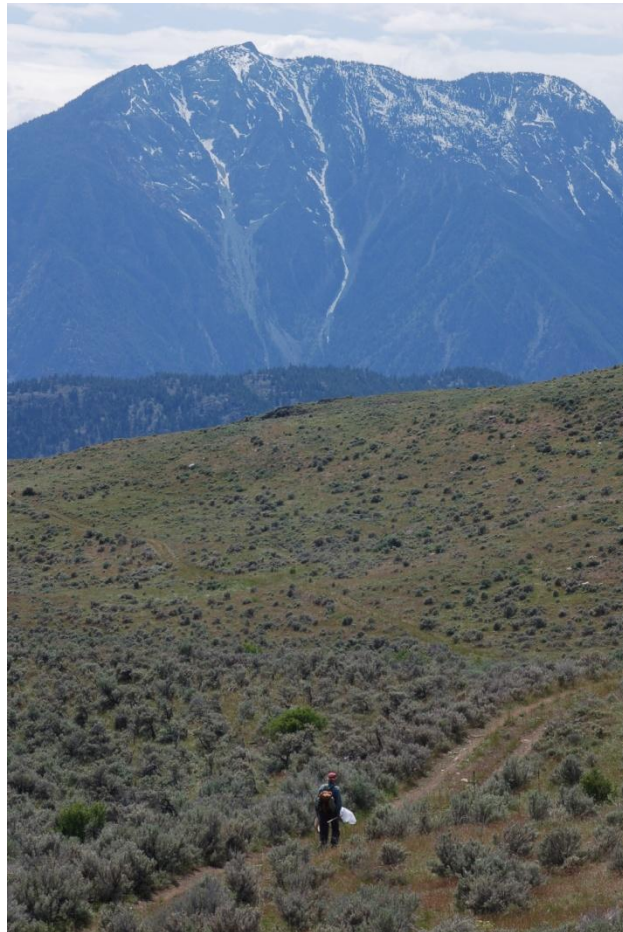
The further implementation of 5 *Grand Cities* was stalled due to a major scandal in the Liberal Party. In the elections of 2026, the Liberal Party which dominated the BC government for more than 2 decades lost the majority to a Conservative/Green/NDP coalition. This occurred through a heroic and determined effort of local rural organizations coming together with some

urban counterparts. The new Coalition tried to make policies more equitable between urban and rural areas. Some of the revenues from cap and trade programme were used for improving public rural transportation infrastructure. Some were also given to Community Forests and First Nations' to support their watershed and biodiversity protection programmes. But turning around public policies and programmes proved to be quite difficult, particularly with Coalition infighting. In addition, most local urban community organizations continued to support their own, bringing to bear their greater wealth, information and political-economic skill compared to their rural counterparts. So the Coalition's attempt at redistributing wealth to rural places improved the rural condition only marginally. After one term in office, it was defeated. With the support of strong urban community organizations and greening economic employees the Liberals were back and so continued implementing *5 Grand Cities*. And Phase 2 of the Victoria-controlled greening economy was kicking- in. On the other hand, the global consortium financed in 2035 to seriously explore the moon and Mars for metals and minerals might threaten BC's economy.

Support Document: B

Natural Environment and Biodiversity of the Similkameen Valley

(Sustainable Similkameen Project Internal Analysis Baseline Information)



**Prepared for the Similkameen Valley Planning Society, Sustainable Similkameen Project
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March 2010

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Preface:

The Sustainable Similkameen Project mission is to establish a strategy to achieve sustainability for the socio-cultural, economic and environmental aspects of the region, with a specifically stated objective to protect the Valley's water, land, air quality and **biodiversity**¹.

Ecologically, sustainability describes how biological systems remain diverse and productive over time, in human terms, it is the potential for long-term improvement and maintenance of well-being and quality of life within the **carrying capacity**² of those biological systems. The concepts are interdependent as biological systems depend on responsible human land use, and human well being depends on the well being of the natural world as the basis for our economies, our health and prosperity, and our collective cultural futures.

The Similkameen Valley is part of a very unique region of Canada, recognized provincially and nationally as a biodiversity hotspot for the richness and rarity of species and habitats. Situated in the rain shadow of the Coast and Cascade Mountains, the western part of the Similkameen has a cooler, moister climate from the dry south-eastern area. Each area supports specific ecosystems and associated species, some of which are iconic to the Southern Interior Region, many of which are sensitive to human disturbance, and a high proportion are designated by the Provincial and or Federal governments as being "at risk".

Alteration and the loss of ecosystems have occurred over history due to a variety of activities. The region has a long cultural history of livestock farming, commercial orchard and field crop development, and more recently the focus has been on vineyard/winery and rural ranchette or larger parcel home developments. Until recently, the Lower Similkameen had escaped much of the development pressure that the adjacent Okanagan Valley has experienced.

From an ecological perspective the Princeton, Hedley and Keremeos/Cawston areas are *different from one another, yet are connected by a common thread, the Similkameen River*.

Unlike the Okanagan River, the Similkameen has been impacted by few dykes with more set-back construction that allows the river to still meander and flow. Historic mapping in the Lower Similkameen region indicates that roughly 30% of the cottonwood-dogwood floodplain has been lost throughout that reach. The Similkameen River as a whole system continues to support many intact remaining natural attributes such as riparian deciduous forests, dense thickets, meadows and wetlands associated with its floodplain. The cottonwood forests on the valley floor are a notable feature of the landscape. Equally significant are the high mountains with deep dry valleys, the surrounding sensitive upland ecosystems of sagebrush grasslands, rugged slopes, old growth open Ponderosa Pine and Interior Douglas Fir forests.

This summary focuses primarily on the lower elevation areas of the Similkameen region "the study area", first outlining terrestrial or land based ecosystems, and secondly addressing aquatic

¹ Biodiversity is short for biological diversity – the variety of life in all its forms. It includes genes, species and ecosystems, and the processes that link them. Simply, often people think of this as "nature".

² Carrying Capacity is the maximum number of individuals that a given environment can support without detrimental effects.

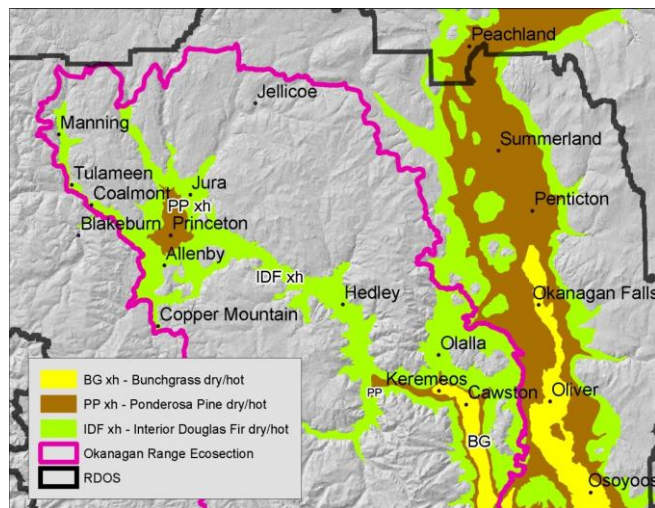
ecosystem values. This summary also includes information related to conservation tools, programs, partners and monitoring indicators as key elements for implementation of the nature conservation aspects of the Sustainable Similkameen Project.

Ecosystems³ of the Similkameen Valley

The Similkameen Valley is part of the **Southern Interior Ecoprovince**⁴, which has the greatest diversity of birds in the interior of British Columbia and the most breeding species of all the Ecoprovinces in BC; it holds 74% of all bird species known to occur and 70% of those species known to breed in the province.

Of the sixteen **biogeoclimatic**⁵ zones in the province, the low elevation areas of the Similkameen Valley are home to three of the four of most rare and significant zones identified for conservation concern in the province (Bunchgrass (BG), Ponderosa Pine (PP), and, Interior

Figure 1: Biogeoclimatic Zones of the Similkameen Valley



Douglas Fir (IDF). Further, low elevation grassland communities are the rarest land cover type in the province and are concentrated in these three biogeoclimatic zones.

Figure One shows where these zones are relative to named locations in the Similkameen. Note that the Bunchgrass zone is exclusively in the valley bottom from Keremeos southward. The Interior Douglas Fir (very dry hot) zone follows the major low elevation drainages including the Tulameen and the Similkameen rivers, and a

substantial proportion of the Ponderosa Pine zone falls in the area around the community of Princeton.

Trends in Ecosystem Loss in the Similkameen Area

Ecosystems provide important services to all living things, such as regulating climate, and the flow of water, including providing basic human needs and essentials for the human economy such as food, clean water and additional values related to recreational, spiritual and cultural

³ Ecosystems are a complex set of relationships among the living organisms in an area as well as its physical environment (non-living) functioning together as a unit. This includes plants, animals, people, microorganisms, water, rocks, soils and the local atmosphere.

⁴ Ecoprovince encompasses areas of uniform climate, geological history and physiography (i.e. mountain ranges, large valleys, plateaus).

⁵ The Biogeoclimatic Zone Classification system groups ecosystems. A biogeoclimatic zone is a geographical area with a relatively uniform macroclimate, characterized by a mosaic of vegetation, soils and, to a lesser extent, animal life reflecting that climate.

needs. Research shows that the environment of the Similkameen figures highly in the vitality and attractiveness of the region and that there is significant support for conserving these values.

Ecosystems also provide important habitat for many species both common, and those of conservation concern. Many species are dependent on the assortment of natural habitats both on the valley bottom and upslope, and must travel between and amongst habitat types at various elevations to fulfill their life requisites. Loss, degradation, interruptions or fragmentation of habitat as a result of development and intensive human activities on the landscape can adversely impact species needs and ultimately their survival.

There is not one seamless layer of detailed ecosystem mapping in the Similkameen area, however information garnered from a number of past projects and analyses can provide a picture of the status of biodiversity and loss of ecosystems:

Sensitive Ecosystem Inventory: What is at Risk? Many of the ecosystems in the Lower Similkameen and part of Rural Princeton have been studied and mapped in more detail as part of a larger project that includes the South Okanagan. Sensitive Ecosystem Inventory (SEI)

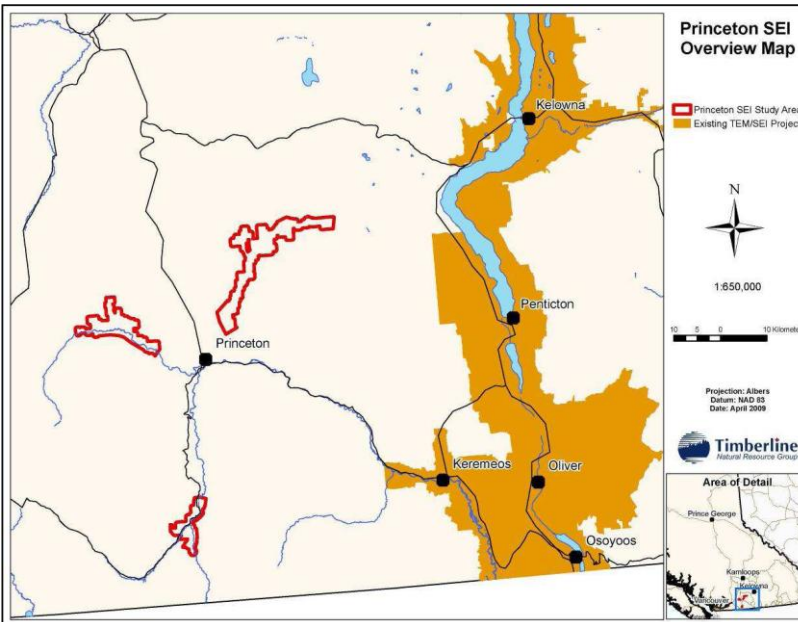


Figure Two: Areas of Similkameen covered by Sensitive Ecosystems Inventory

identifies and maps rare and/or fragile ecosystems that are relatively unmodified, ecologically fragile, have high values for wildlife and/or may be recognized as “at risk” in the provincial landscape. (Figure Two outlines the SEI study areas).

SEI is a flagging tool that provides scientific information and support to local governments and others working to maintain or enhance biodiversity. See **Appendix One** for a description of sensitive ecosystems.

Of the 241,269 hectare portion of the RDOS that was originally mapped in 2007 using SEI, 63.7% of the area is recognized as containing sensitive and other important ecosystems. For the East Gate, Otter Lake and Chain Lakes area (19,800 hectares) mapped using SEI in 2009, approximately 25% of the total area classified as containing sensitive ecosystems. The sensitive ecosystems hardest hit by human development in the South Okanagan Similkameen have been those associated with grasslands, low elevation forests, wetlands and riparian areas.

Ecosystems: How are they doing? An historic mapping assessment of South Okanagan and Lower Similkameen Study Area ecosystems outlines the historic extent of ecosystems starting with the year 1800, and observes changes to those ecosystems in 1938 and again in 2009. The Similkameen area has not had the same scale or intensity of losses to ecosystems as experienced in the South Okanagan (many South Okanagan ecosystem losses rates between 3-91%); however, there have been some impacts to natural areas identified. In the Lower Similkameen, the historic mapping analysis identifies sensitive ecosystems that have experienced significant losses: Sagebrush-needle-and-thread grass (46% remaining), riparian-wetland ecosystems such as Water Birch-dogwood swamp (just > than 8% remaining) and Cottonwood-dogwood floodplain (69% remaining).

Many sensitive ecosystems that are intact (unconverted) may still be reduced in quality or limited in their functioning as a result of natural resource extraction and development, intensive grazing or recreational activities, invasive plants (weeds), fire suppression and climate change.

The Grasslands Conservation Council of BC has also assessed the historic and current grassland coverage throughout the low elevation areas of the entire Similkameen region. **Table 1** below shows the percent of grasslands in each low elevation BEC zone remaining, while **Table 2** below outlines the ownership and jurisdiction of those remaining grasslands. It is also important to note the amount of important habitat within the provincial designation of land in the Agricultural Land Reserve (ALR) as agricultural development is outside the purview of local government controls see **Table 3**.

Table 1: Comparison of Historic and Current Grassland Coverage in the Similkameen by Biogeoclimatic Ecosystem Classification Zone and Subzone (in hectares)

Zone & subzone	HISTORIC (ha)	CURRENT (ha)	LOST (ha)	% Remaining
BG xh	2813	1221	1592	43
PP xh	7938	5327	2610	67
IDF xh	18783	16773	2010	89

Table 2: Current Ownership/Land Status of Remaining Grasslands (in hectares)

Ownership	BG xh (ha)	PP xh (ha)	IDF xh (ha)
Indian Reserve	614	672	1771
Private	367	3532	7052
Provincial Crown	78	403	5804
Provincial Managed (e.g, WHA)	11	247	1037
Provincial Protected	145	451	1033
Other	6	22	75
Total	1221	5327	16773

What is more important to protect? A conservation ranking exercise is underway as part of the South Okanagan Similkameen Biodiversity Conservation Strategy and will be available for the spring of 2010. The exercise is working towards integrating ecosystem mapping and a number of provincial assessment tools to establish a ranking of importance for sensitive ecosystems to assist land use decision makers and conservation organizations with prioritizing efforts for environmental protection.

This information is currently available for the Lower Similkameen area and the strategy science team is now discussing how to rank importance of ecosystems in the Upper Similkameen region where no Sensitive Ecosystem Inventory (SEI) mapping occurs. In the interim, generalizations can be made about the ranking process that will allow the use of other map layers to determine exact or approximate ranks for the rest of the Similkameen region. Below in bullet form is some of what can be taken from the Lower Similkameen ranking process that can be used to determine ecological importance in areas of the rest of the Similkameen:

What ranks as most important in the Biodiversity Conservation Strategy analysis? A synopsis of Important Ecological Communities with 1 highest value to 4 lowest values:

- All water related features with the exception of gullies are given the most important rank (“1”) in all three BEC zones: BG,PP, and IDF
- Gulley features receive the most important rank (“1”) in both the BG, and PP zones, and the second most important rank (“2”) in the IDF zone.
- All moderate-to-good condition grasslands receive the most important rank “1”, while poorer condition grasslands receive the second most important rank (“2”).
- Riparian associated communities in Douglas Fir or Ponderosa forest receive the highest priority “1”.
- Where not riparian associated, coniferous forests are ranked by age: Old forests in Douglas Fir or Ponderosa Pine receive the highest priority “1”; Mature Forests “2”; Young Forests “2” or “3”.
- In the IDF zone, rank “1” is given to rock outcrop and talus communities on warm aspects; cool aspects are given a rank of “2”. For the BG and PP zones these communities receive score of “1” for any aspect.
- All aspen and deciduous shrub communities (commonly associated with topographic depressions / water receiving areas) are assigned the highest priority “1”.

Wildlife Values

There have not been comprehensive and consistent species inventory or monitoring programs in the Similkameen, however there are some notable clusters of species at risk occurrences throughout the area. With the intact and diverse nature of the Similkameen habitat types, the area

is rich in wildlife including many Provincially Red and Blue-listed and COSEWIC - listed species (Endangered, Threatened or of Special Concern). Many species that occur in the Similkameen are rare and occur either nowhere else in BC, or in Canada. **Appendix Two** is a list of species at risk found in the Similkameen area with pertinent information for each species including species code, common name, and scientific name as well as provincial and federal status.

The presence of large mammals such as Grizzly and Black Bear, California Bighorn Sheep, and Mountain Goat speaks to the intactness and integrity of remaining wilderness areas. It is important to retain stretches of land and or water that is diverse in type and elevation across which wildlife can travel to feed, seek refuge, and migrate between seasons. For example, the rocky cliffs and hills alongside the Similkameen east of Princeton and West of Keremeos serves the role of connectivity corridor for species such as Mountain Goats and Bighorn Sheep, as well as snakes and perhaps other reptiles on the southern facing or warm aspect rugged areas.

The exceptional area of wide valley bottom riparian ecosystems occurs along the Similkameen drainage is an important low elevation corridor and represents a similar landscape to that which once existed in the valley bottom between Penticton and Osoyoos in the South Okanagan Basin. The grasslands around Princeton include intact natural areas that share similarities with those of the Nicola and this may be a corridor of importance for ecosystems and species.

Despite the changes in the landscape over time and the impact to natural areas, the Similkameen Valley still presents more possibilities than the south Okanagan for habitat preservation and sustainability.

Land Use Regulations and Conservation

Parts of the Similkameen area (B and G) do not have official community plans, zoning bylaws nor other regulations and have not chosen to protect ecological integrity at the local level through mechanisms such as the designation of Environmentally Sensitive Development Permit Areas or other conservation zoning. Electoral areas and municipalities with or without existing OCPs and bylaws could benefit from the improvement of Green Infrastructure Bylaws as outlined in the Green Bylaws Toolkit (www.greenbylaws.ca). The toolkit is an important resource that outlines local government tools that are authorized by the *British Columbia Community Charter* and *Local Government Act* and is a comprehensive background on jurisdictions and legislation addressing ecosystem protection, case studies, sample bylaw wording and examples of comprehensive regulations for rural, town, suburban and urban communities. Some examples of bylaws that can help to protect green infrastructure and sensitive ecosystems are (see Appendix Three for more information):

- Regional Growth Strategies
- Regional Conservation Strategies
- Official Community Plans
- Zoning Bylaws
- Environmental Development Permit Areas
- Tax Exemptions
- Impact Assessment
- Rainwater Management
- Security and Covenants

- Regulatory Bylaws (eg. Landscaping, tree protection, soil removal and deposit, watercourse protection)
- Riparian Areas Protection
- Groundwater Bylaw

Many local municipalities and electoral areas within the Okanagan are improving environmental protection measures and can be a good source of information and support. The RDOS Environmental Planner position is an excellent resource for municipalities and electoral areas looking to improve environmental protection mechanisms. The South Okanagan Sub-Regional Growth Strategy is also a good source of support for policy language, tools and performance indicators available for achieving sustainability objectives. In addition, the Province of BC also has *Develop with Care; Environmental Best Management Practices for Urban and Rural Land Development in British Columbia* which is a helpful resource to promote to the development community for considering environmental values.

Another helpful program is the provincial Integrated Community Sustainability Initiative, originating from the 2005 Federal/Provincial/UBCM Gas Tax Agreement. The program provides capacity through Gas Tax funding, and encourages communities to engage community members and establish partnerships for adapting existing plans, or creating new long-term plans to help realize sustainability objectives within environmental, cultural, social and economic dimensions.

Local governments are also using their power to levy taxes in support of conservation and environment as a “service”. The Capital Regional District garners more than \$1.7 million per year for park land acquisitions, while areas within East Kootenay Regional District have also approved a dedicated conservation fund through property taxes. There are other tax incentives that local governments can provide property owners who are conserving important habitat on their properties.

Private landowners wanting to protect ecological values on their lands have a range of tools at their disposal as well, including working with a stewardship organization to enhance or restore important habitat on the property landowners still own, including establishing short-term agreements to manage or steward the land – or entering into leases or license for conservation. Landowners may also establish legal agreements with land trusts that are registered to the title of the land binding future landowners to the terms of the covenant – including protecting features important to landowners in perpetuity. Landowners may also transfer property to conservation organizations/land trusts now, or at a later date through the sale or donation of land. Each of these options have both tax liabilities and benefits. Land trusts operating in the Similkameen Region include Ducks Unlimited Canada, The Land Conservancy of BC, The Nature Trust of BC, and The Nature Conservancy of Canada.

At a provincial land use regulation level, 100% of land designated in the Agricultural Land Reserve (ALR) occurs in the low elevation study area, approximately constituting 31.7% of the entire study area. ALR lands are typically thought of as mostly outside the purview of local government, however, jurisdictional interaction

between the *Agricultural Land Commission Act and Local Government Act* need to be understood more clearly.

Table 3: Important Biogeoclimatic Zones for Conservation in the Agricultural Land Reserve.

Zone & subzone	In the ALR (ha)	% of total study area
BG xh	6418	86.9%
PP xh	22230	10.95%
IDF xh	5538	49.3%

Low intensity agricultural activity is often harmonious with conservation of natural systems, however the intensive development of ground crops, orchards or vineyards has a deeper conversion impact than grazing for example. Traditionally, conservation tools such as conservation covenants (legal agreements with a land trust, provincial or local government that is registered to the title of the land and may limit agricultural activities) have been difficult to achieve within ALR lands. The ALR is not an effective tool for conservation, as lands can be excluded from the ALR for development and intensive agricultural development can impact environmental values. Subdivision approval and layout in rural areas are within the purview of the Agricultural Land Commissioners and the Provincial Ministry of Transportation and Highways. Provincial/local tax structures also provide disincentives for agricultural and private landowners to conserve their lands, however, local governments have jurisdiction to provide tax exemptions as an incentive for landowners to place conservation covenants on important habitat.

Conservation Activities

The South Okanagan Similkameen Conservation Program has over 49 partner agencies working together to achieve shared conservation goals, many of which have had a long history of activity in the Similkameen, far beyond the SOSCP's 9 years of operations. Non-government agencies within the partnership are active in the Similkameen region, assisting landowners to steward their lands and achieve habitat restoration objectives, as well as acquire and manage private lands for conservation. Government agencies are also active in funding conservation programs or projects in the Similkameen, as well as managing lands such as protected areas and crown lands for biodiversity. All project and organizational contact information can be found at www.soscp.org. Here are a few examples of organizations and their work:

- **The Land Conservancy of BC (TLC)** and the **SOS Stewardship Program** continues to work with private landowners individually, through neighborhood community contact and in partnership with agricultural and other private business partners in the Similkameen to assist them in achieving their habitat

stewardship goals and holds conservation lands near Cawston (ie: Harper property).

- **The Nature Trust of BC (TNT)** works with ranchers and other private landowners ie: White Lake Biodiversity Ranch, and holds conservation lands in the Similkameen (ie: Similkameen Pines/Wainright property). **The Nature Conservancy of Canada (NCC)** and **Ducks Unlimited Canada (DUC)** also works with private landowners on stewardship, covenants, and acquisitions of property for conservation.
- **Okanagan Similkameen Conservation Alliance (OSCA)** is an environmental education and outreach organization and has conducted many educational events that focus on wildlife species and ecological management workshops. Audiences include school children, private businesses, growers, local governments, developers, planners and public.
- **The South Okanagan Syilx Environmental Committee** is made up of representatives from three bands (Osoyoos, Penticton and Lower Similkameen) and is working to advise Band Councils on environmental and land use issues.
- **The Okanagan Regional Wildlife Heritage Fund Society** is a non-government organization that gets involved in conservation projects for wildlife.
- **Environment Canada/Canadian Wildlife Service** also provides funding for conservation activities including through the Habitat Stewardship Program, EcoAction public engagement for direct conservation and Aboriginal Funding for Species at Risk Recovery/Critical Habitat Protection
- **The Province of BC Ministry of Environment** has conservation objectives and habitat enhancement/compliance programs on Crown lands including parks and protected areas and lands managed for wildlife habitat areas. There are also provincial funding opportunities through the Habitat Conservation Trust Foundation (HCTF).
- For the past few years **Parks Canada and Province of BC** have been actively engaged in a national park feasibility study for specific lands including provincial protected areas and a number of private land in holdings that straddle the south Okanagan and Lower Similkameen Valleys. Organizations participating in the national park proposal include **Canadian Parks and Wilderness Society (CPAWS)** and local citizen group - **South Okanagan Similkameen National Park Network (SOSNPN)**.

Measuring Conservation Success

There are a number of indicators that will help to measure conservation success and goals related to protection of biodiversity. **See Appendix Four.**

Aquatic Ecosystems: the Similkameen River and Lakes

The Similkameen River is 196 kilometres long and flows from its origin in Manning Provincial Park north to Princeton, and then southeast through Keremeos to and across the international border to join with the Okanogan River near Oroville, Washington

which ultimately drains into the Columbia River. The land that surrounds the streams and lakes that ultimately drain into the Similkameen River is called the “basin”. It is approximately 7,600 square kilometers in B.C. and a small area of the basin also occurs in the U.S. (20% or so).

Streams in the Similkameen Basin are fed mainly by snowmelt. Winter snows that melt and run into streams in the spring resulting in high water flow is called the spring freshet, and accounts for two-thirds of annual stream flow. By July, the freshet has subsided and water flow remains low for the summer, autumn, and winter. This means that water flow in creeks is low during the peak irrigation months and during the peak spawning periods for fish. This overlap is greatest in the lower Similkameen valley where most agriculture occurs. Climate change may be affecting river flow, according to one study that compared water flow in the upper Similkameen River in the 1970's, 1980's and early 1990's showed that snow melted earlier in spring and had lower flows in summer which lasted longer. The study concluded that these trends would continue over the next 80 years.

There is one significant dam on the Similkameen; the Enloe Dam was built for hydroelectricity generation about 14 km upstream of its mouth on the US side and was operated from 1916 to 1923. Although a natural barrier existed at the same location, preventing sea-run fish from accessing the Canadian portion of the Similkameen Basin, the dam remains today as a barrier to upstream fish migration. A second natural barrier to fish occurs at the Similkameen Falls (near the confluence of Pasayten and Similkameen Rivers).

In 2008, the State of Washington, Public Utility District No. 1 of Okanogan County (PUD), filed for a new license for permission to reactivate power production from the Enloe Dam. The Federal Energy Regulatory Commission (FERC) issued its Notice of Scoping Meetings, a Site Visit, and solicitation for Scoping Comments, and later, FERC issued a preliminary permit to PUD for a second proposed project on the same river known as the Shankers Bend Project. This second dam is proposed to be located just one mile upstream of the Enloe Project. In a three year feasibility study permit, Shankers Bend is described as a 42 megawatt project with a 260 foot high dam 1,200 feet long. The project will impound an 18,000 acre reservoir with an average depth of 1,289 feet and would impound lands located in both Washington State and British Columbia. Half of the flood zone behind Shankers Bend would be in British Columbia encroaching on close to 25 kilometres of the Similkameen Valley and flooding 9000 acres south of Keremeos and west of Osoyoos. It would cover riverine habitat including existing lakes, private farmland and abandoned mine sites. The project would create a “regionally important water storage” to satisfy Washington State municipal and agricultural needs.

All 17 species of fish in the British Columbia portion of the Similkameen Basin are resident fish, meaning that they stay in fresh water throughout their lives. Twelve of the 17 species are native to the river, and four of those are rare and considered to be of

conservation concern including the Umatilla dace (BC red list¹), Chiselmouth, mottled sculpin, and mountain sucker (BC blue list and only locations in BC). Five species have been introduced, including black bullhead, brook trout, lake trout, cutthroat trout, and kokanee.

The Tulameen River is the largest tributary that joins the Similkameen River. Other important tributaries include the Pasayten and Ashnola rivers, and Allison, Hayes, and Otter creeks. The Similkameen Basin boasts about 500 kilometres of fish-supporting rivers and streams. In a recent assessment of focal watersheds, 16 tributary streams were named as having high or very high significance for fish protection because of the sensitivity of fish stocks (rainbow trout and rare species) and the current or potential level of fish production in the stream.

A study in 2001 indicated that Similkameen tributaries were considered to be important as spawning, rearing, and overwintering habitat. However, streamside vegetation, which provides important bank stability, shading of the water, nutrient inputs, and in-stream habitat from woody debris, has been removed along many tributary streams and negatively impact habitat quality and productivity.

An estimated 153 lakes are found in the Similkameen Basin, and although they are smaller, Similkameen Basin lakes generally have higher productivity than Okanagan Basin lakes (not including the six main valley lakes in the Okanagan). Sixty-eight lakes are currently stocked for angling. Of the 17 fish species living in the Similkameen Basin, at least nine can be found in the lakes. Twenty-six lakes have rainbow trout populations that live in lakes but spawn in streams.

Human activities have had various impacts on the lakes, streams, rivers and groundwater in the Similkameen Basin. These activities include land use, water use/withdrawal, flood control, and species introductions. Agriculture, forestry, mining, and urban development activities frequently occur near lakes and streams, altering shorelines and streambanks. By the mid-1980s, most surface water sources in the Similkameen Basin were fully licensed, meaning that they were at their capacity to have water withdrawn for human use. Groundwater use is currently unregulated and in most cases, unmapped therefore there are no estimates of the supply or use rates.

There is a significant historic dataset related to water quality and effluent quality of the Similkameen River and some of its selected tributaries collected from about 1965 to December 1982. The purpose was to develop water quality objectives in areas where designated water uses may be threatened. Tributaries examined were the Tulameen River; Allison and Hayes Creeks; Wolfe Creek; and Hedley and Keremeos Creeks respectively. Lakes examined include Lorne and Smelter Lakes in the Wolfe Creek watershed; Allison and Missezula Lakes in the Allison Creek Watershed; and Chain,

¹ Designated by the Province of British Columbia; red list includes any ecological community, and indigenous species and subspecies that is extirpated, endangered, or threatened in British Columbia, blue listed species are of special concern because of characteristics that make them particularly sensitive to human activities or natural events.

Link and Osprey Lakes in the Hayes Creek Watershed. Several mining operations and town wastewater flows during that time discharged wastewater to the environment within the basin. Other projects including impacts from an industrial landfill and other issues were identified within the historic assessments.

A summary of data collected between 1987 and 1993 indicate that water quality objectives² were met, or close to being met. Those not attained and which may be of some significance include objectives for fecal coliforms and a few metals in the Similkameen River, molybdenum in a tributary and phosphorus in tributary watershed lakes. The objective for fecal coliforms, an indicator of human and animal waste, was not met at times in the Similkameen River and in Allison Creek, a tributary. The phosphorus objective was exceeded in Missezula and Osprey lakes which are located in tributary watersheds. The molybdenum objective in Wolfe Creek, a tributary to the Similkameen, was exceeded at times downstream from a copper mine. The objectives for aluminium, iron, and zinc were exceeded occasionally at the mouth of Hedley Creek or just downstream in the Similkameen River. Another summary of monitoring data from 1979-1997 found that water quality meets drinking water guidelines, but that several metals exceed guidelines for aquatic life.

The BC Ministry of Environment continues to monitor for specific water quality objectives within a number of rivers across British Columbia, including the Similkameen. These guidelines are determined by the specific conditions in a given watershed. They take into account the naturally occurring physical properties of the water, the water uses in that area, and the requirements for maintaining aquatic life and the animals that depend on it for food.

There are existing water quality monitoring stations on the Similkameen River at Princeton, near the US Border and above 20 mile Creek.

Some Aquatic Conservation Activities:

In 2000, the Similkameen River Planning Committee commissioned a fish habitat assessment. Sampling was conducted at four mainstream and seven tributary sites, and

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- ² **Fecal Coliforms** are microbiological indicators of human and animal waste.
 - **Suspended Solids** and **Turbidity** are measures of particulate matter which can affect aquatic life and drinking water.
 - **Cyanide**, which is toxic to aquatic life above objective levels, can originate from gold mining.
 - **Dissolved Oxygen** is necessary to sustain aquatic life.
 - **pH** is a measure of acidity which can affect aquatic life if not within the proper range.
 - **Aluminum, Iron, Molybdenum, Zinc** and **Other Heavy Metals** (such as Copper, Lead, Mercury, Nickel and Uranium) can be toxic to aquatic life above objective level. In addition, Molybdenum in irrigation water can affect cattle via uptake by forage crops.

fish habitat assessments were conducted on four tributaries. The information collected was then used to identify opportunities for fish habitat restoration. In 2002, restoration work was conducted on sections of Allison and Keremeos creeks, as recommended in the Similkameen River Planning Committee report. The restoration focused on building large woody debris and boulder structures to stabilize eroding streambanks. These structures will also provide more fish habitat in the creeks.

In 2001, the Okanagan Nation Alliance planted native vegetation on three-quarters of a kilometre of bank along the Similkameen River near Chopaka bridge. The Ministry of Water, Land and Air Protection places restrictive regulations on anglers to limit the harvest of wild trout stocks.

In 2005, the Okanagan Nation Alliance, Department of Fisheries and Oceans, and the BC Ministry of Environment established a comprehensive report called “The State of Fish and Fish Habitat in the Okanagan and Similkameen Basins.

Long term water quality information and monitoring data for the Similkameen Basin from 1965 to 1982 exists and is available through the BC Ministry of Environment. Currently, the Ministry continues to monitor water quality at three sites on the Similkameen.

Appendix 1 (Support Document B): Sensitive Ecosystems of the Similkameen Area:

Sensitive Ecosystems	Ecosystem Description & Value
Wetlands	Non-forested ecosystems where the water table is at or near the surface; provide surface water for drinking and critical breeding sites for amphibians. Insect production attracts insectivorous birds and bats.
Riparian	Treed or shrubby ecosystems associated with pond and lake shorelines (fringe), swamps, floodplains, or gullies with intermittent or permanent creeks. Intact thickets are critical nesting sites for endangered Yellow-breasted Chats and large deciduous trees with woodpecker cavities provide nesting habitat for endangered Western Screech-owls. These productive ecosystems generate insects that insectivorous birds and bats rely upon and can play a large role in the regulation of stream/river water temperature.
Broadleaf Woodlands	Ecosystems dominated by trembling aspen occurring in depressions and moist areas in grasslands; old Broadleaf Woodlands are part of the Old Forest category. These areas form a vertically diverse structure within a shallow landscape. The ecology of these areas is diverse and productive at these sites.
Coniferous Woodlands	Open stands of Douglas-fir or ponderosa pine, often on shallow soils, with typically grassy understories; old Coniferous Woodlands are part of the Old Forest category. These ecosystems are fairly common in the area, but often have important associated habitat features and provide ecosystem connectivity. Snags are important attributes.
Old Forest	Forest ecosystems dominated by large, old trees; includes old Coniferous Woodlands. These ecosystems are far less common than they would have occurred naturally. Many forest dwelling animals are dependent on the veteran trees and snags in these ecosystems. Fire is critical for maintaining Old Forests.
Grasslands	Ecosystems dominated by bunchgrasses, most often occurring on slopes on the valley walls. Intensive grazing changes the plant structure and composition from natural conditions. Fire is an important factor for maintaining these ecosystems. Many rare plants occur in grasslands. Important wildlife include several snake species, drought tolerant amphibians (Spadefoot, Tiger Salamander), Grasshopper Sparrows and Bighorn Sheep.

Sagebrush Steppe	Sagebrush-dominated grasslands on deep and shallow soils. Intensive grazing damages sagebrush making them less suitable for nesting birds, like the endangered Sage Thrasher. Other shrub and ground nesting birds, rare plants, amphibians, snakes and rare small mammals are also important fauna of these ecosystems. Most of this habitat occurs on low elevation slopes.
Sparsely Vegetated	Ecosystems with little vegetation occurring on bedrock or colluvial features, including rock outcrops and cliffs. These rugged slopes are generally free of human disturbances and are often critical habitat for snakes, bats, some birds, mountain goats and Bighorn Sheep.
Other Important Ecosystems	Ecosystem Description & Value
Mature Forest	Forests dominated by mature coniferous trees; excludes mature coniferous and broadleaf woodlands. Mature Forests have similar attributes as Old Forests although decadent trees and snags are less common. Mature forests are important for recovering old forest stands.
Seasonally Flooded Fields	Many of these ecosystems were historically cleared of riparian vegetation and seeded with agronomic grasses. In their current state they can provide important amphibian breeding sites when flooded, staging areas for migratory birds, raptor foraging areas, and breeding and foraging habitat for Long-billed Curlews and Bobolinks when not flooded.
Not Sensitive	Ecosystem Description & Value
Not Sensitive	These areas are generally not sensitive ecosystems but may have important habitat attributes within them such as wildlife trees, small ponds, thickets and rock outcroppings.

Appendix 2 (Support Document B): Species at Risk In Similkameen Area

Species Code	Common Name	Scientific Name	BC CDC Status	COSEWIC Status
Amphibians				
A-AMTI	Tiger Salamander	<i>Ambystoma tigrinum</i>	Red	Endangered
A-SPIN	Great Basin Spadefoot	<i>Spea intermontana</i>	Blue	Threatened
Birds				
B-WISA	Williamson's Sapsucker	<i>Sphyrapicus thyroideus</i>	Red	Endangered
B-BOBO	Bobolink	<i>Dolichonyx oryzivorus</i>	Blue	
B-BRSP	Brewer's Sparrow	<i>Spizella breweri breweri</i>	Red	
B-BUOW	Burrowing Owl	<i>Athene cunicularia</i>	Red	Endangered
B-CAWR	Canyon Wren	<i>Catherpes mexicanus</i>	Blue	
B-GBHE	Great Blue Heron <i>fannini</i> subspecies	<i>Ardea herodias fannini</i>	Blue	SC
B-GRFL	Gray Flycatcher	<i>Empidonax wrightii</i>	Blue	
B-GRSP	Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Red	
B-LASP	Lark Sparrow	<i>Chondestes grammacus</i>	Red	
B-LBCU	Long-billed Curlew	<i>Numenius americanus</i>	Blue	SC
B-LEWO	Lewis' Woodpecker	<i>Melanerpes lewis</i>	Blue	SC
B-SATH	Sage Thrasher	<i>Oreoscoptes montanus</i>	Red	Endangered
B-WHWO	White-headed Woodpecker	<i>Picoides albolarvatus</i>	Red	Endangered
B-WSOW	Western Screech-owl <i>macfarlanei</i> subspecies	<i>Otus kennicottii macfarlanei</i>	Red	Endangered
B-WTSW	White-throated Swift	<i>Aeronautes saxatalis</i>	Blue	
B-YBCH	Yellow-breasted Chat <i>auricollis</i> subspecies	<i>Icteria virens auricollis</i>	Red	Endangered
Reptiles				
R-CHBO	Rubber Boa	<i>Charina bottae</i>	Yellow	SC
R-CHPI	Western Painted Turtle	<i>Chrysemys picta bellii</i>	Blue	SC

	(Intermountain - Rocky Mountain population)			
R-COCO	Western Yellow-bellied Racer	<i>Coluber constrictor mormon</i>	Blue	SC
R-CROR	Western Rattlesnake	<i>Crotalus oreganus</i>	Blue	Threatened
R-HYTO	Night Snake	<i>Hypsiglena torquata</i>	Red	Endangered
R-PHDO	Pigmy Short-horned Lizard	<i>Phrynosoma douglasi</i>	Red	Extinct
R-PICA	Great Basin Gophersnake	<i>Pituophis catenifer deserticola</i>	Blue	Threatened
Mammals				
M-ODHE	Mule Deer	<i>Odocoileus hemionus</i>	Yellow	
M-URAM	Black Bear	<i>Ursus americanus</i>	Yellow	
M-OVCA	California Bighorn Sheep	<i>Ovis canadensis</i>	Blue	
M-ORAM	Mountain Goat	<i>Oreamnos americanus</i>	Yellow	
M-URAR	Grizzly Bear	<i>Ursus arctos</i>	Blue	SC
M-EUMA	Spotted Bat	<i>Euderma maculatum</i>	Blue	SC
M-LETO	White-tailed Jackrabbit	<i>Lepus townsendii</i>	Red	
M-REME	Western Harvest Mouse <i>megalotis</i> subspecies	<i>Reithrodontomys megalotis megalotis</i> subspecies	Blue	SC
M-SYNU	Nuttall's Cottontail	<i>Sylvilagus nuttallii</i>	Blue	SC
M-TATA	American Badger <i>jeffersonii</i> subspecies	<i>Taxidea taxus jeffersonii</i>	Red	Endangered
Insects				
I-APODMOR	Mormon Metalmark (Southern Mountain population)	<i>Apodemia mormo</i>	Red	Endangered
I-ARGIVIV	Vivid Dancer	<i>Argia vivida</i>	Red	
I-ELEONIG		<i>Eleodes nigrinus</i>	Red	
I-LIBEPUL	Twelve-spotted Skimmer	<i>Libellula pulchella</i>	Blue	

Appendix 3 (Support Document B): Examples of Bylaws that Help to Protect Green Infrastructure and Sensitive Ecosystems (see www.greenbylaws.ca)

Regional Growth Strategies: agreements between member municipalities and a regional district on social, economic, and environmental goals and priority actions. Guides decisions on growth and development. Bylaws and plans must be consistent with the RGS.

Regional Conservation Strategies or Biodiversity Strategies: articulate ecological principles and conservation goals and actions that aim to maintain and enhance the biological diversity of a region and protect or restore ecologically significant areas. Provides significant scientific foundation for conservation goals and objectives. Provides local and senior governments and other stakeholders with management priorities and planning tools for healthy regional watersheds and ecosystems.

Official Community Plans: and sub-plans such as neighbourhood plans, local area plans, and/or watershed plans set general direction for development and conservation in a community. Articulates the community's objectives and policies regarding land use, community development and operations. OCP's can set Environmentally Sensitive Development Permit Area Guidelines for protecting ecosystems. May contain policies for the "preservation, protection, restoration and enhancement of the natural environment, and its ecosystems and biological diversity".

Zoning Bylaws: Allows government to regulated the use to which a landowner can put a piece of land and how much of that use (density) is allowed on a specific part of the land.

Environmental Development Permit Areas: designated to protect the natural environment, its ecosystems, and biological diversity, and regulate the form and character of development and influence the siting of the development on a parcel. They enable staff to make site-specific decisions about protecting sensitive ecosystems, and specify conditions and standards that a developer must meet. These are the best way to protect sensitive ecosystems.

Tax Exemptions: property tax exemptions can encourage landowners to maintain the natural value of environmentally sensitive lands. Can also compensate landowners for the social and ecological benefits they provide the community. Local governments can provide tax incentives for riparian areas currently. Other tax incentive programs include the federal Ecological Gifts Program which is a federally certified donation of ecologically sensitive land or an interest in land (easement, covenant, servitude).

Impact Assessments: help local governments prevent damage to sensitive ecosystems and avoid the cost of correcting environmental problems after the fact. Information gathered during assessments gives decision makers an objective basis for decisions about proposed activities.

Security and Covenants: deposits provided by developers to communities to assist with the funding of restoration or enhancement of habitat if damage occurs during development in an environmentally sensitive area.

Regulatory Bylaws (e.g. Landscaping, tree protection, soil removal and deposit, watercourse protection, groundwater protection): provisions can be standalone bylaws or or as sections of green infrastructure bylaw.

Riparian Areas Protection: provincial government now requires local governments to protect streamside corridors and harmonize tri-jurisdictional (federal, provincial and local) regulations for development within watercourses.

Appendix 4 (Support Document B): Measuring Biodiversity Conservation Success

From the Okanagan Sub-Regional Growth Strategy Baseline Report 2008

Performance Indicators are related to three items related to **Natural Spaces** :

- BNS-1 annual and cumulative area of parkland and protected areas (measured annually)

- BNS -2 percentage of sensitive ecosystems protected or stewarded by general habitat type (measured 5 years)
- BNS-3 percentage of riparian areas protected (measured 5 years)

From the South Okanagan Similkameen Conservation Program

Conservation success: measure against outcomes identified for conservation goals combined (species recovery, habitat and ecosystem outcomes).

- Ecosystem Function: Species richness, composition, extent of habitat fragmentation, preservation of key migration corridors etc.
- Species Diversity: population targets for focal and at risk species.
- Conservation goals for all important habitat types across all tenures.

Support Document: C

Amenity Migration In the Similkameen Valley, BC, Canada

Amenity-led Migration Survey: *Final Report*

**Prepared for:
Similkameen Valley Planning Society**

6 March 2010



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Contents

1.0 Introduction.....	1
2.0 Methodology	6
3.0 Who are the Amenity Migrants?	8
4.0 Similkameen Valley Resident Types and Reasons for Residence	9
5.0 Location of In-migrants in the Similkameen Valley	13
6.0 Comparison of Key Characteristics of Amenity Migrants with Other Resident Types....	14
6.1 Age.....	14
6.2 Education.....	15
6.3 Inadequate Income Data.....	16
6.4 Household Type.....	16
6.5 Employment.....	17
6.6 Values and Behaviour.....	19
6.6.1 <i>Environmental Conservation Practices</i>	19
6.6.1.1 <i>Environmental Conservation Practices of Resident Types</i>	20
6.6.1.2 <i>Comparison of Environmental Conservation Practices Of Amenity Migrant .</i> <i>Types</i>	22
6.6.1.3 <i>Respondents Attributes Influencing Environmental Conservation</i>	22
6.6.2 <i>Community Participation</i>	23
6.6.2.1 <i>Community Participation by Resident Types</i>	24
6.6.2.2 <i>Community Participation of Amenity Migration Types</i>	25
6.6.2.3 <i>Respondents Attributes Influencing Community Participation</i>	27
6.7 Perception of Social, Economic and Environmental Issues.....	28
6.7.1 <i>Key Valley Future Issues</i>	28
6.7.2 <i>Capability and Will of Local Government</i>	29
6.7.3 <i>Quality of Life Issues</i>	32
7.0 Economic Effects and Housing Implications	33
8.0 Similkameen Valley Amenity Migration: Opportunity or Threat?.....	37
9.0 Works Cited.....	40

LIST OF FIGURES

Figure 1. The Similkameen Valley, BC, Canada.....	1
Figure 2. Regional District of Okanagan-Similkameen	2
Figure 3. Percentage Change in Population Growth, In-Migration & Crude Birth (2001-2006)...	3
Figure 4. Amenity Migration Construct	9
Figure 5. Resident Types in Similkameen Valley	9
Figure 6. Permanent and Part-time Amenity Migrants as Percentage of Total Respondents.....	10
Figure 7. Location of Migrants to Similkameen Valley by Resident Type (2001-2006).....	13
Figure 8. Percentage of Survey Respondents 55 years and Older by Resident Type.....	14
Figure 9. Educational Attainment by Resident Type.....	16
Figure 10. Household Type by Resident Type	17
Figure 11. Employment by Resident Type	18
Figure 12. Unemployment Rate in Similkameen Valley (2006)	18
Figure 13. Similkameen Valley Residents Environmental Conservation Practices	19
Figure 14. Environmental Conservation Participation by Resident Type	20
Figure 15. Environmental Conservation Practices by Activity	21
Figure 16. Similkameen Valley Environmental Conservation Practices by Amenity Migrant Type	22
Figure 17. Similkameen Valley Respondent Participation for Resolving Community Issues	23
Figure 18. Community Participation by Resident Type	24
Figure 19. Community Participation By Type of Activity	25
Figure 20. Level of Community Participation by Amenity Migrant Type	26
Figure 21. Community Participation by Amenity Migrant Type In South Okanagan Valley	27
Figure 22. Statistically Significant Key Issues the Valley May Face in the Next 20 Years.....	28
Figure 23. Local Government Needs to Do More about Valley Key Issues	29
Figure 24. Local Government Capability to Address Valley Key Issues	30
Figure 25. Local Government Capability to Address Valley Key Issues by Resident Type.....	30
Figure 26. Local Government's <i>Will</i> to Act on Valley Key Issues	31
Figure 27. Local Government's <i>Will</i> to Act on Valley Key Issues by Resident Type.....	31
Figure 28. Statistically Significant <i>Quality of Life</i> Issues.....	32
Figure 29. Survey Respondents Opinions about Amenity Migration.....	38
Figure 30. Survey Respondents Opinions about Amenity Migration by Resident Type.....	38

LIST OF TABLES

Table 1. Similkameen Valley Population (2001-2006)	2
Table 2. South Okanagan Population (2001-2006).....	2
Table 3. Housing Affordability in Similkameen Valley	5
Table 4. Similkameen Valley Sample Survey Response Rate (2007)	7
Table 5. Very Important Reasons for Coming/Living in the Valley	11
Table 6. 2004 Annual Gross Sales by NAICS Sector in Similkameen Valley.....	35
Table 7. Housing Affordability in Similkameen Valley (Correlated with Median Income).....	37

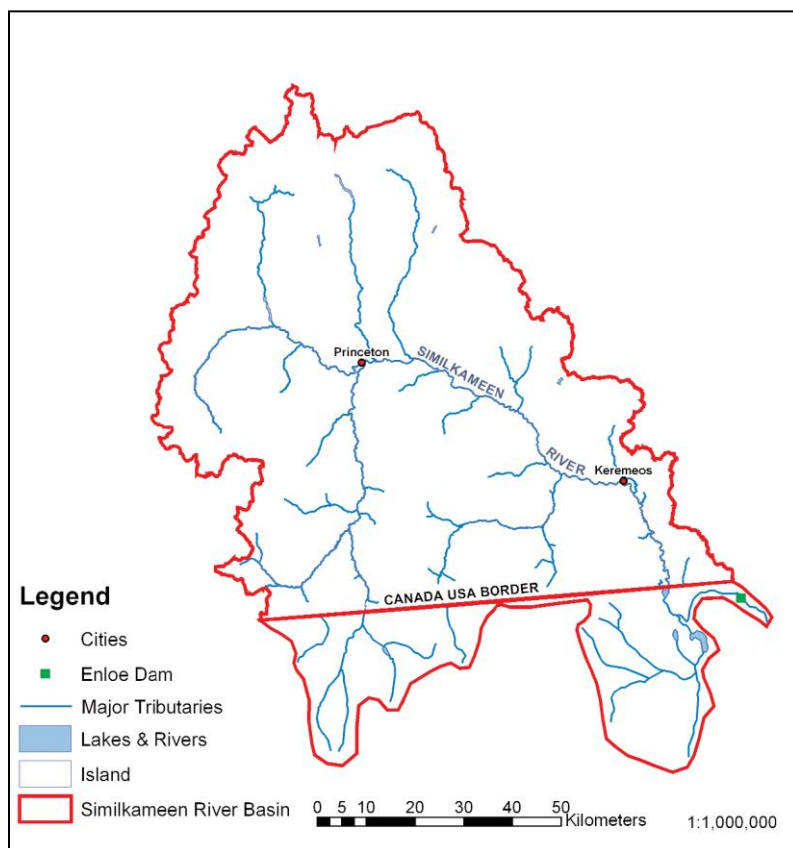
LIST OF APPENDICES

Appendix A. Inferential Statistical Analysis Results.....	44
Table 1. Comparison of Amenity and Economic Migrants Reasons for Moving to the Valley	44
Table 2. Significant Attributes for Environmental Conservation Practices	46
Table 3. Most Significant Attributes Affecting Respondents Community Participation.....	48
Table 4. <i>Analysis of one-way variance (ANOVA)</i> results comparing resident types' responses on <i>Valley Future Key Issues</i>	49
Table 5. <i>Analysis of one-way variance (ANOVA)</i> results comparing resident types' opinions on <i>Quality of Life</i> key issues.....	50
Appendix B. Project Phase I Technical Report: Amenity-Led Migration Survey (33pp)	
Appendix C. Survey Questionnaires:	
Key Informant Interview Guide (15 pp)	
Household Survey Questionnaire (10 pp)	

1.0 Introduction

The Similkameen Valley (the Valley) (see Fig. 1) in south central British Columbia (BC), Canada is centered on the Similkameen River that runs west to east between the Coast and Cascade mountain ranges. The western part of the Valley has a colder, moister climate than the dry, south eastern area — the northern extremity of the Sonoran Desert. It is a fertile place of

Figure 1. The Similkameen Valley, BC, Canada
(Fisheries & Oceans Canada 2005:75)



some 7,239 sq km with a rich biodiversity, and in 2006 was the home of a culturally diverse

population of 9,793 people¹. Between 2001 and 2006 the Valley's population increased 5.9% (Table 1). This increase is significant, especially in the context of both its regional jurisdiction (Regional District of Okanagan-Similkameen) (Fig. 2) and the larger province of BC. For the first time in decades the Similkameen Valley's population growth surpassed both neighbouring South Okanagan (3.4%) and BC (5.3%) (Table 2). Most of the increase came from in-migration. Based on the 2006 BC Census, the total number of new in-migrants (2001-2006) in the Valley was 2,620, making up 27% of the total Valley

population in 2006 (Table 1). Area H had the largest increase in in-migration (37.6%), followed by Keremeos at 36.2%, Area G (31%) and Princeton (7.4%). Area B decreased its in-migration by 53.3%. Consequently, population grew in all these places except for Area B. Most growth occurred in Area G (12.5%), followed by Area H at 12.1%. Keremeos grew modestly at 7.7% while Princeton grew at 2.6% (Table 1, Fig. 3).

¹ This includes the population of "Indian Reserves" located in Similkameen Valley.

Table 1. Similkameen Valley Population (2001-2006)

Area	2006 Population	2001 Population	% Population Change	2001-2006 new migrants	1996-2001 new migrants	% Change	% In-migration Share of 2006 Population
Alexis 9 (IR)	5	15	-66.7%	NA	NA	NA	NA
Area B	1,082	1,122	-3.6%	210	450	-53.3%	19%
Area G	2,308	2,052	12.5%	760	580	31.0%	33%
Area H	2,208	1,969	12.1%	530	385	37.6%	24%
Ashnola 10 (IR)	38	62	-38.7%	NA	NA	NA	NA
Blind Creek 6 (IR)	21	23	-8.7%	NA	NA	NA	NA
Chopaka 7 & 8 (IR)	54	48	12.5%	NA	NA	NA	NA
Chuchuwaya 2 (IR)	64	65	-1.5%	NA	NA	NA	NA
Keremeos	1,289	1,197	7.7%	470	345	36.2%	36%
Lower Similkameen 2 (IR)	47	48	-2.1%	NA	NA	NA	NA
Princeton	2,677	2,610	2.6%	650	605	7.4%	24%
Total	9,793	9,211	5.9%	2,620	2,365	10.7%	27%

NOTE: IR (Indian Reserve)

Source: BC Statistics 2001, 2006

Figure 2. Regional District of Okanagan-Similkameen (BC Statistics 2006)

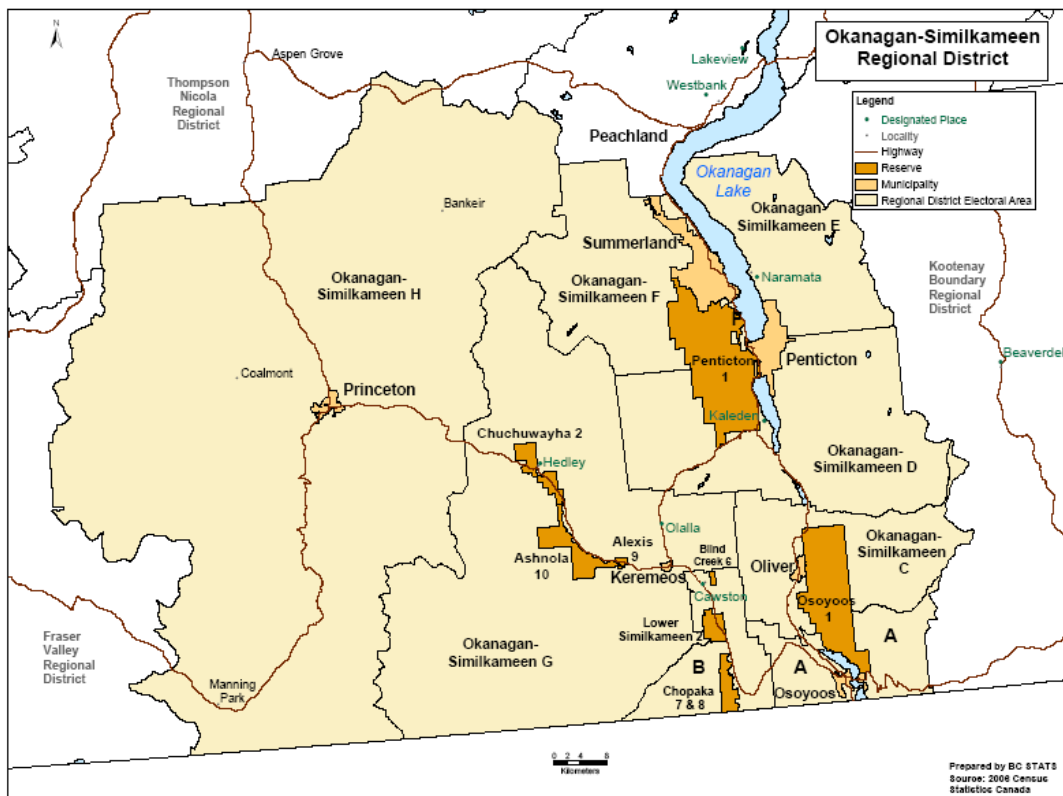


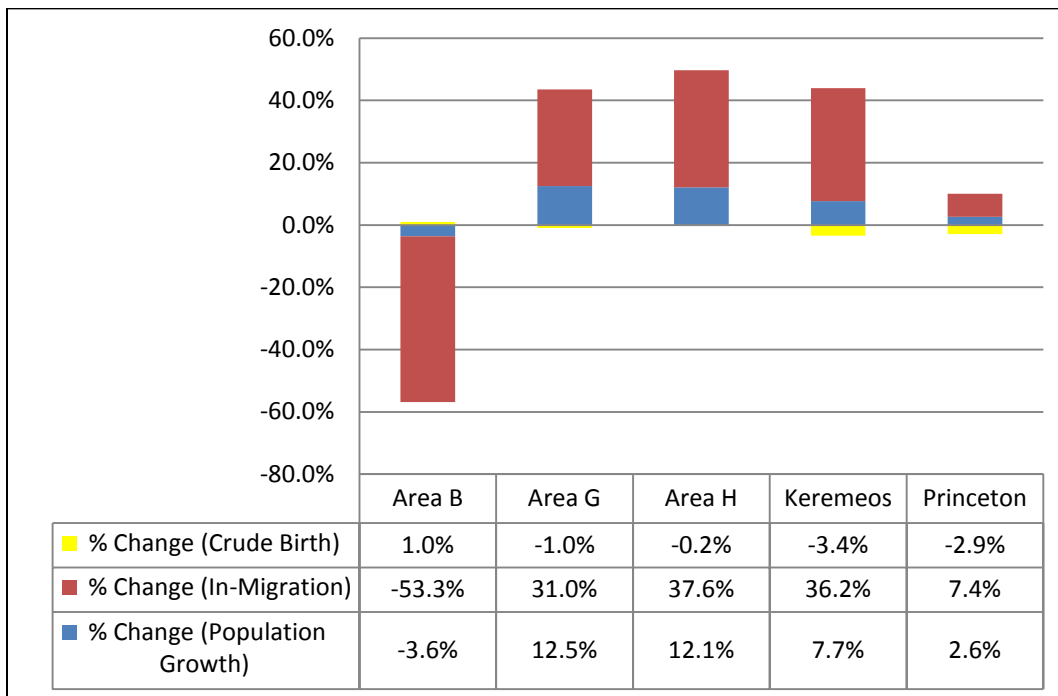
Table 2. South Okanagan Population (2001-2006)

Area	2006 Population	2001 Population	% Population Change
Area A	1,921	1,897	1.3%
Area C	3,899	4,154	-6.1%
Area D	5,913	5,703	3.7%
Area E	2,010	1,996	0.7%
Area F	2,011	1,979	1.6%
Oliver	4,370	4,224	3.5%
Osoyoos	4,752	4,295	10.6%
Osoyoos 1 (IR)	599	567	5.6%
Penticton	31,909	30,985	3.0%
Penticton 1 (IR)	1,470	901	63.2%
Summerland	10,828	10,713	1.1%
Total	69,682	67,414	3.36%

NOTE: IR (Indian Reserve)

Source: BC Statistics 2006

Figure 3. Percentage Change in Population Growth, In-Migration & Crude Birth (2001-2006)



NOTE: This figure does not contain information on in-migration in “Indian Reserves” located in the Valley because of unavailability of data in BC Census 2001, 2006.

Source: BC Statistics 2001, 2006.

The Similkameen's population growth fits a pattern that has been unfolding further to the south since the 1970s, and especially during the 1990s. Due mainly to in-migration, population growth rate of rural areas of the USA not only dramatically increased, but surpassed that of metropolitan areas, reversing the 150-history of US urbanization (*Johnson and Cromartie 2006*). While generally rural places grew, it is the high amenity-rich rural places that grew the most (*McGranahan 1999, 2008*). In particular, the US rural west, or the *New West* (from the Rocky Mountain Front Range to the Pacific Coast) has attracted most in-migrants (*Nelson 2006, Travis 2007*). Although information about this change is most available for the US New West, a similar amenity-led migration pattern and effects are reported elsewhere, such as in western Canada and in upland and mountain regions more globally. It has been referred to as *amenity migration* (see especially *McIntyre et al 2006, Moss 1994, 2006*). The August, 2007 Similkameen Valley household survey for this project found 64% of its respondents were this kind of migrant.

Amenity migration — the movement of people to places rich in natural and/or cultural amenities — offers opportunities such as economic growth and diversification, improved services and facilities along with new ideas and experiences (*McGranahan and Wojan 2007, Moss 2006, Rasker and Alexander 2003*). While some high amenity, rural communities experience these benefits, there have also been serious negative effects. Socio-economic ones include lack of affordable housing, increasing cost of living, widening income disparity between earlier inhabitants and amenity migrants and social and physical dislocation of people of modest means. The most common biophysical outcomes are low-density sprawl, land fragmentation with conversion to residential development, increasing urban-wildland interface and depletion of water resources along with more general stress on ecological systems (*Glorioso and Moss 2007, Gobster and Haight 2004, Power 1996*).

The Similkameen Valley Planning Society (SVPS), a not-for-profit organization based in Keremeos and Princeton, BC, became aware of the growing change amenity migration was bringing to the Similkameen Valley. For example, amenity migrants seemed to play a dominant role in Area B's (Table 3) dwelling average value increasing between 2001 and 2006 by 67% (\$143,981 to \$404,525). Therefore, in 2007, SVPS initiated a project that would study and strategically respond to amenity migration. In Phase I of the project, amenity migration surveys were undertaken to inform the Valley's residents, decision-makers and planners of the role and impacts of amenity migration to their communities. These surveys undertaken in both the Similkameen and South Okanagan Valleys produced significant and useful information, and have been reported in three documents:

Table 3. Housing Affordability in Similkameen Valley

Area	2006 Dwelling Average Value (\$)	2001 Dwelling Average Value (\$)	% Change from 2001 to 2006	% of Renters paying \geq 30% of household income on housing (2006)	% of Owners paying \geq 30% of household income on housing (2006)
Area B	404,525	143,981	64%	33%	36%
Area G	182,522	96,357	47%	46%	16%
Area H	323,374	170,437	47%	20%	23%
Keremeos	189,628	102,305	46%	49%	16%
Princeton	246,194	97,115	55%	49%	16%
Total Ave.	269,248	122,039	45%	39%	21%

Notes: BC average dwelling value in 2006 was \$418,703.
There is no information about Indian Reserves.

1. *Amenity-Led Migration in the Similkameen & South Okanagan Valleys, Project Phase 1 Technical Report*, International Amenity Migration Centre (14 April & 24 June, 2008). This detailed report (see Appendix B) includes the findings for the projects' two surveys (semi-structured key informant survey and random household survey) in the Similkameen and South Okanagan Valleys.
2. *Summary Report: Similkameen In-Migration Survey*, Similkameen Valley Planning Society (May 2008). This interim report outlines key findings of the household survey's Similkameen Valley part.
3. *Similkameen-South Okanagan Amenity Migrant Study, Special Report to Parks Canada: Empirical Analysis of Selected Survey Questions*, Similkameen Valley Planning Society, (January, 2008). The report provided information to *Parks Canada* for the socio-economic analysis part of its South Okanagan and Similkameen National Park Reserve Feasibility Study.

Due to a short fall in funds for analysing the survey information, the above reports used only descriptive statistical analysis that summarized and displayed the data using simple statistical tools, such as percent, average, and median. Although it was an important step in understanding the amenity migration phenomenon in the Valley, a more sophisticated level of analysis would be an asset for the project's next phases, crafting a strategy (Phase 2) and action planning (Phase 3) for the sustainability of the Similkameen Valley ("Sustainable Similkameen").

Therefore in Phase 2 (2009-10) some funding was allocated to improve the information, especially through using inferential statistical analysis².

Phase 2 of the project, and this report, focuses on conditions in the Similkameen Valley. However, it includes some results for the South Okanagan Valley part of the household survey where the information is significant for understanding amenity migration in the Similkameen. For the same purpose comparisons are made with the province (using 2001 and 2006 BC Census data). The report also bridges the earlier descriptive and later inferential analyses, focusing especially on providing information for the project's Phase 2 – developing a strategy for the socio-cultural, environmental and economic sustainability of the Similkameen Valley.

2.0 Methodology

This 2007-08 amenity-led migration study uses both quantitative and qualitative surveys. The results of the surveys were analyzed, compared and augmented by reviewing relevant literature on amenity migration, with particular emphasis on western North American mountain regions and BC Statistics 2001, 2006. Although that study was conducted in both the Similkameen and South Okanagan Valleys, only the results for the Similkameen Valley are reported here (see above discussion).

The qualitative survey was undertaken first, and consisted of semi-structured, in-depth interviewing of 15 key informants residing in Similkameen and South Okanagan Valleys and knowledgeable about the socio-cultural, political-economic and biophysical condition of the valleys. Among these interviewees were a mayor, organic farmer, hotel manager, real estate agent, bank manager, Indian Band development director, regional district's planning manager, NGO leaders, economic development officers, and automobile repairman. All interviews were in-person, each typically lasted about 1.5 hrs and were guided by the same set of 50 questions. The information obtained from this research tool was used in developing a random sample questionnaire of 40-questions. This sample "household" survey was designed (Appendix C), tested and then mailed to 700 property owners/households in the Similkameen Valley, which

² *Inferential Statistics* investigate questions, models and hypotheses. In many cases, the conclusions from inferential statistics extend beyond the immediate data alone. For instance, inferential statistics is used to try to infer from sample data a population's attitude. Or, inferential statistics is used to make judgments of the probability that an observed difference between groups is a dependable one, or one that might have happened by chance in this study. Thus, inferential statistics is used to make inferences from our data to more general conditions; and descriptive statistics is used more simply to describe what's going on in our data.

representing 14% of the Valley’s owner-occupied and second home dwellings³, and 12% of total number of Valley dwellings⁴ (Table 4). Renters *per se* and “Indian Reserves” were not surveyed due to inaccessibility or unavailability of these rosters. These shortcomings were ameliorated to some extent by the key informant survey and Census data.

Table 4. Similkameen Valley Sample Survey Response Rate (2007)

SURVEY AREA	TOTAL OWNER OCCUPIED DWELLINGS ³ (2006)	TOTAL NO. OF DWELLINGS ⁴ (2006)	SURVEYS MAILED	% of OWNER-OCCUPIED DWELLINGS ² (2006)	% of TOTAL NO. OF DWELLINGS ³ (2006)	RETURNED / COMPLETED SURVEYS	RESPONSE RATE (%)
Areas B & G	1,740	2,026	250	14%	12%	68	27%
Area H	1,796	1,902	200	11%	11%	52	26%
Keremeos	518	654	125	24%	19%	50	40%
Princeton	1,043	1366	125	12%	9%	63	50%
Total	5,097	5,948	700	14%	12%	233	33%

Source: BC Statistics 2006

The household survey was self-administered by respondents in their homes. The accompanying introductory letter explaining the objectives of the survey and defined terms used in the questionnaire, such as *amenity migration*, temporal types of *amenity migrant*⁵ (*permanent*⁶, *seasonal*⁷ and *intermittent*⁸), *economic migrant*⁹, *local person*¹⁰, *returned resident*¹¹ and

³ BC Census does not include second homes in *owner-occupied dwellings*. Because second homes property owners were included in the survey the number of second homes are included in this figure.

⁴ This figure includes owner-occupied, rented-occupied, and second home dwellings.

⁵ *Amenity migrant* is a person who primarily moved to the Valley because of the natural or environmental amenities such as mountains, lakes, rivers, forest, climate and recreational opportunities; and/or socio-cultural amenities such as safe/friendly communities, rural values and lifestyle.

⁶ *Permanent amenity migrants* reside most of the time in the high amenity place.

⁷ *Seasonal amenity migrants* reside in the high amenity place for one or several periods each year, such as the summer or the ski season.

⁸ *Intermittent amenity migrants* move between their residences more frequently.

⁹ *Economic migrant* is a person who primarily moved to the Valley for a job, to start a business, or other economic reasons.

¹⁰ *Local person* is someone who was born and raised in the Valley.

¹¹ *Returned resident* is a person who left the Valley and returned as an adult. They were classified as a separate cohort because the project’s key informants did not consider them as migrants, and may exhibit other specific, significant characteristics. However, they were considered as *migrants* in both 2001 and 2006 BC Census.

*others*¹² The questions, which took from 25 to 35 minutes to complete, can be grouped into five categories: socio-economic profile; key reasons for in-migration; attitudes and behaviours toward amenities; socio-cultural, political, economic and environmental effects; and local government's ability and *will* to respond to related issues.

To increase participation, the survey was advertised on local community notice boards, in local newspapers and on regional radio, and several newspaper editorials were written to encourage local participation. The survey was conducted in late 2007. A total of 233 respondents returned their completed questionnaire representing 33% of the total mailed (Table 4). This retention is considered high, especially for developed countries. *Johnson and Owens* (2003) states that due to concerns with privacy, confidentiality, the exploitation of personal information, general cynicism, and declining civic participation, response rates have been declining in most of the industrialized world for at least several decades.

3.0 Who are the Amenity Migrants?

Amenity migrants are people who move as permanent or part time residents to a place principally because of its actual or perceived higher environmental quality¹³ and/or cultural differentiation¹⁴ (see especially *Green, Deller & Marcouiller 2005, Loffler & Steinicke 2008, Moss 1994, 2006, Moss, Glorioso & Krause 2009*). They are motivated mainly by opportunities these amenities afford for leisure, learning (including spiritual development), rural life-ways, and secondarily, for economic gain (Fig. 4). If economic gain is the primary motivator for locating in high amenity places, they are *economic migrants*, not *amenity migrants*. Recently, when referring to *amenity migration* together with *economic migration* in amenity-rich places the term *amenity-led migration* is often used. Climate is considered part of environmental amenity. However, to capture the more recent moving of people to escape real and anticipated negative impacts of climate change, this factor was more recently added to the amenity migration construct as a key motivator (Fig. 4). The set of key motivating factors for amenity migrants are

¹² *Others* refers to people who do not consider themselves the other types of residents.

¹³ *Higher environmental quality* refers to environmental amenities, including terrestrial and aquatic landscapes, climate, air, water and biodiversity quantity and quality.

¹⁴ *Cultural differentiation* refers to how different from others the cultural amenities of a place are. Cultural amenities refer to both intangible and tangible manifestations of human groups considered culturally valuable by their earlier originators or others.

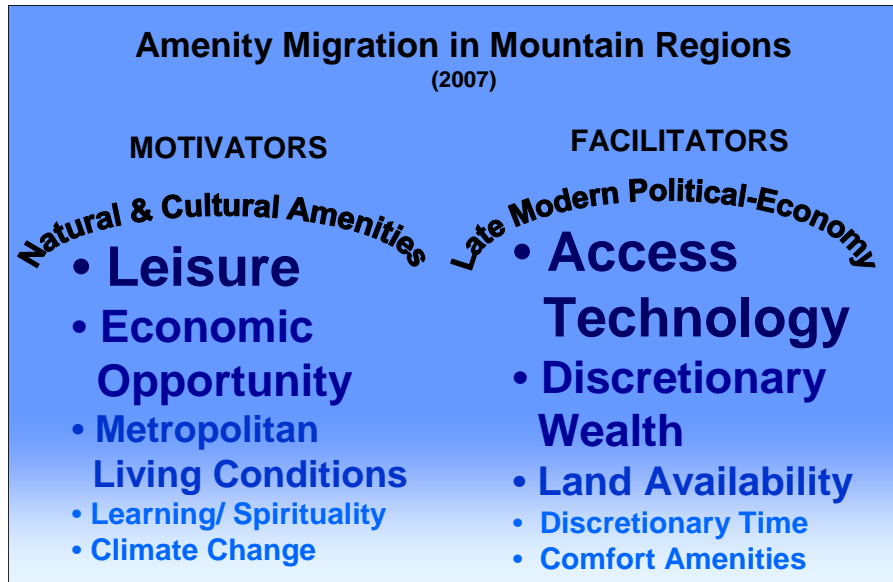
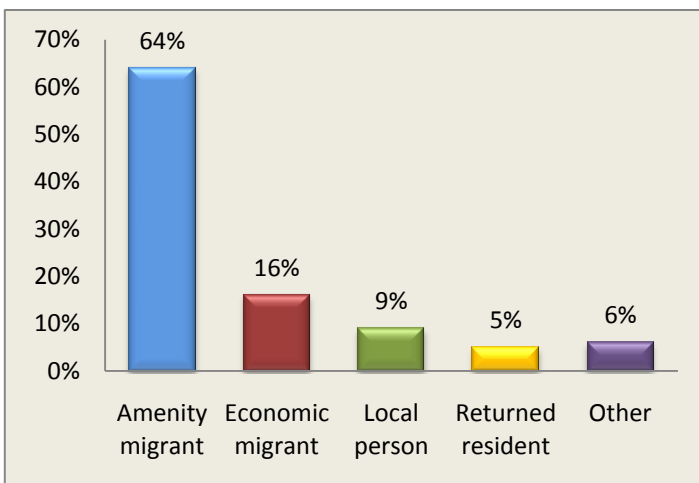


Figure 4. Amenity migration construct indicating comparative significance of key motivators and facilitators (Moss 2008:268).

joined by a set of facilitating factors, especially access-facilitating technology (good roads, airports, wireless internet and cell phone connections, etc.), discretionary wealth, land availability, discretionary time, and comfort amenities (hotels, boutiques, social clubs, medical specialists, etc) (Fig. 4).

4.0 Similkameen Valley Resident Types and Reasons for Residence

Figure 5. Resident Types in Similkameen Valley

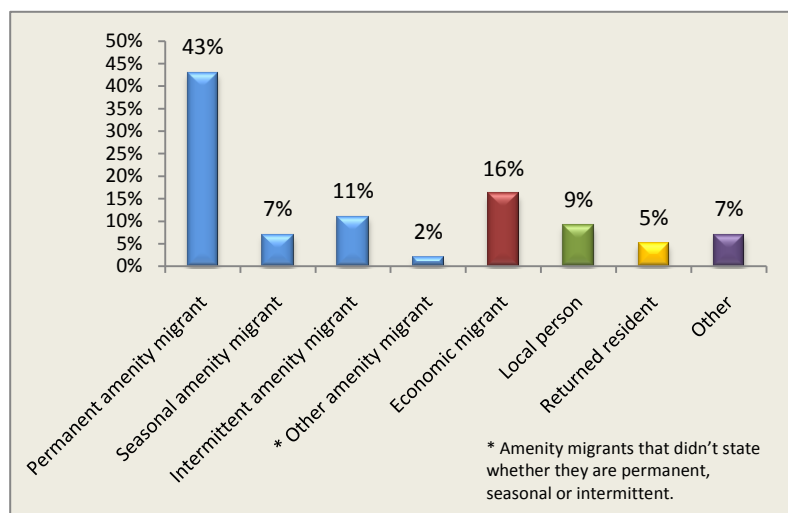


Using the above description of amenity migration, 64% of respondents in our 2007 Similkameen household survey classified themselves as *amenity migrants*, 16% as *economic migrants*, 5% as *returned residents*, 9% as *local people* and 6% *others* (Fig. 5). Breaking down the amenity migrants into permanent and part-time residents as percentage of all respondents, 43% were permanent amenity migrants while 18% were part-time (seasonal and intermittent)

amenity migrants (Fig. 6)¹⁵.

¹⁵ A caution is needed here about the term “permanent resident”. So called permanent amenity migrants are also not so permanent. Many are absent intermittently, often for a whole

Figure 6. Permanent and Part-time Amenity Migrants as Percentage of Total Respondents



What were the reasons (motivators and facilitators) for coming to or remaining in the Similkameen Valley? Every resident type chose the natural environment and then, cultural differentiation as a *Very Important Reason* for moving to or remaining in the Valley. Looking more particularly at these reasons, the top ones chosen by all resident types were: *To enjoy clean air* (68%), *To enjoy clean rivers and lakes* (63%), *Because of the climate* (62%), and *For peace and quiet* (59%). The 28 *Very Important* reason people gave, along with their resident type is shown in Table 5.

The top reasons for amenity migrants were:

- 1st *To enjoy clean air* (68%);
- 2nd *To enjoy clean rivers and lakes, Because of the climate, For peace and quiet* (tied at 62%); and
- 3rd *Because of mountains and mountain views* (50%).

Economic migrants' top reasons were:

- 1st *To enjoy clean rivers and lakes* (54%);
- 2nd *For a job* (51%); and
- 3rd *To enjoy clean air & Because of the climate* (tied at 49%).

Local persons top reasons were:

- 1st *To enjoy clean air* (67%);
- 2nd *To enjoy clean rivers and lakes and Because of mountains and mountain views* (tied at 52%); and

season of the year, and many move on for perceived superior amenities. Respondents to the household survey in the Similkameen and South Okanagan Valleys indicated that 29.6 % of the amenity migrants had migrated to another destination earlier, and 5.7 % said they were considering moving to another high amenity place. Also, 11.4 % of other resident types were considering moving to such places.

- 3rd Because of the climate and For peace and quiet (tied at 48%).

Returned residents’ top reasons were:

- 1st Because of the climate and To live in rural community (tied at 64%);
- 2nd To enjoy clean rivers and lakes and For peace and quiet (tied at 54%); and
- 3rd To enjoy clean air, Because of mountains and mountain views, and To live in a safer place (tied at 46%).

Although it was clear that amenity migrants rated highly the natural environment and then culture of the Similkameen as very important reasons, some also indicated that economic reasons were also very important for moving and/or living in the Similkameen (see reasons no. 20-23, Table 5). So, a significant question for planning for the Valley’s future is, are these self-identified amenity migrants primarily or secondarily motivated by economic opportunities? Are they amenity migrants or economic migrants? Likewise, are those self-identified economic migrants that rated natural environment and cultural attributes “Very Important” not amenity migrants?

Table 5. Very Important Reasons for Coming/Living in the Valley

REASONS	RANK (Based on no. of times mentioned as <i>Very Important reason.</i>)					
	Amenity Migrant	Economic Migrant	Local Person	Returned Resident	Others	All
<u>Natural Environment</u>						
1. To enjoy clean air.	1 st (68%)	3 rd (49%)	1 st (67%)	3 rd (46%)	1 st (60%)	1 st (68%)
2. To enjoy clean rivers and lakes.	2 nd (62%)	1 st (54%)	2 nd (52%)	2 nd (54%)	1 st (60%)	2 nd (63%)
3. Because of the climate.	2 nd (62%)	3 rd (49%)	3 rd (48%)	1 st (64%)	3 rd (47%)	3 rd (62%)
4. Because of mountains and mountain views.	3 rd (50%)	9 th (19%)	2 nd (52%)	3 rd (46%)	3 rd (47%)	5 th (48%)
5. To live in an area of diverse plants/wildlife.	5 th (39%)	4 th (43%)	4 th (43%)	5 th (27%)	2 nd (53%)	7 th (38%)
6. To be near parks.	12 th (23%)	12 th (14%)	6 th (33%)	5 th (27%)	6 th (33%)	12 th (25%)
7. To be in farm or ranch country.	16 th (14%)	10 th (16%)	4 th (43%)	6 th (18%)	9 th (13%)	17 th (18%)
<u>Cultural Differentiation</u>						
8. For peace and quiet.	2 nd (62%)	6 th (35%)	3 rd (48%)	2 nd (54%)	2 nd (53%)	4 th (59%)
9. To live in a safer place.	6 th (37%)	7 th (32%)	5 th (38%)	3 rd (46%)	2 nd (53%)	6 th (40%)
10. To live in a rural community.	8 th (31%)	8 th (30%)	5 th (38%)	1 st (64%)	2 nd (53%)	8 th (37%)
11. To enjoy the music or cultural scene.	18 th (4%)	(0%)	9 th (19%)	(0%)	8 th (20%)	21 st (6%)

REASONS	RANK (Based on no. of times mentioned as <i>Very Important reason.</i>)					
	Amenity Migrant	Economic Migrant	Local Person	Returned Resident	Others	All
12. Because of the wineries.	19 th (3%)	12 th (5%)	9 th (19%)	(0%)	(0%)	22 nd (5%)
13. Because it's culturally distinct.	20 th (2%)	(0%)	10 th (14%)	(0%)	9 th (13%)	23 rd (4%)
<u>Leisure</u>						
14. To retire.	4 th (44%)	9 th (16%)	8 th (24%)	6 th (9%)	7 th (27%)	7 th (38%)
15. To prepare for retirement.	11 th (25%)	14 th (5.4%)	7 th (29%)	3 rd (36%)	9 th (13%)	13 th (24%)
16. To be <i>near</i> abundant outdoor recreational opportunities.	7 th (33%)	9 th (16%)	4 th (43%)	6 th (18%)	6 th (33%)	9 th (33%)
17. Because of <i>diverse</i> outdoor recreational opportunities.	10 th (26%)	11 th (8%)	7 th (29%)	7 ^h (9%)	9 th (13%)	13 th (24%)
18. To be near Crown land for hunting/fishing.	13 th (20%)	12 th (5%)	6 th (33%)	6 th (18%)	9 th (13%)	15 th (20%)
19. To be near Crown land for motorized recreation.	14 th (17%)	13 th (3%)	6 th (33%)	5 th (27%)	10 th (7%)	18 th (17%)
<u>Economic Gain/ Opportunity</u>						
20. Because of cheaper property.	8 th (31%)	7 th (32%)	8 th (24%)	5 th (27%)	8 th (20%)	10 th (32%)
21. To have lower cost of living.	9 th (27%)	8 th (30%)	6 th (33%)	5 th (27%)	4 th (33%)	11 th (31%)
22. For a job	14 th (5%)	2 nd (51%)	4 th (43%)	5 th (27%)	6 th (20%)	16 th (19%)
23. To pursue a business opportunity.	18 th (4%)	5 th (40%)	4 th (43%)	6 th (18%)	9 th (13%)	19 th (16%)
<u>Learning/Spirituality</u>						
24. Because of spiritual attraction of landscape.	15 th (16%)	11 th (8%)	8 th (24%)	6 ^h (18%)	8 th (20%)	18 th (17%)
<u>Other Reasons</u>						
25. To be close to family or partner.	16 th (14%)	10 th (16%)	5 th (38%)	4 th (36%)	5 th (40%)	13 th (20%)
26. Good facilities for seniors.	12 th (23%)	10 th (16%)	8 th (24%)	(0%)	6 th (33%)	14 th (23%)
27. Because of its comfort amenities (restaurants, shops, entertainment, walk to most services).	17 th (11%)	12 th (5%)	9 th (19%)	7 th (9%)	7 th (27%)	20 th (12%)
28. Access to health care.	12 th (23%)	10 th (16%)	6 th (33%)	6 th (18%)	7 th (27%)	13 th (24%)

To determine how strongly or weakly self-identified amenity migrants value economic opportunity compared to self-identified economic migrants, an *odds ratio analysis*¹⁶ was done

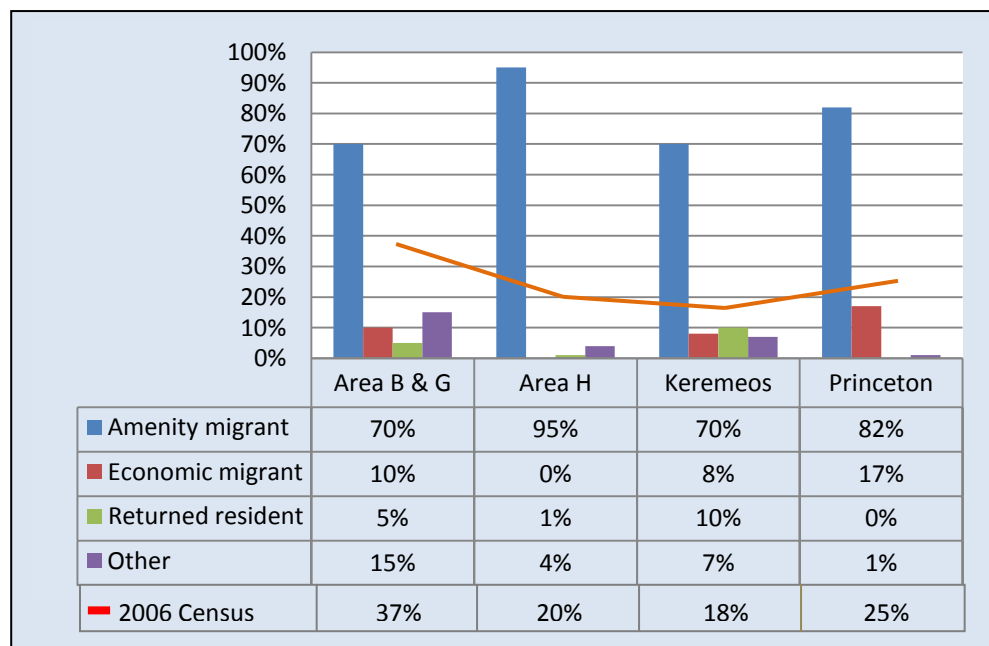
¹⁶ An odds ratio analysis is a way of comparing whether the probability of a certain event is the same for two groups.

(Appendix A, Table 1). The results show that compared to economic migrants, amenity migrants were 44% less likely to move to a place “For a job” and 94% less likely to move “For a business opportunity”. These results strongly indicate that “For a job” and “For a business opportunity” were secondary motivations for amenity migrants. But they were the primary motivations for economic migrants. Furthermore, the results also indicate that compared to economic migrants, amenity migrants were more motivated by the leisure opportunities of being near public land. The above results are consistent with findings of other amenity migration studies, including the role of wilderness and public lands in attracting migrants (see especially Dearien, *et al* 2005).

5.0 Location of In-migrants in the Similkameen Valley

The household survey indicates most migrants came after the year 2000, which also corresponded with 2006 BC Census data. Of the total 2,620 in-migrants to the Valley between 2001 and 2006 identified in the 2006 Census, based on the household survey it is estimated that 80% were *amenity migrants*, 9% *economic migrants*, 4% *returned residents*, and 7% *other*. Fig. 7. shows the location of in-migrants within the Valley based on both information sources. Some 37% migrated to Area B & G¹⁷, 25% to Princeton, 20% to Area H and 18% to Keremeos.

Figure 7. Location of Migrants to Similkameen Valley by Resident Type (2001-2006)



¹⁷ In the 2006 Census, 8% migrated to Area B while 29% moved into Area G. However, in the project’s household survey Area B & G were one cluster or stratum which necessitated the summing of in-migrants in Area B & G.

6.0 Comparison of Key Characteristics of Amenity Migrants with Other Residents

6.1 Age

Amenity migrants were the oldest among the Valley’s different resident types. In 2007, the median age of *amenity migrants* was 64 years old, followed by *others* at 59 years old, *economic migrants* at 57 years old, *returned residents* and *local people* at 55 years old. The median age of all household respondents was 60 years old. Seventy-six percent (76%) of total respondents was 55 years old and above; of which 68% were *amenity migrants* (Fig.8).

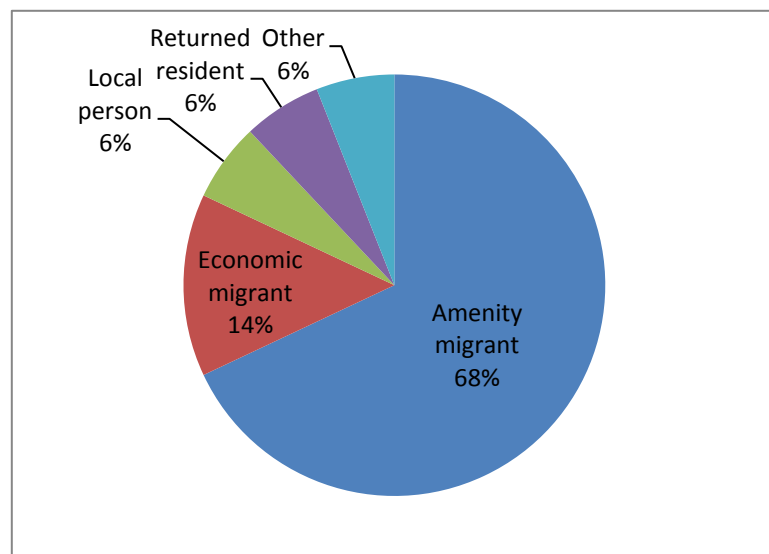


Figure 8. Percentage of Survey Respondents 55 years and Older by Resident Type.

Some Implications of Older In-migrants

According to BC Statistics the major factor driving population growth in all areas in BC from 2001-2031 has and will be in-migration. If the Valley’s trend

is maintained, it will continue to have a high percentage of migrants and they will likely be mature residents (55 and older). This would mean greater demand for retirement housing and health services. It will also likely result in a short fall in working age residents, labour which is needed to sustain the Valley’s economy, especially agriculture and much of the service sector. Elsewhere, some high amenity places have been drawing on surrounding labour, but it appears the Valley’s anticipated short will also be more general than in the Similkameen. Also, the Valley’s increasing cost of living, especially housing, will dissuade younger in-migrants (see *Economic Effects...*, Section 7.0). The younger population of the “Indian Reserves” may assist, but is likely not enough to replace the Valley’s aging labour force, or meet new demands.

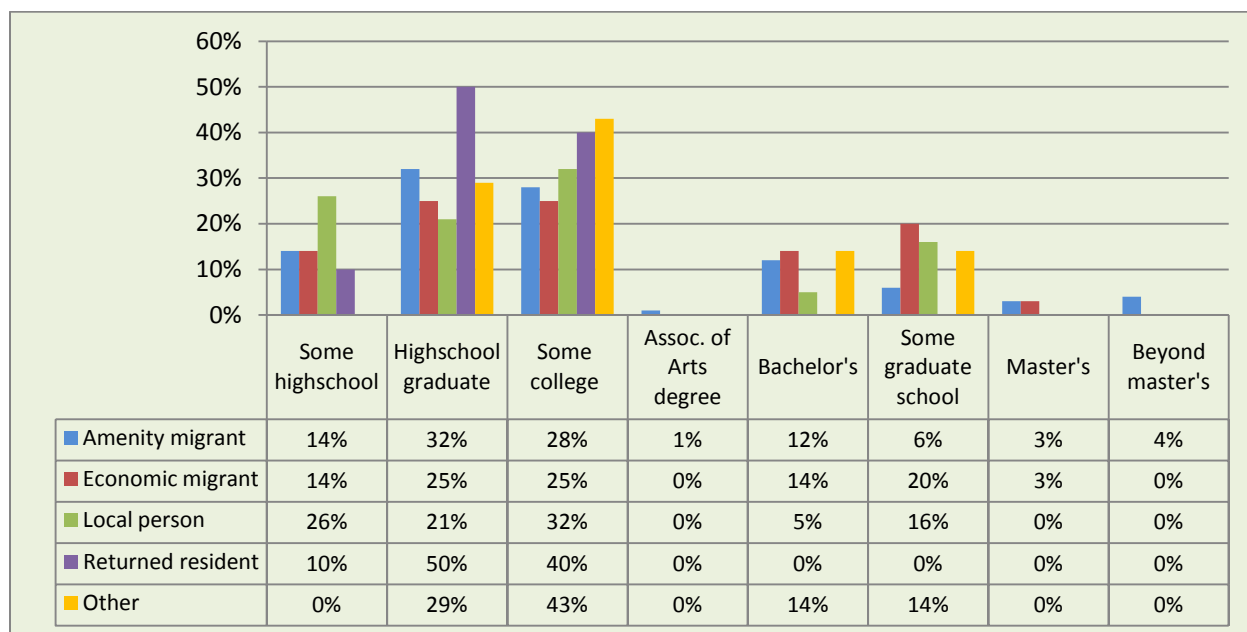
6.2 Education

The amenity migrants generally had a little higher level of formal education than any other resident type. Within this general picture the difference is most pronounced for graduate studies level (*Master's* and *Beyond Masters*), with 7% out of the total 10% attained by all resident types. *Economic migrants* (37%) and *others* (28%) had higher rates of post secondary education compared to *amenity migrants* (25%) and *local people* (21%). Both economic and amenity migrants had a higher level of educational attainment compared to local persons. But local persons were more educated than returned residents (Fig. 9).

Some Implications of Well-educated Migrants

The comparatively modest level of education of the amenity migrants suggests an early stage of the phenomenon's development, including limited *New Economy* skills. In the *New Economy* (or *Knowledge Sector*), where information replaces land and labour for generating wealth, highly educated migrants can create economic opportunities for local population that may not only lead to higher individual income but also sustained economic growth for the community they reside in. In addition, economic activities that need higher technical skills and education are typically more environmentally friendly, or *green*, such as learning industry, financial and built environment services. However, the danger is a possible mismatch of jobs that need higher skills and a local population that is not appropriately educated. Jobs in the *New Economy* need much more theoretical and analytical knowledge compared to jobs in more traditional economic activities such as agriculture, forestry and mining (except where *value-added* activities exist). Also, many activities in the *New Economy* use few employees, such as in computer software development.

Figure 9. Educational Attainment by Resident Type



6.3 Inadequate Income Data

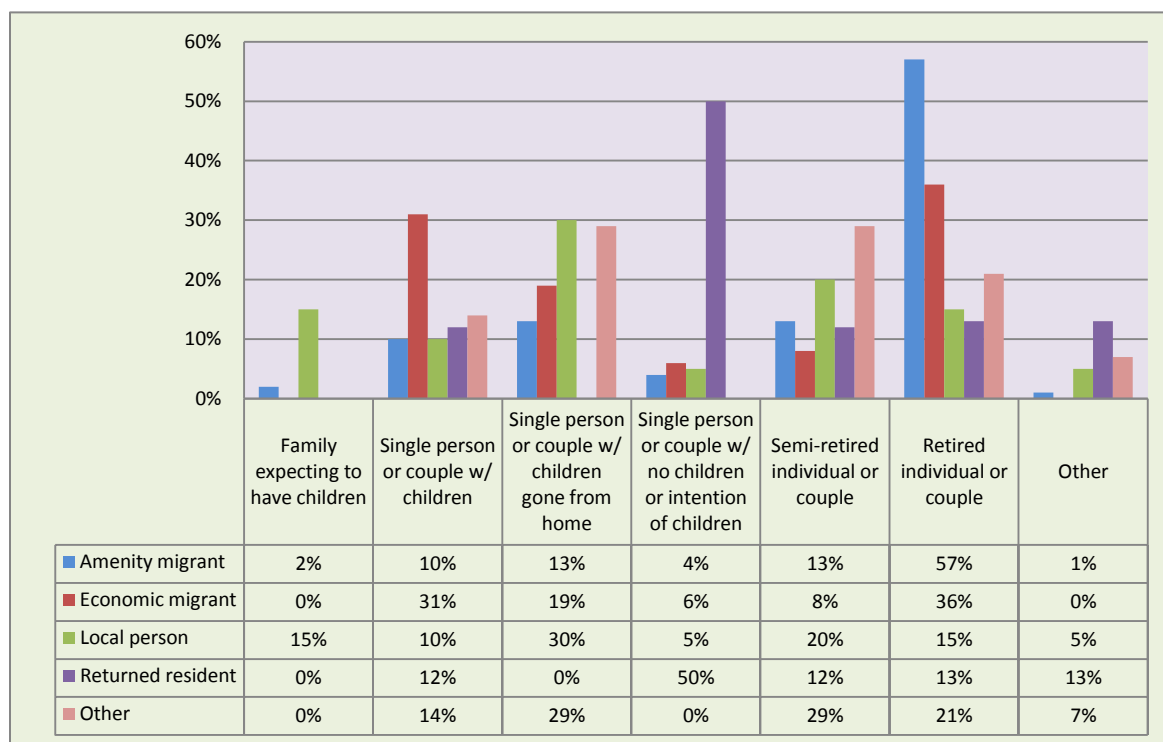
The annual household income information obtained from the survey was inadequate. Only 27% of the respondents indicated their income, and for *amenity migrants* and *economic migrants* in particular the percentages were lower; 20% and 22% respectively. In addition, there were two entries that were highly questionable; both were for permanent amenity migrants living in Keremeos: \$12M and \$50M. If these two entries were valid it would be reflected in the average household income of Keremeos residents for 2006, but this information was not available. However, the average income reflected in 2006 Census was for 2005, where the average household income for Keremeos was \$38,861 and the median was \$34,171. If we use the survey data for income the Household median income for all resident types in 2006 would be \$60,000, which was 54% higher than the Valley's 2005 median income and about 14% higher than BC's median income in 2005 of \$52,709. The survey data was therefore judged unreliable.

6.4 Household Type

The data on household type (Fig. 10) was consistent with expectations from the household survey's age information, and also with the finding of the key informant survey. Among the resident types, the economic migrants had the highest percentage of households

with children (31%). Likely due to the *amenity migrants'* age, only 12% of this resident type had or expected to have children. In addition, *amenity migrants* had the highest percentage of semi-retired and retired households (70%). The *returned residents*, who were younger than *amenity migrants*, had the same percentage of households that had or expected to have children (12%). This group also had the highest percentage among resident type that had no children or no intention of having children.

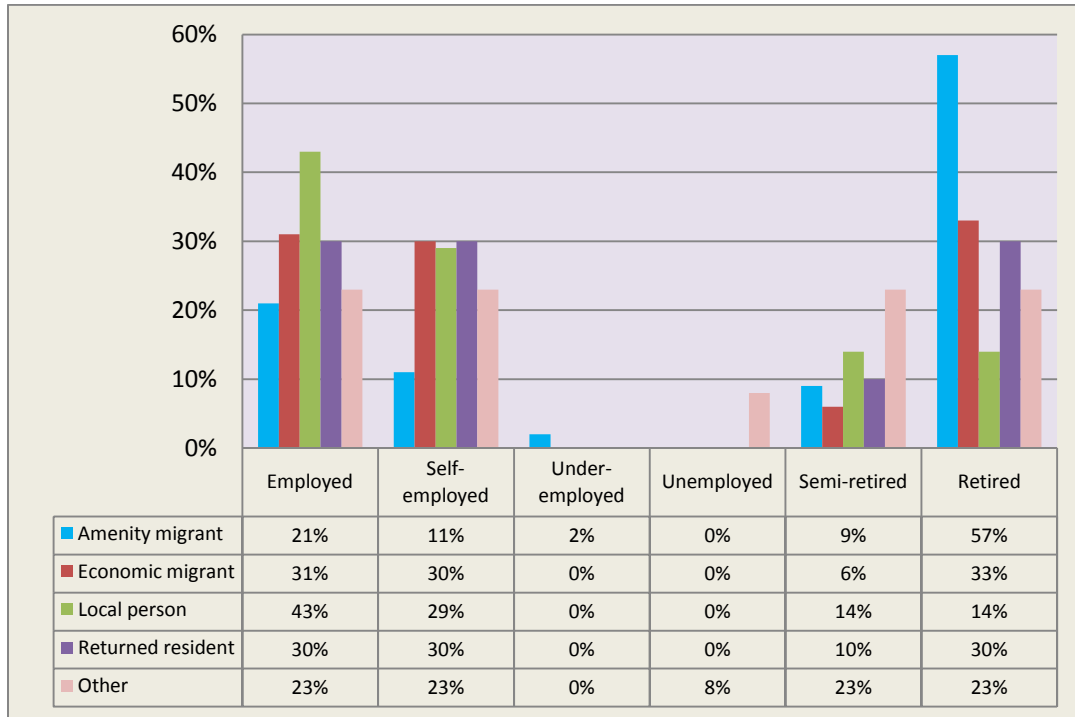
Figure 10. Household Type by Resident Type



6.5 Employment

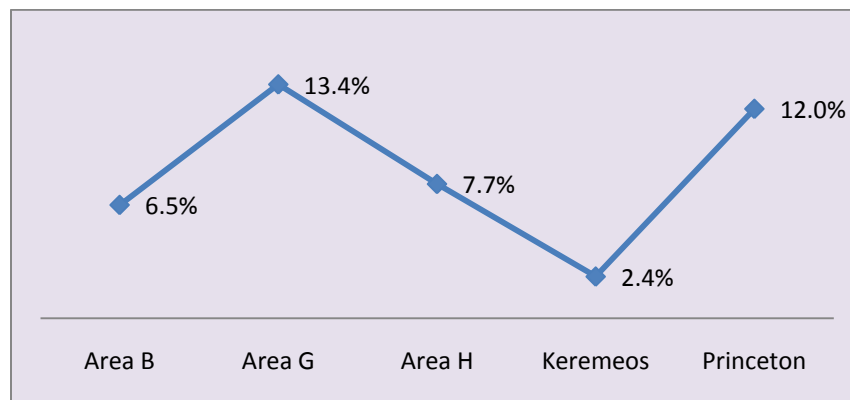
The employment data (Fig. 11), as anticipated from general amenity migration information, corresponded with age and household type findings. *Amenity migrants* had the highest percentage of *semi-retired* and *retired* respondents at 66%, followed by *others* at 46%, then *returned residents* at 40%, *economic migrants* at 39% and *local persons* at 28%. *Local persons* had the highest percentage of *employed* and *self-employed* respondents at 72%, followed by *economic migrants* at 61%, *returned migrants* at 60%, and then *amenity migrants* at 32%. Of all resident types only *others* (8%) were unemployed, and only *amenity migrants* (2%) were under-employed.

Figure 11. Employment by Resident Type



Based on the 2006 Census, the unemployment rate in the Similkameen Valley was 8.4%. This figure may be lower, because it did not include the “Indian Reservations” as there was no information on their unemployment rate in the 2006 Census. The Valley’s unemployment rate was 1.8% higher than RDOS (6.6%), 2.4% higher than BC (6.0%) and Vancouver (6.0%). However, unemployment rate in two areas Area G (13.4%) and Princeton (12%) were much higher than the Valley’s (Fig. 12).

Figure 12. Unemployment Rate in Similkameen Valley (2006)



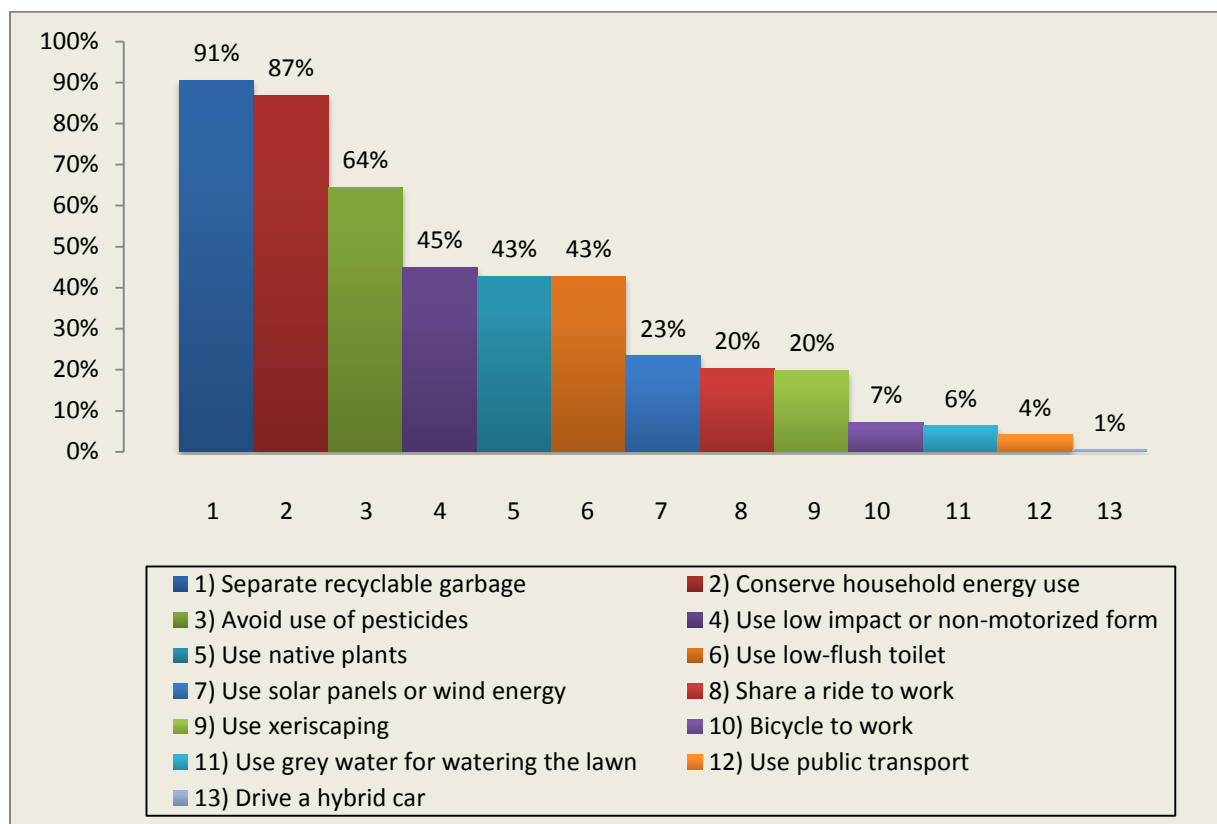
Source: BC Statistics 2006

6.6 Values and Behaviour

6.6.1 Environmental Conservation Practices

Fig. 13 shows the 13 practices undertaken to *sustain the environment* and the corresponding percentage of participation in them of all resident types in each activity. The top three environmental conservation activities in Similkameen Valley were: 1) *Separate recyclable garbage* (91%); 2) *Conserve household energy use* (87%); and 3) *Avoid use of pesticides and chemical fertilizers* (64%). More than 50% of total respondents did these. Looking at the list of 13, the level of participation in each activity decreases (from 45% to 1%) with newness or unfamiliarity of a technology (eg. use of solar panel or wind energy, 7%), and the cost involved (eg. hybrid car, 1%). But there were three exceptions to these criteria which still had low participation: 1) *Share a ride to work* (20%); 2) *Bicycle to work* (7%); and 3) *Use public transport* (4%). In general, it also seems that the lesser the direct impact of a conservation activity on an individual’s health, the lesser the respondents’ participation. For example, 64% of respondents avoided use of pesticides and chemical fertilizers, 43% used native plants, 20% used xeriscaping, and 1% used a hybrid car.

Figure 13. Similkameen Valley Residents Environmental Conservation Practices

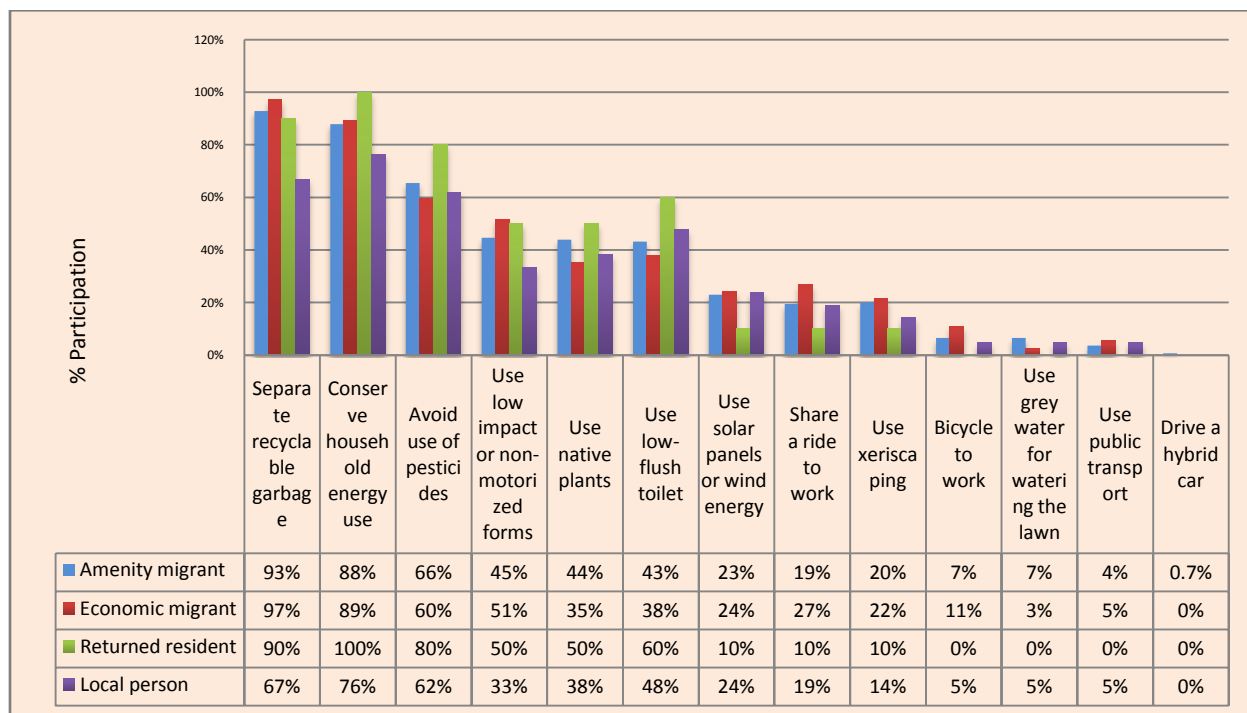


6.6.1.1 Environmental Conservation Practices of Resident Types

Some analysis of amenity migration suggests that amenity migrants can be categorized as resource-conservers or resource-consumers. The research on related behaviour of amenity migrants is quite limited, but indicates that generally their impacts on environmental amenities has been a degrading one, especially in the mountain context of comparative scarcity, poverty and ecological fragility (Huber et al 2005, Moss 2006, Price et al 1997, Rasker and Alexander 1997). In the household survey we obtained some indication of amenity migrants' environmental conservation behaviour along with a comparison with other Valley resident types.

Fig. 13. indicates the participation of all respondents in 13 practices to sustain the environment, and Fig 14. shows the level of participation by resident type. Caution must be used in interpreting the results with the use of percentages because the total number for each resident type differs. For example, there were 37 *economic migrants*, 21 *local persons*, 11 *returned residents*, 17 *others* compared to 147 *amenity migrants*. Because of amenity migrants' higher real number, their impact is likely greater than other resident types, as is indicated in Fig. 15.

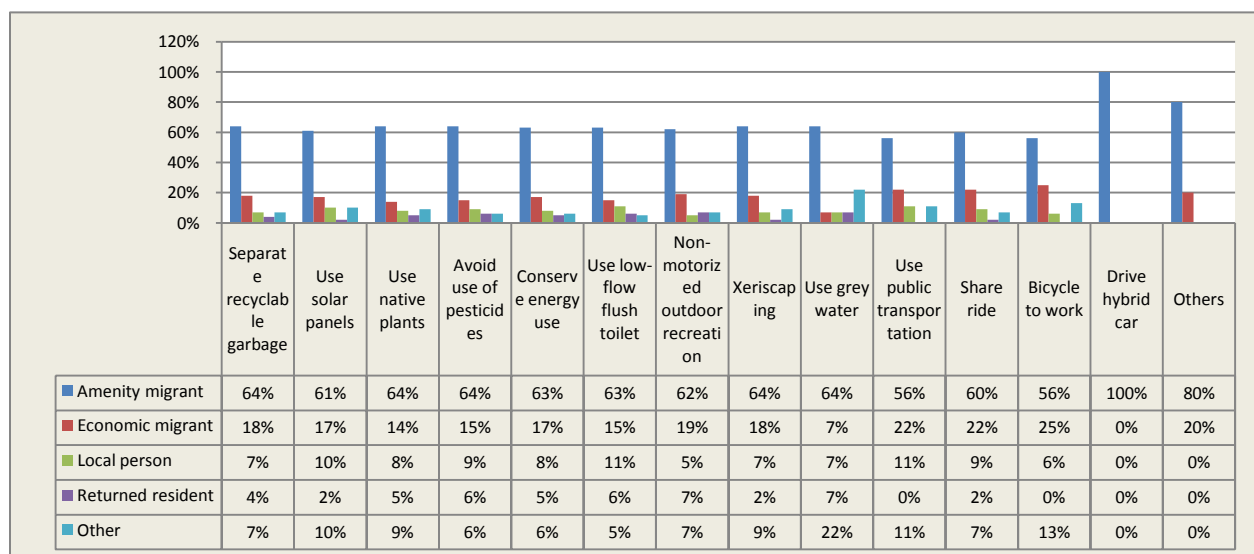
Figure 14. Environmental Conservation Participation by Resident Type



Breaking down the responses by resident type yielded the following results:

- Amenity migrants generally indicated they practiced environmental conservation. Although they only led in 2 environmental conserving practices out of the total 13 (use of grey water and hybrid car), they participated in all 13 activities. Also, their level of participation was always a few percentage points lower than the leading resident type, economic migrants.
- Economic migrants were the most conserving among the four resident types for the 13 activities considered. In addition, they led in all transportation-related practices (*share a ride to work, bicycle to work, and use of public transport*), except for *use of the hybrid car*. They led not only in the most familiar ones (*separate recyclable garbage and conserve household energy use*), but also less familiar, such as *use xeriscaping*, and a more costly one; *use of solar panels or wind energy*.
- The returned residents led in familiar conservation activities, such as *conserving household energy use, avoiding the use of pesticides and chemical fertilizers* and the semi-familiar ones: *low flush toilet* and *use of native plants*. Their level of participation was considerably lower in activities that were costly such as solar panels. Further, they were the only resident type that did not *bicycle to work, use public transport, and grey water for watering the lawn*.
- Local born and raised residents' level of participation in environmental practices was the lowest among the resident types.

Figure 15. Environmental Conservation Practices by Activity

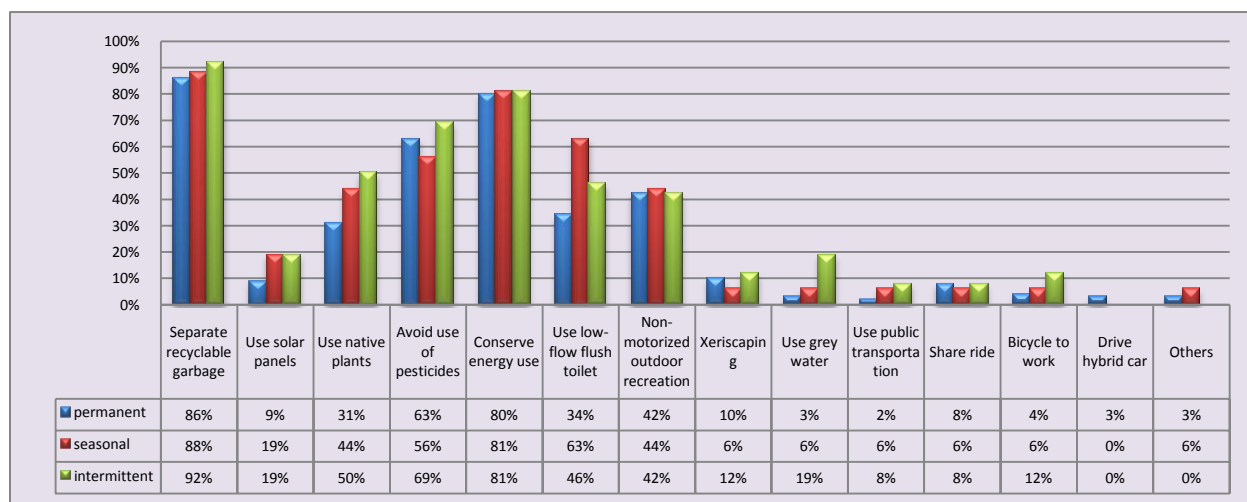


6.6.1.2 Comparison of Environmental Conservation Practices Of Amenity Migrant Types

Existing information about amenity migration in high amenity rural areas suggests their environmental behaviour differs based on their type of residence: permanent, seasonal and intermittent (with the latter two also referred to as second home owners or multi-resident dwellers). What is the situation in the Similkameen Valley?

Fig. 16. shows that part-time (seasonal and intermittent) amenity migrants led in 11 out of 13 environmental conservation practices, which indicates they were more resource-conserving than permanent amenity migrants. Further, breaking down the part-time amenity migrants into seasonal and intermittent shows that intermittent amenity migrants led in 8 out of 11 activities, which suggest they were more environmentally conserving than the seasonal amenity migrants.

Figure 16. Similkameen Valley Environmental Conservation Practices by Amenity Migrant Type



6.6.1.3 Respondents Attributes Influencing Environmental Conservation

The findings (Fig. 13), indicate that out of 13 environmental conservation practices only 3 had more than 50% of all respondents' participation: 1) *Separate recyclable garbage* (91%); 2) *Conserve household energy use* (87%); and 3) *Avoid use of pesticides and chemical fertilizers* (64%). What are the factors that influence most respondents' environmental conservation? Is it age, education, household type, employment, income, or reason for living in or moving to the Valley? The survey's income data seems unreliable, so it can not be included here.

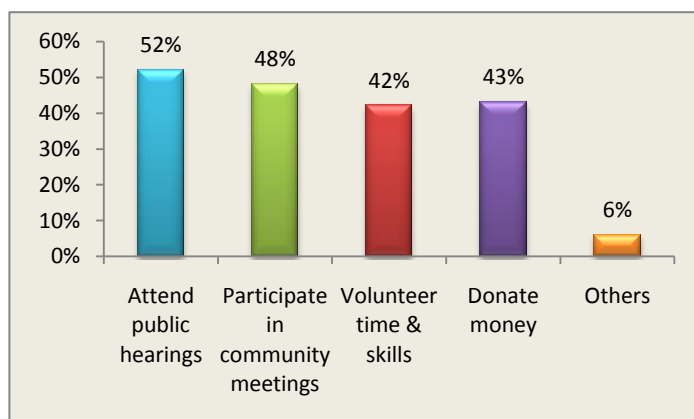
To answer this question an odds-ratio analysis was conducted (Appendix A, Table 2). It shows that:

- In general, age and reasons¹⁸ for residence in the Valley were the most important factors affecting respondents’ environmental conservation behaviour. Employment and household type correlations were found insignificant. Education was a significant factor for only one environmental action/practice, *Avoid use of pesticides*.
- Age was an important factor for 9 environmental practices — the older the respondent the less likely s/he would do the following: 1) *separate recyclable garbage*; 2) *use native plants*; 3) *conserve household energy*; 4) *use low-flow flush toilet*; 5) *use low impact or non-motorized forms of outdoor recreation*; 6) *use xeriscaping*; 7) *use grey water for watering the lawn*; 8) *share ride to work*; and 9) *bicycle to work*.
- The age factor may help explain why economic migrants were found to be more resource-conserving than amenity migrants. Economic migrants were younger than amenity migrants: median age of economic migrants was 57 years old, compared to 64 for amenity migrants. This also suggests why part-time amenity migrants, particularly the intermittent ones, were more environmentally resource-conserving compared to permanent amenity migrants. The median age of permanent amenity migrants was 68 years old, compared to 58 years old for seasonal amenity migrants and 56 years old for intermittent amenity migrants.

6.6.2 Community Participation

The survey findings (Fig. 17) indicate that the over-all level of respondents’ participation to resolving community issues was lower than their environmental conservation practices (Fig.14). Only one action “Attend public hearings” had more than 50% of respondents’ participation.

Figure 17. Similkameen Valley Respondent Participation for Resolving Community Issues



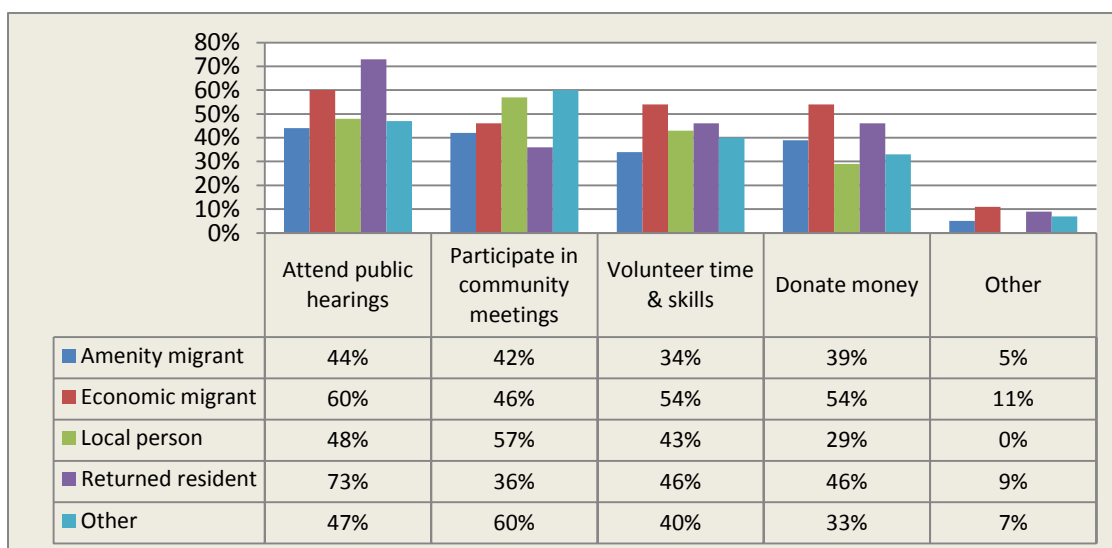
¹⁸ Not all reasons for coming and/ or living in the Valley (see Table 5) were found significantly important for a respondent to participate in environmental conservation practices (see Fig. 14). For complete list of significantly important reasons for environmental conservation practices see Appendix A, Table 2.

6.6.2.1 Community Participation by Resident Types

The survey findings (Fig. 18) indicate that:

- Amenity migrants participated less in the community compared to other types of Valley residents.
- Economic migrants participated the most.

Figure 18. Community Participation by Resident Type

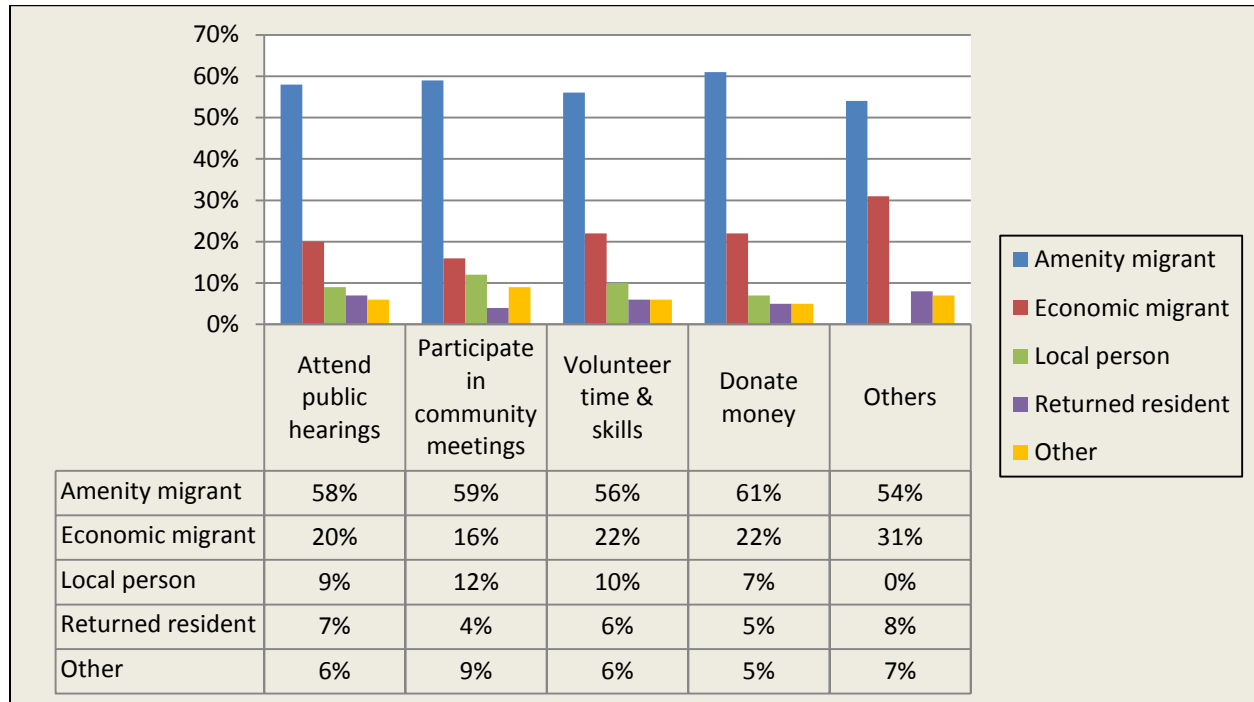


This lower participation gives us some insight into why some respondents considered amenity migrants as a threat. The following are examples of household survey respondent’s verbatim answers of why amenity migration is a threat.

- *Amenity migrants often have a different view of the future of the Valley as compared to long time residents. Amenity migrants often attempt to impose their biases and baggage onto their adopted neighbours.*
- *People bring their bad city habits and attitudes, which don't integrate with the country attitude.*
- *Some may try to change the area to greater reflect where they came from originally.*
- *They seem to want to change our way of life to suit theirs.*

However, similar with environmental conservation practices, due to being a much higher percentage of the population, the amenity migrants through these 5 indications of participation, likely have greater effects compared to any other resident type (see Fig. 19).

Figure 19. Community Participation By Type of Activity



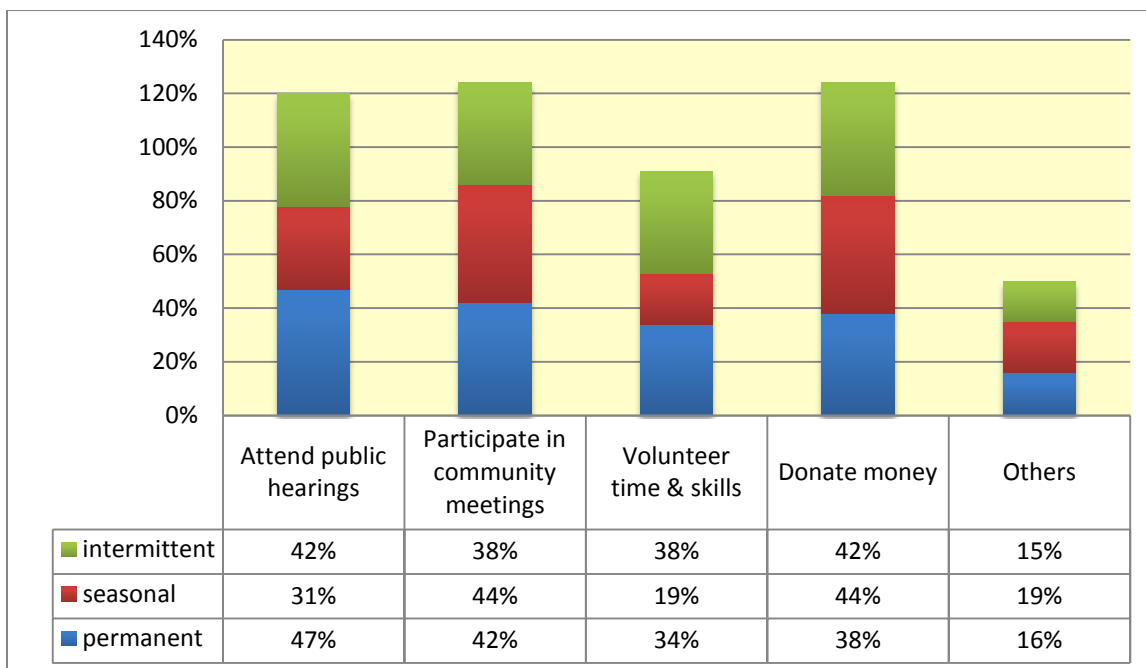
6.6.2.2 Community Participation of Amenity Migration Types

Volunteerism is generally considered crucial to the social, economic and environmental sustainability of rural communities. With increasing amenity migration the role of these migrants in their destination communities has become a significant concern. The little research undertaken on this subject is inconclusive. However, in some communities there is a belief, also reflected in some literature on amenity migration, that part-time amenity migrants (seasonal and intermittent) participate little in the affairs of the communities where they have their second homes or holiday cottages.

In the household survey 18% respondents identified themselves as part-time amenity migrants. This is a significant number; 2% higher than economic migrants and twice the number of local people (Fig. 6). Therefore, the following analysis was undertaken.

Overall part-time amenity migrants participated in community decision-making to resolve issues, and in some activities did so more than permanent amenity migrants (Fig. 20). This is especially true with intermittent amenity migrants. At the same time they were a few percentage points less than permanent amenity migrants in activities that had a set date, such as public hearings and community meetings.

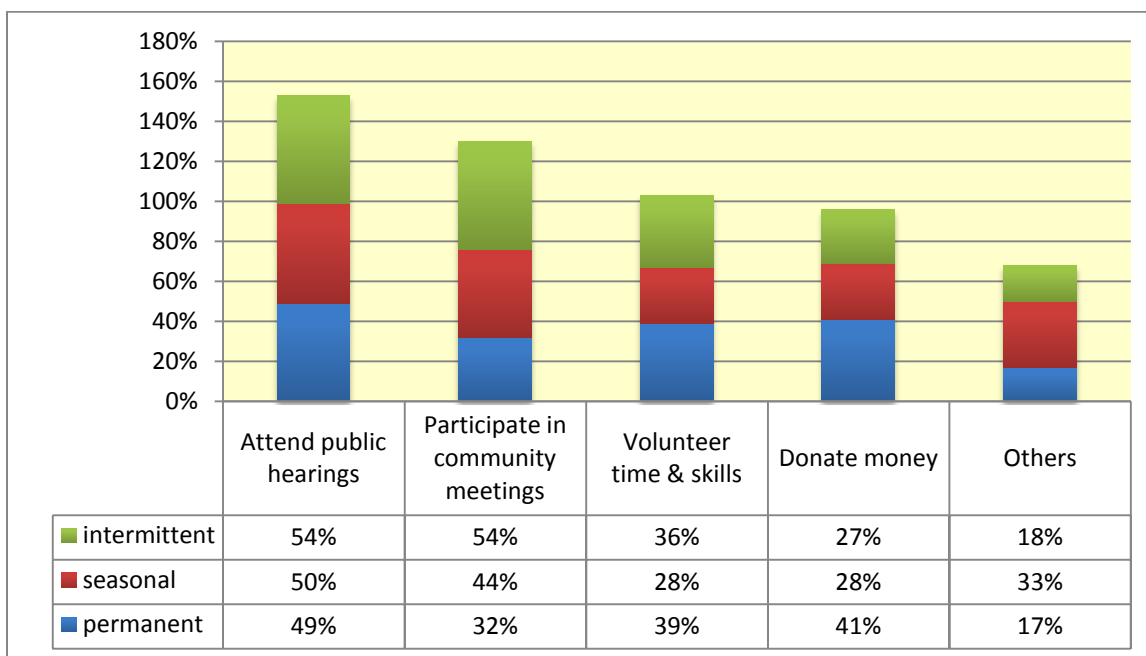
Figure 20. Level of Community Participation by Amenity Migrant Type



To see whether there is a difference when compared to a geographic area with a seemingly more advanced phase of amenity migration development, the same analysis was undertaken for the South Okanagan Valley (Fig. 21).

In the South Okanagan Valley, part-time amenity migrants, especially the intermittent type, also participated in community decision-making, and in some activities, similar to Similkameen, considerably more than permanent amenity migrants. A seeming difference between Similkameen and South Okanagan was for part-time amenity migrants participating more in activities undertaken at a set date and place: public hearings and community meetings. Similkameen and South Okanagan showed the opposite tendency.

Figure 21. Community Participation by Amenity Migrant Type In South Okanagan Valley



6.6.2.3 Respondents Attributes Influencing Community Participation

Similar to environmental conservation practices above, the attributes of age, education, employment, household type and reasons for coming to or living in the Valley were correlated with 5 community participation activities to resolve issues to determine which attribute(s) were most important (Appendix A, Table 3). The following seems most relevant to the project’s objectives:

- Age, reasons for migration, employment, and education were found the most significant attributes for participation.
- Household type was found insignificant.
- Out of the four reasons amenity migrants were disadvantaged by three because they were older, non-employed (retired) and higher educated. The last one seemed surprising because it is commonly thought that if amenity migrants have a higher level of educational attainment, compared to other resident types (see Section 6.2) particularly in post graduate studies, their participation should be high. But it was low.

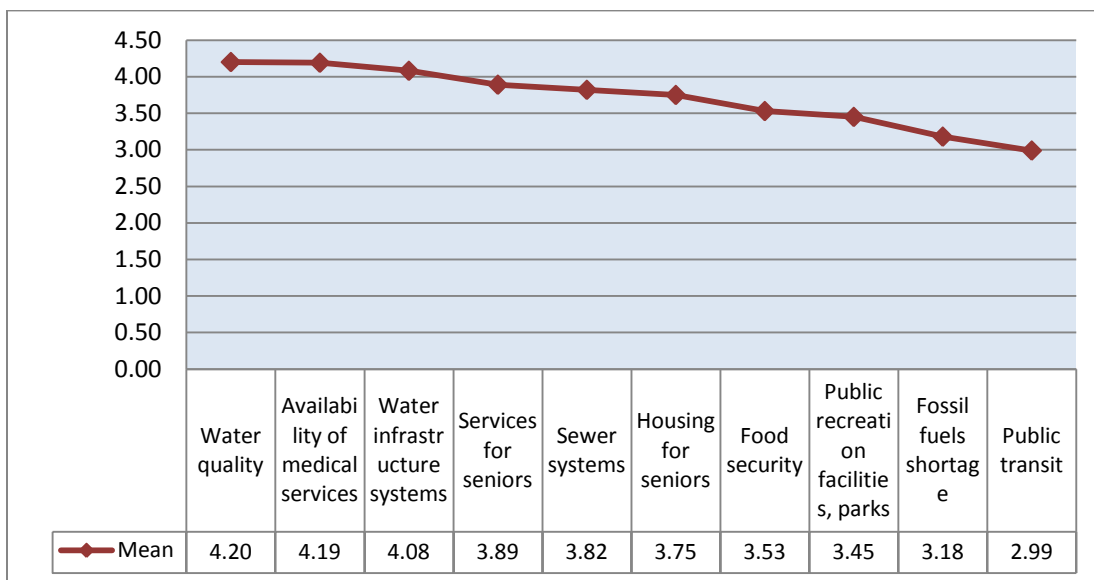
6.7 Perception of Social, Economic and Environmental Issues

6.7.1 Key Valley Future Issues

In the random household survey, respondents were asked to rate in a scale of minor to major¹⁹ key issues the Valley may face in the next 20 years. A *one-way analysis of variance* called ANOVA was used with the following main results:

- Out of 28 key issues that the *Valley may face in the next 20 years* 10 were found to be statistically significant²⁰. Water quality was identified as the most important future problem, followed by availability of medical services. See Fig. 22 for other 8 issues ranking.

Figure 22. Statistically Significant Key Issues the Valley May Face in the Next 20 Years



¹⁹ The *Lickert-Type* rating of 1 to 5 (1 minor and 5 major) was used to measure the respondents' responses.

²⁰ Some of the issues identified here are different from those reported in the *Technical Report* (Appendix B) due to the use here of a more representative statistical tool. The earlier report did not consider if the differences among the means were statistically significant, meaning the differences were likely *not* by chance occurrence.

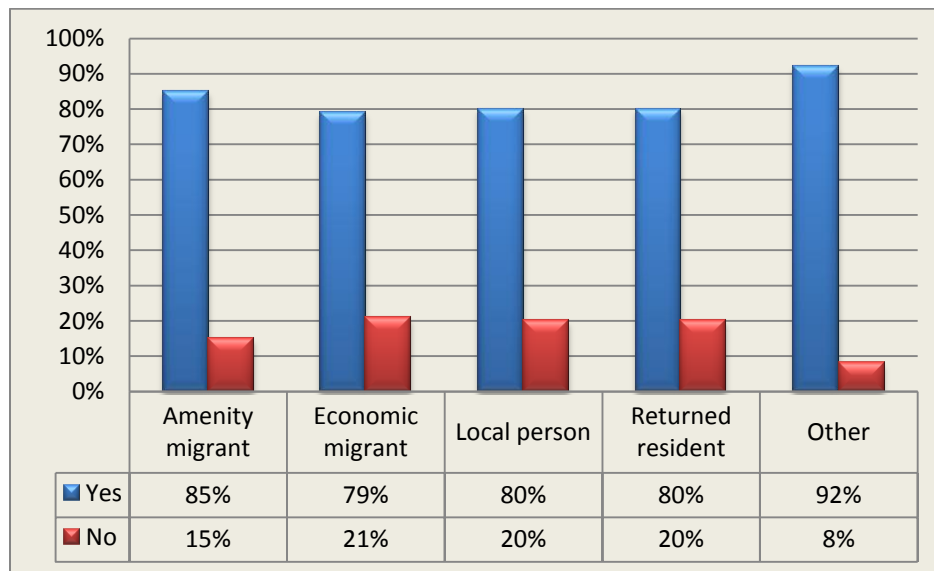
In addition to identifying issues that are most significant, the most important issues were also identified for each resident type:

- Amenity migrants: 1) *Services for seniors*, 2) *Housing for seniors*, 3) *Availability of medical services*, and 4) *Food security*.
- Economic migrants: 1) *Water quality*, 2) *Water infrastructure systems*, 3) *Public transit*, and 4) *Fossil fuel shortage*.
- Returned residents: 1) *Sewer systems*, and 2) *Public recreation facilities, parks*
- Local persons: There were no statistically significant key issues that local persons thought of major importance in the future. Also, the analysis indicated that this resident type would participate less on the following issues: 1) *Fossil fuel shortage*, 2) *Public transit*, 3) *Public recreation facilities*, 4) *Sewer systems*, and 5) *Food security*.

6.7.2 Capability and Will of Local Government

When asked if local government in the Valley needs to do more regarding the above key issues they identified, 84% of total respondents stated Yes. In addition, the responses across resident types were fairly similar (Fig. 23).

Figure 23. Local Government Needs to Do More about Valley Key Issues



When asked which top 3 key issues local government should give most attention to, only 16% (38 respondents) of the total household respondents answered this question. The top 3 were *Air quality*, *Water quality*, and *Available medical services*.

However, when it came to the opinion of resident types on whether or not local government has the planning, management and financial capability to address the top 3 issues identified above, there was a large difference in opinions among resident types. Of the 24% of respondents who thought local government was capable (Fig. 24), 43% came from local persons, 24% from amenity migrants, 12% from economic migrants, and 10% from returned residents (Fig. 25). But, only 49% of respondents had a definite answer to the question (Fig. 24) which represents 8% of the total survey respondents.

Figure 24. Local Government Capability to Address Valley Key Issues

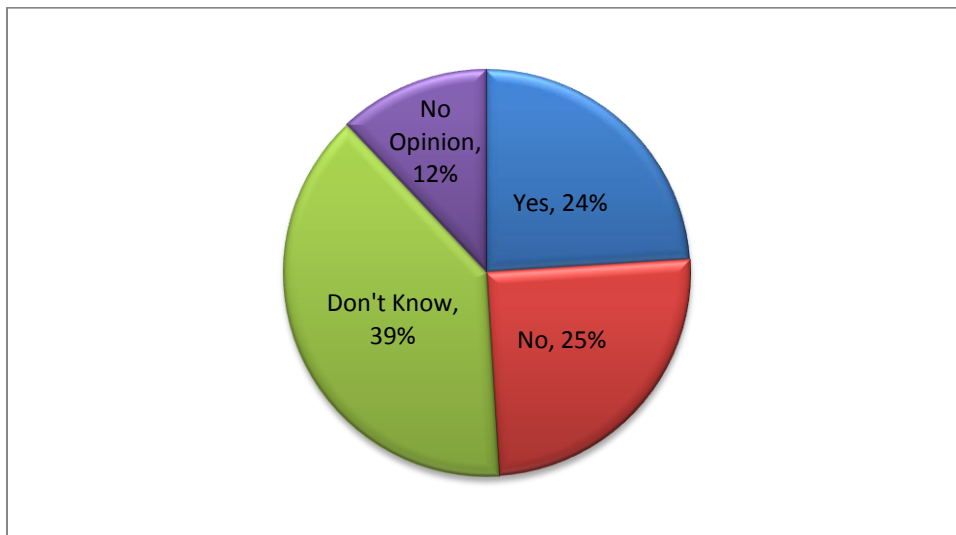
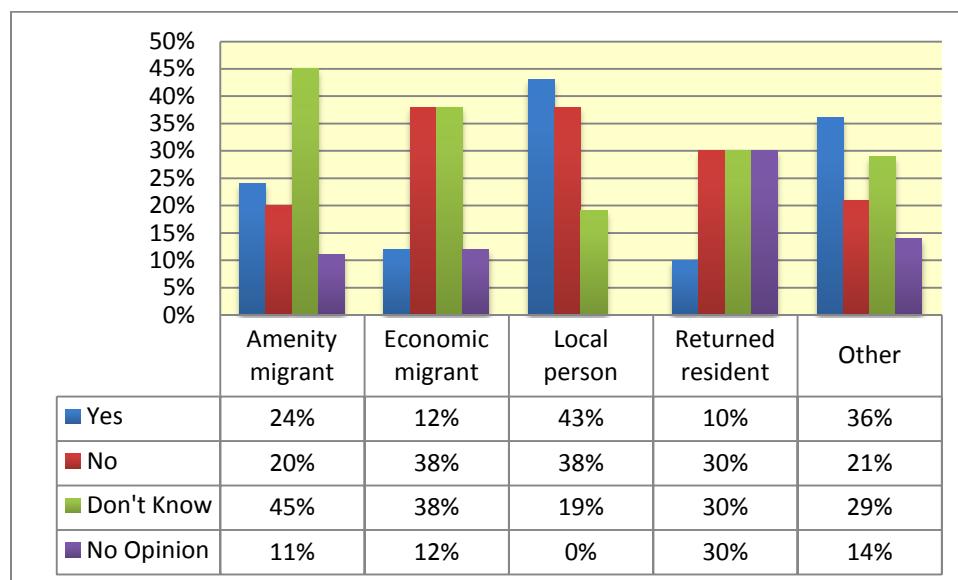


Figure 25. Local Government Capability to Address Valley Key Issues by Resident Type



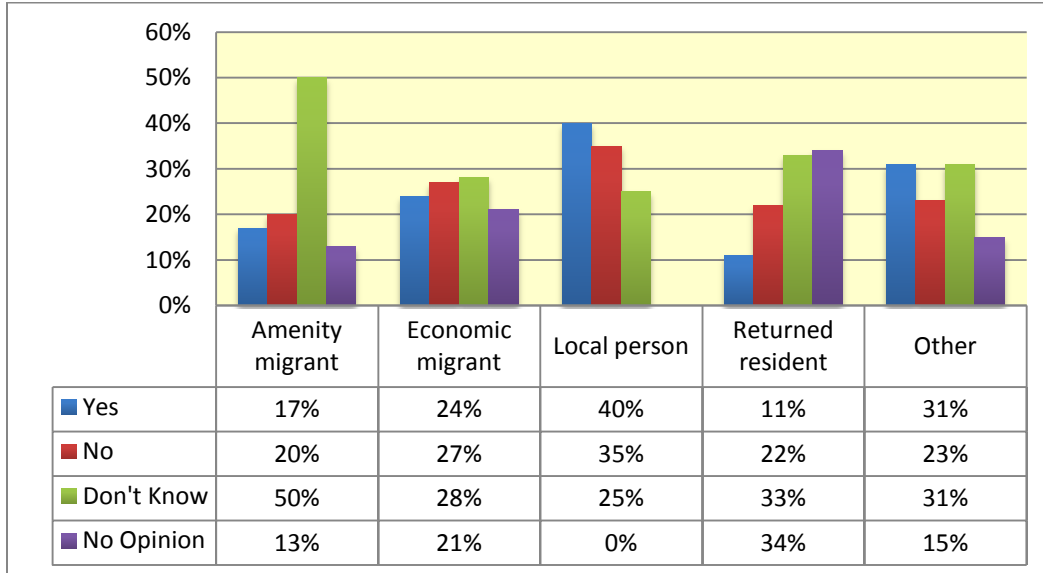
Regarding whether or not local government has *the will* to act on the top 3 issues the respondents identified, there was more uncertainty. Fig. 26 shows that only 21% of total respondents thought local government had this *will* and 23% thought not. However, only 44% of respondents had a definite answer to this question (which constitutes 7% of total survey respondents).

Figure 26. Local Government’s *Will* to Act on Valley Key Issues



Regarding differences in opinion about the will of local government among resident types. Forty percent of local persons thought local government has *the will* to address the Valley future key issues they identified, as compared to 17% of amenity migrants, 24% for economic migrants, 11% for returned residents and 31% for others (Fig. 27).

Figure 27. Local Government’s *Will* to Act on Valley Key Issues by Resident Type

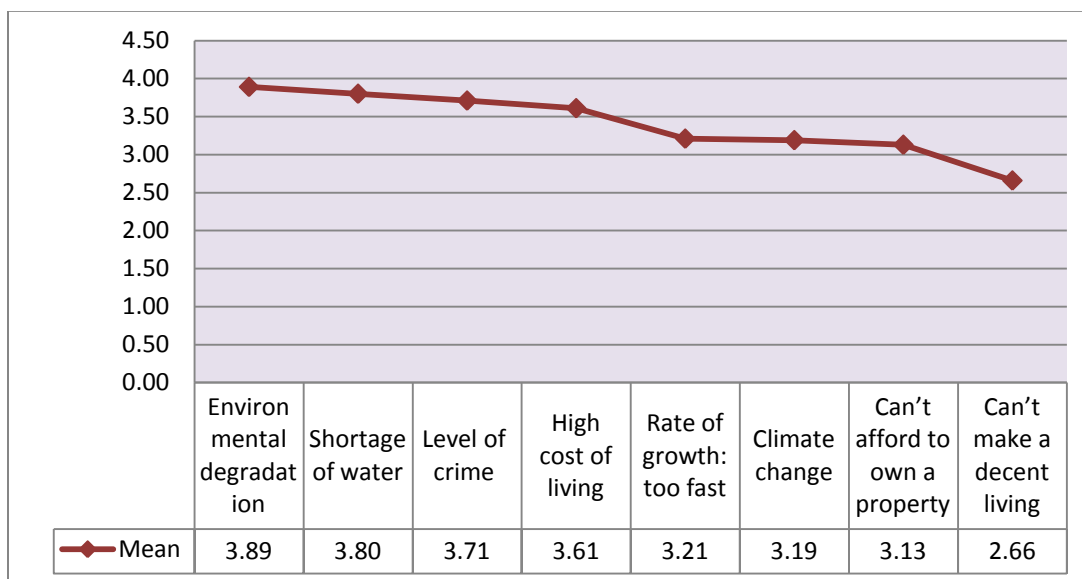


6.7.3 Quality of Life Issues

Similar to *Valley Future Issues* (Section 6.3.1) ANOVA was used with the following main results:

Out of 12 social, economic and environmental conditions that may decrease survey respondents' *quality of life*, 8 issues were found statistically significant (Fig. 28; for complete results of the analysis see Appendix A, Table 5). Overall, the most important was *Environmental degradation*, followed by *Shortage of water*.

Figure 28. Statistically Significant *Quality of Life* Issues



- Both amenity and economic migrants, unlike local people thought *Level of crime*, *Shortage of water*, and *Environmental degradation* would decrease their *quality of life*.
- *Can't afford to own a property* and *Can't make a decent living* were more important *quality of life* issues for economic migrants compared to their importance for local people and amenity migrants, respectively.
- *Climate change* and *Rate of growth: too fast* were significantly more important to amenity migrants when compared to their importance for local people and economic migrants, respectively.
- Local persons thought *High cost of living* was a more important *quality of life*, issue compared to amenity migrants.

The respondents were also asked what quality of life issues could cause them to leave the Valley.

- Most significant for amenity migrants were: *Level of crime, Shortage of water, Environment degradation, Can't afford to own a property, and Lack of health care facilities.*
- Economic migrants compared to other resident types are more likely to leave the Valley because of: *Can't make a decent living, Level of Crime, Environmental degradation and Lack of health care facilities.*
- Local persons are more likely to leave the Valley due to *Can't make a decent living.*
- Returned residents did not indicate that any of the issues would cause them to leave the Similkameen.

7.0 Economic Effects and Housing Implications

Of all the effects of amenity migration, its economic ones are the most studied to date. Bearing in mind that most such information is about the western US mountain region, it indicates that in some high amenity rural places, amenity migrants have brought and created new and more diversified economic activity. The *combination of amenity-led migration and a new economic base has created what some call a 'New West'* (Nelson, 2006: 58). Included are self-employment and some jobs for others, especially significant in places that experienced diminishing forestry or mining. Parallel, there is indication that amenity migration may reduce some regional out-migration of earlier inhabitants.

Amenity migrants may or may not earn a living in their high-amenity location. A considerable percentage of them obtain income from elsewhere in the form of investment returns or transfer payments (especially pensions). When earning an income locally, they are frequently plugged into the information or knowledge-based economy, and the linked creativity and arts economy; the *New Economy*. They own the enterprise or occupy the higher paying jobs in the late modern sector of the economy, along with professional positions of related activities, as they have the appropriate knowledge, orientation and capital. But also many have more mundane jobs, such as construction workers, store and gallery assistants, restaurant waiters, and often have several part time jobs. Characteristically amenity-led migrants derive income from tourism and amenity migration service activities, the primary driver typically being real property development. A common result of this *development*, increasing unaffordability of local housing, appears to be a principal socio-economic problem resulting from amenity migration. (See especially *Chipeniuk, 2006, Clark et al., 2006, Green et al., 2005, Johnson and*

Rasker, 1995; Johnson et al., 2003, Löffler and Steinicke, 2006, Moss, 1994, 2006, Rasker and Alexander, 1997, 2003).

Do Similkameen Valley amenity migrants create jobs compared to other resident types? More generally, is there a similar amenity migration effect in the Valley to that described above? The following are the main related findings:

Amenity migrants have had limited economic effects in the Valley, especially compared to economic migrants²¹. However, this finding from the household survey may understate the existing condition, as the survey did not develop information about amenity migrants' purchase of local goods and services.

- Compared to economic migrants, amenity migrants were 94% less likely to move to a place for business opportunity.²²
- Only 12% of amenity migrants started up a business in the Valley compared to 56% of economic migrants, 59% of local people and 20% of returned residents.
- The median business investment of economic migrants (\$150,000) was three times that of amenity migrants (\$50,000), twice of returned residents (\$75,000) and 2.5 times that of local persons (\$60,000)²³.

²¹ The above findings are not consistent with earlier analysis of amenity migrants' contribution to the Valley's economy, particularly the SVPS summary report (May 2008). Earlier analysis did not use inferential statistical analysis. Further, one significant data that can help determine amenity migrants' economic contribution was highly questionable: total business investments made by each resident type. Based on the survey, the total investment of amenity migrants in Similkameen Valley was \$162,065,000, or 98% of the total respondents' business investment in the Valley. Going back to the database we found that there was an entry for one amenity migrant living in Keremeos with \$160,000,000 investment in Keremeos. It is most likely that there was no single business in Keremeos that was worth \$160M in 2006. The available data for comparison was the 2004's Similkameen Valley's NAICS annual gross sale where forestry's annual gross sale was about \$60M. Based on the survey, economic migrants' total investment in 2007 was \$2,843,000, \$150,000 for returned residents, and \$120,000 for local persons.

²² This finding is consistent with another regression analysis done on sources of income of all resident types. It shows that compared to economic migrants, amenity migrants are 95% less likely to think that they can move to a place because they are business persons who could settle in several places.

²³ Earlier analysis (Technical Report in Appendix B) used averages which is inappropriate for particularly this case. Due to one amenity migrant reporting a \$160,000,000 investment in Keremeos, the average amenity migrant investment was \$16,206,500, which quite distorted the finding.

- Economic migrants employed 2.7 times more employees than amenity migrants; 40 times more than returned residents, but 7% less than local persons.
- Only 11% of amenity migrants were self-employed compared to 31% of economic migrants.
- Amenity migrants’ most important source of income was their pension, and not earnings from capital and investments. Forty-two percent of amenity migrants depend on their pension compared to 12% of economic migrants. Only 5% of amenity migrants derived their income from business compared with 27% economic migrants.

The main economic industries (NAICS) in the Valley did not indicate a shift to a *late-modern* economy or *New Economy*, which advanced amenity migration locations like Santa Fe, New Mexico, and other Rocky Mountain communities typically have (see especially Shumway and Otterstrom 2001). This was reflected in the economic activities of the amenity migrants’ (above) and in the 2004 NAICS annual gross sale in the Valley. Bearing in mind the date of this information, see especially the starred (*) categories.

Table 6. 2004 Annual Gross Sales by NAICS Sector in Similkameen Valley

NAICS Sector	Annual Gross Sales
Forestry	59,075,000
Retail Trade	38,100,000
Agriculture	21,237,500
Accommodation/ Food Service*	16,500,000
Manufacturing	14,000,000
Educational Services*	12,662,500
Wholesale Trade	11,337,500
Construction	8,862,500
Health Care and Social Assistance	6,125,000
Other Services *	5,550,000
Real Estate/ Rental/ Leasing *	3,837,500
Public Administration	3,250,000
Transportation/Warehousing	2,137,500
Finance/ Insurance *	2,125,000
Utilities	2,000,000
Professional/ Scientific/ Technical *	1,862,500

How do the above amenity migrants’ economic effects differ from those of neighbouring South Okanagan (SO), where amenity migration is considered to be more developed? The regression analysis shows although economic migrants still created more jobs

in South Okanagan compared to its amenity migrants, amenity migrants in SO created more jobs compared to amenity migrants in the Similkameen (S) Valley. The following are other differences:

- 7% more of the SO amenity migrants had started up a business than in S Valley.
- Median business investment of SO amenity migrants was 20% greater than in S Valley.
- SO amenity migrants employed 2.7 times more employees than their S counterparts.
- There were 3% more self-employed amenity migrants in SO than in S.
- There were 3% more SO amenity migrants who derived their income from their business compared to S.
- 31% more SO amenity migrants migrated due also to business opportunity than their S counterparts.

Housing Implications

There was a high correlation between the increased amenity migration for the 2001-2006 period with the increase in real estate values during the same period. With the use of a *Wilcoxon signed-rank test*²⁴ it was determined that the median value of real estate in the Valley had more than doubled (from \$140,000 to \$300,000) from 2001 to 2006. This result is consistent with housing value increases in other high-amenity mountain places (*Ireland 2006, Glorioso and Moss 2006, Glorioso 2009*), which *Ireland 2006* warned may be a welcome change in the early phase of amenity migration development, but may result to out-migration of younger and middle class populations as housing becomes increasingly unaffordable.²⁵

Housing affordability is decreasing (Table 7.). The average value of a dwelling in the Valley increased from 2001 to 2006 by 45% (from \$122,039 to 269,248), while median household income increased by 52%. However, in most places, the percentage increase in

²⁴ p-value was <0.001.

²⁵ Other analysts (*Bland 2009, Clark 2006, and Johnson et al 2006*) all agreed that where amenity migration is most advanced, the decline in housing affordability, for both purchase and rent, has become an outstanding public policy issue. On the other hand, *Hammer and Winkler 2006* suggest that high amenity communities have better opportunities to address their affordable housing issue compared to other rural communities where this problem stem from long-term decline and neglect. They propose that high amenity places have a larger tax base and through land use controls can require land developers to provide affordable housing.

household income was much lower than the percentage increase in dwelling unit value. For example, the dwelling value in Princeton increased by 55%, while median household income increased by only 21%. In addition, in some places in the Valley, Area B in particular, the average dwelling value of \$404,525 was only 3.5% lower than BC’s average dwelling value in 2006 (\$418,703). However, Area B’s median household income was 34% lower than BC’s median household income.

Table 7. Housing Affordability in Similkameen Valley (Correlated with Median Income)

Area	2006 Dwelling Average Value (\$)	2001 Dwelling Average Value (\$)	% Change from 2001 to 2006	2006 Median Household Income (\$)	2001 Median Household Income (\$)	% Change from 2001 to 2006	% of Renters paying ≥ 30% of household income on housing (2006)	% of Owners paying ≥ 30% of household income on housing (2006)
Area B	404,525	143,981	64%	39,468	25,610	54%	33%	36%
Area G	182,522	96,357	47%	33,122	24,525	35%	46%	16%
Area H	323,374	170,437	47%	49,967	39,939	25%	20%	23%
Keremeos	189,628	102,305	46%	34,171	22,110	54%	49%	16%
Princeton	246,194	97,115	55%	38,826	32,094	21%	49%	16%
Total	269,248	122,039	45%	38,826	25610	52%	38%	20%

Note: 2006 BC average dwelling value was \$418,703; and 2006 BC median household income was \$52,709.

8.0 Similkameen Valley Amenity Migration: Opportunity or Threat?

The majority of the 15 key informants interviewed thought amenity migration was definitely an opportunity, but only in the context of amenity migration being appropriately planned and managed. Otherwise, cost of living increases while most incomes remain low or fixed, and uncontrolled population growth would result in negative environmental and socio-economic issues, such as unaffordable land and housing and a general decrease in the social and environmental *quality of life*.

The key informants had more definitive opinion than respondents to the household survey on whether amenity migration was an opportunity or a threat. The latter had more cautious, or perhaps more uninformed, or less informed opinions. Forty-six (46%) of the household survey respondents had no opinion on the matter, while 39% thought it is an opportunity, 12% a threat, and 3% both (Fig. 29). There were no significant differences in opinion among amenity, economic and local resident types. But there was a difference in

opinion between the returned residents and the previous three resident types. Only 10% returned residents thought amenity migration is an opportunity and 90% had no opinion (Fig. 30).

Figure 29. Survey Respondents Opinions about Amenity Migration

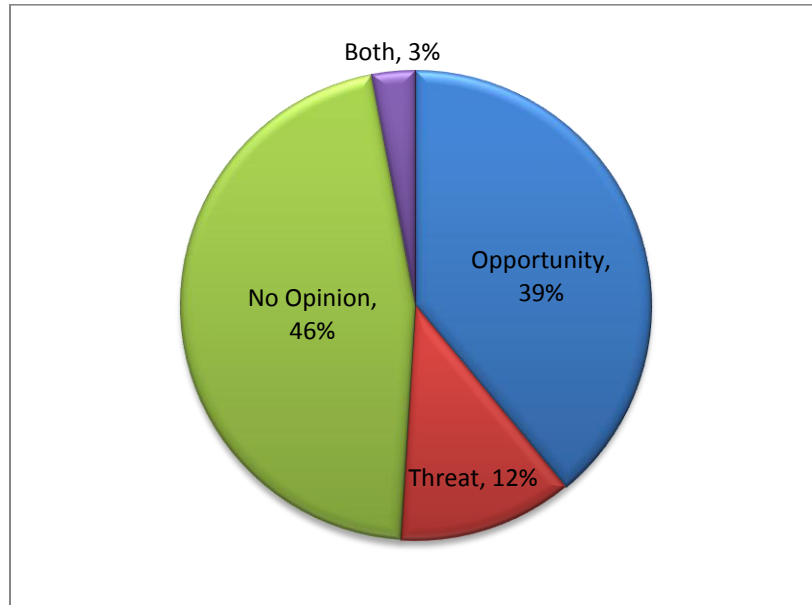
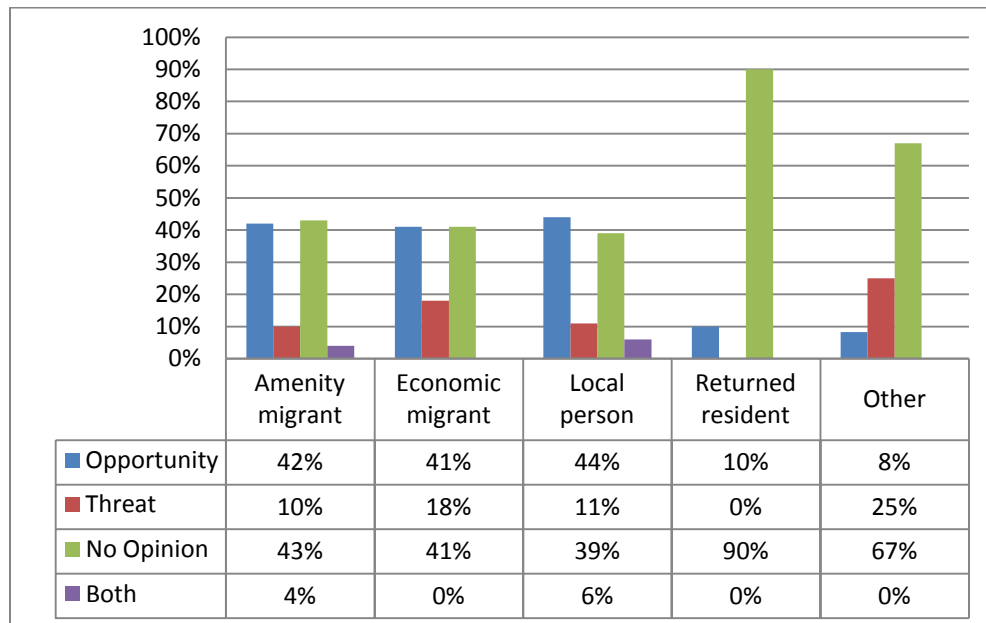


Figure 30. Survey Respondents Opinions about Amenity Migration by Resident Type



What does the global research on the subject say about this? Generally, more studies support the phenomenon as an opportunity, or at least an untapped opportunity, than otherwise. The following are the most commonly identified changes needed if the opportunities of the amenity migration phenomenon are to be realized.

- Significantly increase understanding of the amenity migration phenomenon. Especially *Moss 1994, 2006* and *Ireland 2006* propose that without clear understanding of the phenomenon's forces and their results, communities will continue to adopt policies and regulations that only address a few symptoms without grappling directly with root causes.
- Where the phenomenon is understood, most communities still need to move beyond to proactive strategy to take advantage of amenity migration's potential benefits while avoiding its threats. Public policy and action have characteristically been quite limited or ineffective, typically *ad hoc* and piecemeal attempts to manipulate negative effects of amenity migration and its attendant economic migration. The focus is on marginal manipulations of land use, slowing of the rate of land conversion to human habitation, especially through the quite limited use of public land acquisition and exchange, development regulation and development incentives and provision of affordable housing (*Howe et al 1997, Gobster and Haight 2004, Moss 2006, Travis 2007*).
- Too much related public policy and planning focuses on utopian *visioning* and not enough on amenity migration's societal causal effects, especially negative ones, before proceeding to plans (*Glorioso 2009b, Glorioso and Moss 2006, Travis 2007*).
- Integrate land use and transportation planning (*Glorioso 2009b, Johnson et al 2006*).
- Shift from or integrate into traditional public planning strategic planning, especially using alternative future scenarios to address our complex and unpredictable world (*Glorioso 2009b, Glorioso and Moss 2006, Kemp 1992, Moss 1999, Kruger et al 2009*).
- Develop and use a set of local quality of life indicators for strategy formulation, monitoring and evaluation (*UN Commission on Sustainable Development 1996, Schechter 2009*).
- Improve statistics (and collection frequency) so they reflect the high mobility and multi-residency of our present society (*Chipeniuk and Rapaport 2009, Hall and Muller 2004, Moss 2006*).

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Appendix I. Inferential Statistical Analysis Results

Table 1. Comparison of Amenity and Economic Migrants’ Reasons for Moving to the Valley

Reason for coming	Economic Migrant	Amenity Migrant Odds Ratio (p-value)	Reason for coming	Amenity Migrant Odds Ratio (p-value)
Superior Natural Environment			Leisure (Continued)	
1. To enjoy clean air	-	3.10 (0.00)	17. Because of diverse outdoor recreational opportunities	4.66 (0.01)
2. To enjoy clean rivers and lakes	-	1.79 (0.12)	18. To be near Crown land for hunting/fishing	5.20 (0.02)
3. Because of the climate	-	2.34 (0.02)	19. To be near Crown land for motorized recreation	8.49 (0.03)
4. Because of mountains and mountain views	-	5.19 (0.00)	Economic Gain/ Opportunity	
5. To live in an area of diverse plants/wildlife	-	4.77 (0.00)	20. Because of cheaper property	1.02 (0.95)
6. To be near parks	-	2.19 (0.13)	21. To have a lower cost of living	1.02 (0.94)
7. To be in farm or ranch country	-	0.86 (0.77)	22. For a job	0.56 (0.00)
Cultural Differentiation			23. To pursue a business opportunity	0.06 (0.00)
8. For peace and quiet	-	4.09 (0.00)	Learning/ Spirituality	
9. To be in a safer place	-	1.44 (0.35)	24. Because of spiritual attraction of landscape	2.58 (0.14)
10. To live in a rural community	-	1.26 (0.55)	Others	
11. To enjoy music or cultural scene	-	NA	25. To be close to family or partner	0.91 (0.86)
12. Because of the wineries	-	0.53 (0.48)	26. Good facilities for seniors	1.75 (0.25)
13. Because it is culturally distinct	-	NA	27. Because of its comfort amenities (restaurants, shops, entertainment, walk to most services)	
Leisure			28. Access to health care	
14. To retire	-	5.01 (0.00)		
15. To prepare for retirement	-	7.06 (0.00)		
16. To be near abundant outdoor recreational opportunities	-	2.98 (0.02)		

NOTE: How to interpret the above table?

Odds ratio analysis is a way of comparing whether amenity migrants' reasons for moving were the same for economic migrants. An odds ratio of 1 implies that the reason is equally likely important for both amenity and economic migrants. An odds ratio greater than 1 implies that the reason is more likely important for amenity migrants while an odds ratio less than 1 implies that the reason is less likely important for amenity migrants. The results with "p-value" equal or less than 0.05 are marked in blue. P-value indicates the decreasing index of the reliability of the result. The lower the p-value, the higher the significance of its result, and the more it is a "true representative of the population". In many areas of research, p-value equal or less than 0.05 is the typical "border-line acceptable" error level. The column for economic migrant is blank because it is the group with which amenity migrant was compared upon.

Examples of Interpretation:

- The odds ratio for all leisure related reasons (reasons no. 14-18) is more than 1 which means that leisure related reasons are more important to amenity migrants compared to economic migrants. Note that p-values for these reasons are equal or less than 0.05.
- Reason no. 19: *To be near Crown land for motorized recreation* is 8 times more important reason for amenity migrants compared to economic migrants. (p-value 0.03)
- Reason no. 23: *To pursue a business opportunity* is 94% less important reason (odds ratio 1 minus 0.06) to amenity migrants compared to economic migrants. (p-value 0.00)

Table 2. Significant Attributes for Environmental Conservation Practices
(Note: This list contains only statistically significant results)

Environmental Conservation Practice	Factors Significantly Related with Practice	Odds Ratio	p-value
1) Separate recyclable garbage	• Age (younger)	0.38	(<0.001)
	• Reasons:		
	1. To enjoy clean rivers and lakes	2.38	(<0.001)
	2. To be near abundant outdoor recreational opportunities (egs. golf, fishing, skiing)	1.95	(0.05)
2) Use solar panels/ wind energy	• Reasons:		
	1. Because of climate	2.04	(0.04)
	2. Because of mountains and mountain views	1.65	(0.02)
	3. To be near abundant outdoor recreational opportunities (eg. golf, fishing, skiing)	1.40	(0.05)
3) Use native plants	• Age (younger)	0.74	(<0.001)
	• Reasons:		
	1. Because of mountains and mountain views	3.39	(<0.001)
	2. Because of spiritual significance of landscape	1.62	(<0.001)
	3. To enjoy clean rivers and lakes	1.50	(<0.001)
	4. To be near abundant outdoor recreational opportunities (eg. golf, fishing, skiing)	1.41	(<0.001)
	5. To live in an area of diverse plants/wildlife	1.34	(0.01)
	6. Because of diverse outdoor recreational opportunities (eg. golf, swimming, skiing)	1.33	(0.02)
7. To be in a safer place	1.33	(0.02)	
4) Avoid use of pesticides	• Education (Bachelor's)	4.12	(0.05)
	• Reasons:		
	1. To live in a rural community	1.42	(0.01)
	2. To enjoy clean rivers and lakes	1.29	(0.04)
5) Conserve household energy	• Age (younger)	0.48	(<0.001)
	• Reasons:		
	1. To enjoy clean rivers and lakes	2.24	(<0.001)
	2. To enjoy clean air	1.76	(<0.001)
	4. To live in a rural community	1.56	(0.04)
6) Use of low-flow flush toilet	• Age (younger)	0.62	(0.01)
	• Reason:		
	1. To be near parks	1.30	(0.05)
	2. Because of mountains and mountain views	1.27	(0.04)
7) Use low impact or non-	• Age (younger)	0.68	(0.03)
	• Reasons:		

Environmental Conservation Practice	Factors Significantly Related with Practice	Odds Ratio	p-value
motorized forms of outdoor recreation	<ol style="list-style-type: none"> 1. Because of its comfort amenities (restaurants, shops, entertainment, walk to most services) 2. To enjoy clean rivers and lakes 3. To enjoy clean air 4. To be in farm or ranch country 5. To be near parks 6. To live in an area of diverse plants/wildlife 7. Because of the climate 8. To live in a rural community 	<p>1.67</p> <p>1.56</p> <p>1.40</p> <p>1.42</p> <p>1.39</p> <p>1.33</p> <p>1.33</p> <p>1.28</p>	<p>(0.01)</p> <p>(<0.001)</p> <p>(0.01)</p> <p>(0.03)</p> <p>(0.01)</p> <p>(0.01)</p> <p>(0.03)</p> <p>(0.04)</p>
8) Use xeriscaping	<ul style="list-style-type: none"> • Age (younger) • Reason: <ol style="list-style-type: none"> 1. Because of spiritual attraction of landscape 	<p>0.41</p> <p>4.0</p>	<p>(<0.001)</p> <p>(<0.001)</p>
9) Use grey water for watering the lawn	<ul style="list-style-type: none"> • Age (younger) • Reason: <ol style="list-style-type: none"> 1. To be in farm or ranch country 2. Because of spiritual attraction of landscape 	<p>0.40</p> <p>1.74</p> <p>1.57</p>	<p>(0.02)</p> <p>(0.02)</p> <p>(0.05)</p>
10) Use public transportation	<ul style="list-style-type: none"> • Reason: <ol style="list-style-type: none"> 1. To pursue a business opportunity 2. Because of its comfort amenities (restaurants, shops, entertainment, walk to most services) 	<p>3.06</p> <p>1.99</p>	<p>(<0.001)</p> <p>(0.04)</p>
11) Share a ride to work	<ul style="list-style-type: none"> • Age (younger) • Reason: <ol style="list-style-type: none"> 1. To pursue a business opportunity 2. For a job 	<p>0.37</p> <p>3.55</p> <p>1.84</p>	<p>(0.01)</p> <p>(<0.001)</p> <p>(0.04)</p>
12) Bicycle to work	<ul style="list-style-type: none"> • Age (younger) • Reason: <ol style="list-style-type: none"> 1. To pursue a business opportunity 2. To be near parks 	<p>0.27</p> <p>2.81</p> <p>1.74</p>	<p>(<0.001)</p> <p>(<0.001)</p> <p>(0.02)</p>
13) Driving a hybrid car	None		

Table 3. Most Significant Attributes Affecting Respondents Community Participation
 (Note: Only statistically significant results are listed here.)

Community Participation Action	Most Significant Attribute	Odds Ratio	p-value
Attend public hearings	<ul style="list-style-type: none"> • Employed • Reason <ol style="list-style-type: none"> 1. To enjoy clean rivers & lakes 	10	(0.02)
		1.30	(0.04)
Participate in community meetings	<ul style="list-style-type: none"> • Age (younger) 	0.39	(0.04)
	<ul style="list-style-type: none"> • Education <ol style="list-style-type: none"> 1. Some college 2. Bachelor's 	3.75	(0.04)
		4.82	(0.03)
	<ul style="list-style-type: none"> • Reason <ol style="list-style-type: none"> 1. Because of spiritual attraction of landscape 2. To live in rural community 3. To enjoy clean air 4. To enjoy clean rivers & lakes 5. To live in an area of diverse plants/ wildlife 6. Because of mountains and mountain views 	1.39	(0.03)
		1.37	(0.01)
		1.36	(0.03)
		1.34	(0.02)
		1.29	(0.03)
	1.26	(0.04)	
Volunteer time and skills	<ul style="list-style-type: none"> • Education <ol style="list-style-type: none"> 1. Some graduate school 	5.62	(0.04)
Donate money	<ul style="list-style-type: none"> • Education <ol style="list-style-type: none"> 1. Bachelors 	3.61	(0.04)

Table 4. Analysis of one-way variance (ANOVA) results comparing resident types' responses on Valley Future Key Issues

(Note: Only statistically significant results are listed here.)

VALLEY'S FUTURE KEY ISSUE	Local people	Amenity migrants	Economic migrants	Returned resident	F (p-value)	Post-hoc
1) Public recreation facilities, parks	2.33 (1.53)	3.51 (1.26)	3.55 (1.02)	3.70 (0.94)	<0.001	Amenity/Local Economic/Local Returned/Local
2) Fossil fuels shortage	2.16 (1.29)	3.29 (1.18)	3.38 (1.08)	2.88 (0.60)	<0.001	Amenity/Local Economic/Local
3) Public transit, e.g. a bus system	2.16 (1.33)	3.11 (1.32)	3.20 (1.39)	2.11 (0.92)	<0.001	Amenity/Local Economic/Local
4) Food security	2.68 (1.53)	3.61 (1.28)	3.53 (1.10)	3.88 (1.05)	0.04	Amenity/Local
5) Water infrastructure systems	3.27 (1.48)	4.14 (1.04)	4.26 (0.82)	4.20 (0.78)	<0.001	Amenity/Local Economic/Local Returned/Local
6) Sewer systems	3.05 (1.34)	3.87 (1.10)	3.92 (1.05)	4.10 (0.99)	0.02	Amenity/Local Economic/Local Returned/Local
7) Housing for seniors	3.05 (1.55)	3.85 (1.12)	3.90 (1.13)	3.55 (1.13)	0.04	Amenity/Local
8) Services for seniors	3.21 (1.65)	4.02 (1.17)	4.00 (1.06)	3.30 (1.49)	0.02	Amenity/Local
9) Availability of medical services	3.55 (1.63)	4.29 (1.02)	4.43 (0.80)	3.70 (1.05)	<0.001	Amenity/Local Economic/Local
10) Water quality	3.57 (1.64)	4.23 (1.10)	4.50 (0.71)	4.10 (1.28)	0.04	Economic/Local

Table 5. Analysis of one-way variance (ANOVA) results comparing resident types' opinions on Quality of Life Issues

(Note: Only statistically significant results are listed here.)

QUALITY OF LIFE KEY ISSUE	Local people mean	Amenity migrants mean	Economic migrants mean	Returned resident mean	F (p-value)	Post-hoc
1) Level of crime	2.75 (1.37)	3.92 (1.15)	3.91 (1.37)	3.30 (1.56)	<0.001	Amenity>Local Economic>Local
2) Shortage of water	2.57 (1.50)	4.03 (1.16)	3.90 (1.30)	3.40 (1.57)	<0.001	Amenity/Local Economic/Local
3) Can't afford to own a property	2.52 (1.57)	3.08 (1.57)	3.82 (1.60)	2.60 (1.64)	0.02	Economic/Local
4) Climate change	2.15 (1.21)	3.40 (1.26)	3.00 (1.19)	2.40 (1.42)	<0.001	Amenity/Local
5) Can't make a decent living	3.05 (1.73)	2.35 (1.57)	3.5 (1.61)	2.50 (1.58)	<0.001	Economic>Amenity
6) High cost of living	2.78 (1.35)	3.71 (1.29)	3.94 (1.25)	3.00 (1.56)	<0.001	Amenity>Local Economic>Local
7) Rate of growth: too fast	2.73 (1.44)	3.40 (1.32)	2.67 (1.49)	3.00 (1.49)	0.02	Amenity> Economic
8) Environmental degradation	2.88 (1.23)	4.04 (1.08)	4.03 (1.01)	3.50 (1.58)	<0.001	Amenity>Local Economic>Local

Appendix J

Amenity-Led Migration in the Similkameen & South Okanagan Valleys, BC, Canada

Project Phase I Technical Report: Amenity-Led Migration Survey

14 April 2008

Client: Similkameen Valley Planning Society



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CONTENTS

1. Introduction	1
1.1 <i>Amenity-Based Regional Change</i>	1
1.2 <i>Need For A Similkameen and South Okanagan Survey</i>	2
2. Survey Method	3
2.1. <i>Survey Description</i>	3
2.2 <i>Survey and Report Strengths & Weaknesses</i>	3
3. Key Finding of the Survey	4
3.1 <i>Migrants Socio-Economic Profiles</i>	4
3.1.1. Residence Type.....	5
3.1.2. Amenity and Economic Migrants Mobility	5
3.1.2.1. Origin of Amenity Migrants	5
3.1.2.2. Origin of Economic Migrants.....	6
3.1.2.3. Chronology of Migration: Amenity Migrants & Economic Migrants	6
3.1.2.4. Mobility Propensity of Study Region Residents.....	9
3.1.3 Age, Gender and Household Type	9
3.1.3.1 Age & Gender of Respondents.....	9
3.1.3.2 Household Type	10
3.1.4 Education.....	10
3.1.5 Employment & Income	11
3.1.5.1 Employment.....	11
3.1.5.2 Income.....	11
3.1.5.3 Business Activity.....	12
3.1.6. Housing and Land Use Characteristics	12
3.1.6.1. Residence and Property Type	12
3.1.6.2. Residential Property Value	13
3.2 <i>Key Motivating & Facilitating Factors</i>	15
3.3 <i>Attitudes and Behaviour</i>	19
3.3.1 Amenity Migration As Opportunity & Threat.....	19
3.3.2 Natural Environment & Energy	21
3.3.2.1 Conservers and Consumers	21
3.3.2.2 Parks & Protected Areas	25
3.3.3 Community Participation.....	26
3.3.4 Key Future Issues and Government Action	28
4. Next Steps	30
References & Selected Bibliography	31

Figures and Tables

Figure 1 Amenity Migration in Mountain Regions Paradigm.....	3
Table 1 Chronology & Magnitudes of Amenity Migration to SSO	7
Table 2 Chronology & Magnitudes of Economic Migration to SSO.....	8
Table 3 Cost of SSO Respondents Real Property (Including Improvements) ..	14
Table 4 Estimates Selling Price of SSO Respondents Real Property.....	14

Table 5	<i>Very Important</i> Reasons for Migrating to or Remaining in Similkameen and South Okanagan Valleys, BC, Canada.....	17
Table 6	Environmental Conservation Behaviour of SSO Residents	22
Table 7	Community Participation Behaviour of SSO Residents	27

Appendices

1. Key Informant Interview (KIS) Guideline.
2. Sample Household (HHS) Questionnaire.
3. List of KIS interviewees interpretations of *quality of life*.

Amenity-Led Migration in the Similkameen & South Okanagan Valleys Phase 1 Technical Report: Survey Results

1. Introduction

1.1 Amenity-Based Regional Change

Amenity migration refers to the permanent and part time movement of people, called *amenity migrants*, to places principally because of their actual or perceived higher environmental quality and cultural differentiation. Others who move to the same places primarily for economic opportunity (for a job, to start a business or other economic reason) are referred to as *economic migrants*, and the term *amenity-led migration* is used when referring to amenity migrants and economic migrants together (Moss 1994, 2006; Price *et al* 1997; Glorioso 1999). Obtaining strategic information about these resident types is the principal objective of the survey undertaken in Phase I of this project. To better understand and manage amenity-led migration and the changes it is bringing to the Similkameen and South Okanagan Valleys, it was also considered imperative to know attitudes and responses to this phenomenon of earlier inhabitants of the valleys. Therefore, this is also an objective of the survey.

Amenity-led migration, both part time and more permanent, is increasing around the world, especially today in mountain regions, where it is an equal or greater societal change agent than tourism; but one much less is known about. The change it brings is both beneficial and threatening. It appears that as the quality of our natural environment and distinctiveness of rural cultures decrease around the world, these amenities are more highly valued and sought. This process is resulting in increasing amenity migration, which is generally further degrading the ecosystems and cultures of high-amenity places. In turn, this pattern is detrimental to inhabitants of both mountains and lowlands as they share a dependence on mountains and their valleys for both utilitarian and intrinsic benefits.

What is driving amenity migration in mountainous regions? A pattern appears to have emerged of it being commonly the result of a coalescence of key motivating and facilitating factors. There are two meta-motivators of this change agent: higher societal valuing of the natural environment and differentiated culture. Nested within these are the following motivators: leisure, flight from the negative conditions of large cities, economic opportunity, learning (including spiritual and aesthetic motivation) and climate change (Moss 2006, in press). The economic motivator referred to here is secondary to a place's amenities; not the primary one that drives economic migrants. Integrated with these motivators are key factors facilitating this late-modern mobility: access-facilitating technology, discretionary wealth, land availability (or cost), discretionary time, and destination comfort amenities. Figure 1. illustrates this movement pattern, particularly for

western North America. The gradation in typeface size of factors indicates their comparative importance today; larger for greater importance. The significance of these factors has changed over time. For example, some two decades ago the general importance of discretionary time and spiritual development were seemingly greater (Moss 1994, 2006 Ch 1). Also, comparatively high land availability has been a strong facilitator of amenity seekers. However, particularly in wealthier countries, this key factor is shifting to a negative value in high amenity mountain locations as land availability decreases and its cost increases. The impacts of climate change have recently appeared as a key motivator, and one that is likely to increase in importance.

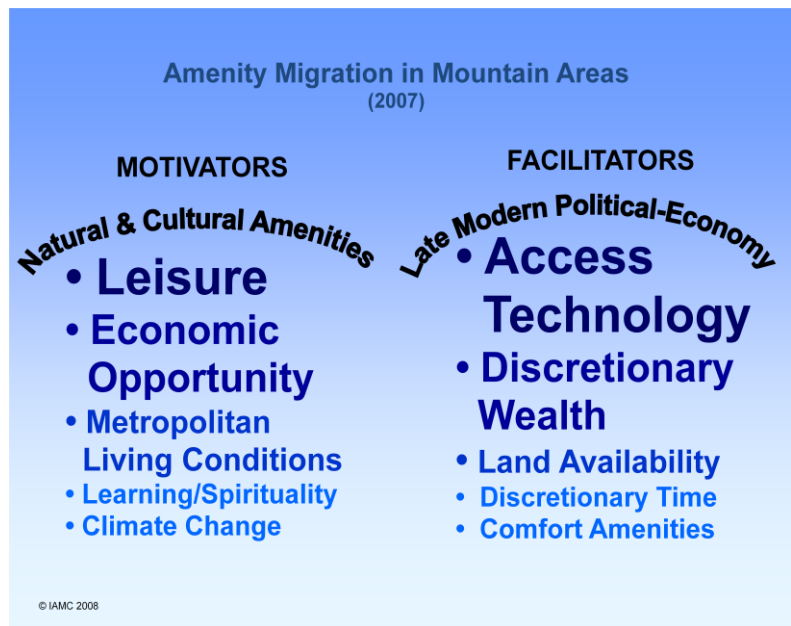


Figure 1. Amenity migration paradigm indicating comparative significance of key motivators and facilitators in approximately 2007 (Moss, in press).

1.2 Need For A Similkameen and South Okanagan Survey

While information about amenity-led migration's (ALM) causes and effects has generally increased over the past several years, this knowledge, especially empirical data, is still quite limited. To date the type of census and related information being collected unfortunately sheds very little light on this growing change agent. More specifically, very little information existed about ALM in the Similkameen and South Okanagan Valleys, BC prior to this project. Therefore, for formulating and implementing an effective strategy to harness the benefits and ameliorate the threats of ALM to human communities and ecologies of the two valleys, a baseline of relevant information needed to be generated through a survey. This report sets out the most relevant of the baseline information developed by a survey undertaken in 2007/2008. Considerably more information

was generated by the survey and is available for further analysis as need dictates.

2. Survey Method

2.1 Survey Description

The following abbreviations are used commonly in the report:

AM refers to amenity migration, *AMs* to amenity migrants, *EMs* to economic migrants, *LRs* to local born and/or raised residents, *RRs* to returned residents, and *OM* for other migrants. *S* is used in referring to the Similkameen Valley, *SO* to the South Okanagan Valley, and *SSO* or *study region* in referring to the two valleys together. *KIS* refers to the key informant interviews tool and *HHS* refers to the homeowners household survey tool used in this project.

Basic to the analytical method for developing base line knowledge about ALM in the SSO was a triangulation of three components: an in-depth interview of key informants, a questionnaire mailed to a random sample of households, and the undertaking of the project by consultants with expert ALM knowledge. The survey employed both quantitative and qualitative analytical techniques to take advantage of the strengths of both. Initially 15 persons knowledgeable about the socio-cultural, political-economic and biophysical condition of the valleys were selected and interviewed. All interviews were individual, typically lasted just over 1 hour each, and were guided by the same set of 50 questions. The information obtained rendered significant insight into ALM in the study region, and was also very useful in formulating a random sample questionnaire. Subsequently a 40 question sample survey was designed, tested and mailed to 2600 households in the study region: 12% of owner residents and 8.9% of total households. To assist in obtaining a representative sample from the 8 incorporated and unincorporated public jurisdictions in the study region, each was allocated a proportional representation of questionnaires. In addition, the survey was advertised in local newspapers and on regional radio, and several editorials were written encouraging local participation. The results of the KIS and HHS were subsequently analyzed. Appendix 1. and 2. of this report contains copies of the two survey tools used.

2.2 Survey & Report Strengths & Weaknesses

Using both qualitative (KIS) and quantitative (HHS) survey tools brought greater depth, breadth and veracity to the analysis, along with the opportunity to benefit from the strengths of two different methods. A SSO wide public concern about ALM and its effects brought a high level of cooperation in undertaking the survey. All the key informant interviewees were quite interested and focused on the task, and the sampled households returned 30.5% of the questionnaires mailed out, a high percentage for this type of survey.

The household survey may be considered to have had several weaknesses. Renters were not specifically surveyed, and some are ALM. While the First Nation communities were likely to have few amenity-led migrants their attitudes and knowledge about ALM will be significant for strategy formulation and implementation, especially given their significant land ownership in the valleys. These two shortcomings were ameliorated to some extent in the KIS. In addition, returning residents (RR) were identified as a separate cohort. However, most RRs did not consider themselves migrants to the valleys, and their ALM characteristics can be obtained from a more detailed analysis of the information collected.

While not a weakness of the survey *per se*, this report may also be considered to have some shortcomings. Two are identified and explained here. The report does not compare or relate some specific SSO findings to their larger socio-economic context. For example, it does not compare the age cohorts and housing values of respondents to those of BC or Canada more generally. Also, in some instances, additional useful and more sophisticated analyses could be expected. For example, regression analyses to determine relationships among key factors, such the affect of education, income and age on environmental attitudes and behaviour were not undertaken. These tasks were not undertaken because of a shortfall in funds due especially to the unanticipated need to expand the HHS sample from 2000 to 2600 households in order to obtain sufficient representation from more rural unincorporated jurisdictions in the study region. In addition, the cost of data tabulation was higher than estimated in the project proposal, due mainly to the processing and analysis of 792 returned surveys, compared to 600 anticipated in the project budget estimate. Nevertheless the report is a detailed, very useful baseline of knowledge, and if and where shortcomings exist for the project's Phase II, further analysis of the rich data bank collected can be undertaken.

3. Key Finding of the Survey

3.1 Migrants Socio-Economic Profiles

The following section of the report offers baseline information in profile format, focusing on the socio-economic characteristics of SSO amenity migrants (AMs) and economic migrants (EMs). To give further depth to these profiles, and especially for comparison, information is included about local born & raised residents (LRs) and returning residents (RRs), and where significant for the above aim, the mainly default category of other migrants (OMs). In addition, salient similarities and differences between the two valleys are identified.

3.1.1. Residence Type

Of the total households surveyed in the study region, 82.3% stated they were owner occupied residents, and 16.1% were 2nd homeowner resident type. It should be further noted that one-third of the 2nd homeowners indicated an intention to become full time residents in the future.

While there was little difference between the two valleys for primary residence percentages, 2nd homes in S was 25.3 % of the total, and in SO 11.9%. Further, within S, 2nd homeowners in the more rural unincorporated areas numbered 45.1% in the Upper S and 12.1% in the Lower S. In comparison, in the more rural area of SO the number was 4.7%.

When asked if they were an amenity migrant, economic migrant, local resident, or returned resident, 57.3% of the respondents identified themselves as AMs, 17.7% as EMs, 11.4% as LRs and 8.3% as RRs. Among the AMs, 20.8% identified themselves as 2nd homeowners. A comparison of the two valleys from this data source indicates a higher percentage of AMs in S than SO (63.6% and 54.6% respectively). EMs were a slightly higher percentage in SO than in S (18.4% and 16%).

The KIS gave a profile for these characteristics that corresponded closely, although the key informants generally underestimated the percentage of AMs in S; approximately 38% estimated in the KIS compared to 64% self-identified in the HHS. The total and two valley relative numbers of AMs and EMs do not appear exceptional compared to other western North American high amenity places. The percentage of 2nd homeowners is similar, except for Upper S, which approaches percentages in mountain resort towns.

3.1.2. Amenity and Economic Migrants Mobility

3.1.2.1. Origin of Amenity Migrants

Canada was the origin of 94% of the amenity migrants in the two valleys, followed by 2.7% from the USA and then 1.7% from Germany. 70.7% of all AMs, originated from BC and 16.2% from Alberta, followed by 5.7% from Ontario, 3.6% from Saskatchewan and 3.6% from Manitoba. The BC Lower Mainland accounted for some 49% of all AMs, and the Vancouver metropolitan area 31%. Comparing cities, Vancouver accounted for 14.1%, followed by Calgary at 6% and Edmonton 4.6%. The total percentage for AMs originating from metropolitan areas was about 48.7%. This suggests that about half of the study region's AMs come from smaller towns and rural areas. However, when we take into account the mobility propensity data below (3.1.2.4), this number needs to be factored down due to serial amenity migration.

Comparing the S and SO areas, proximity of origin is pronounced for the AMs in both; those from BC account for 85.7% of total AMs in S and 63.5% in SO, while those from Alberta account for 21.3% of total in SO and 5.6% in S.

The KIS and HHS findings reinforce one another on this origin characteristic. Also, the more general research on ALM suggests a typical pattern exists, The 49% of all AMs originating from metropolitan areas seems lower than anticipated from a comparison with the AM literature. However, there does not appear to be empirical data for comparison.

3.1.2.2. Origin of Economic Migrants

Canada with 95.5% dominates the origin of EMs, followed far below by Germany and India each with 1.5% of total EMs. Also, 61.4% of all EMs originated in BC, followed by 15% from Alberta, then 6.3% from both Ontario and Saskatchewan, and 1.6% from Quebec. BC Lower Mainland accounted for some 28.6% of the EMs and the Vancouver metropolitan area for 21.8%. Vancouver accounted for 16.8% of the total, followed in descending percentages by Calgary with 4.2%, Edmonton and Regina both with 3.4%, Victoria with 2.5%, Ottawa with 1.7% and Toronto w/ 0.8%. Metropolitan areas accounted for a total of 40.3%.

Parallel to the AM pattern reported above, but less pronounced, BC is responsible for 75.8% of all EMS in S and 56.4% in SO, and Alberta is the origin of 18.1% of this migration type in SO and 6.1% from BC. Those originating from Ontario and Saskatchewan are 6% in both valleys, and those from Quebec 3% in S and 1.1% in SO. A number of KIS interviewees overestimated the source of Quebec for economic migrants, as the HHS identified 2 EMs from this province. The typically high presence of seasonal labourers from Quebec for fruit harvesting may have cause this impression.

The high percentage of ALMs originating in BC and Alberta, along with about half coming from non-metropolitan areas suggests a positive factor in later strategic considerations of cultural difference and similarity among study area residents.

3.1.2.3. Chronology of Migration: Amenity Migrants & Economic Migrants

Table 1 based on HHS findings, shows the number of AMs who moved to SSO by 5-year time period from 1950 to 2007. The greatest number of AMs migrated in 2001-2004 at 25.4%, followed by 1995-2000 at 13.9%, then 1990-1994 and 2005-2007 with equal percentages of 13.7%. From 1950 to 1989, less than 10% moved to SSO in each 5-year period. For the total period of 1950 to 2007, SO attracted more AMs than S; as much as 72.2% in 1980-1984 and as little as 40% in 1955-1959, averaging 50.4% each 5-year period.

Comparing the two valleys, although most amenity migrants in S (30.1%) and SO (23.2%) arrived in 2001-2004, AMs arrived in SO in significant numbers (more

than 10%) in the 5 previous years (1990-1994 at 15.5%) than in S (1995-2000 at 16.3%). This corresponds with the KIS estimate for the beginning of AM in SSO. While the majority of KIS agree that AM in S started sometime in 2000, due principally to the dramatic increase in real estate prices in Vancouver metropolitan area, the KIS estimate for SO was varied. One key informant said it began in the late 1960s, another in the 70s with an increase in people retiring and looking for warmer climate, and another interviewee said in the late 1980s, principally with Alberta's snowbirds and new money, then in the 1990s and early 2000s. This corresponds highly with the spikes of AMs in SO. From 1965 to 1969 AMs grew by 400% from the previous 5-year period; the 2nd spike was in 1970-1974 where AMs grew by 200%; the 3rd in 1985-1989 with an increase of 44.4%, 4th in 1990-1994 with an increase of 61.5% and the last dramatic increase of AMs in SO was in 2001-2004 with an increase of 80.0%. Therefore, the SO pattern appears different from that of S. However, if we base our analysis on what drives AM more generally (see Figure 1), then we may assume that AM in SO began in the third spike, 1985 to 1989.

Table 1. Chronology & Magnitudes of Amenity Migration to SSO

Year AMs Migrated to SSO	Similkameen Valley (S)		South Okanagan Valley (SO)		Similkameen & South Okanagan Valleys (SSO)		SO's Lead Over S in No. of AMs
	Freq	%	Freq	%	Freq	%	%
1950 - 1954	1	0.8	1	0.4	2	0.5	0.0
1955 - 1959	3	2.4	5	1.8	8	2.0	40.0
1960 - 1964	1	0.8	2	0.7	3	0.8	50.0
1965 - 1969	4	3.3	8	2.9	12	3.0	50.0
1970 - 1974	7	5.7	16	5.9	23	5.8	56.2
1975 - 1979	7	5.7	18	6.6	25	6.3	61.1
1980 - 1984	5	4.1	18	6.6	23	5.8	72.2
1985 - 1989	9	7.3	26	9.5	35	8.8	65.4
1990 - 1994	12	9.7	42	15.5	54	13.7	71.4
1995 - 2000	20	16.3	35	12.9	55	13.9	42.9
2001 - 2004	37	30.1	63	23.2	100	25.4	41.3
2005 - 2007	17	13.9	37	13.6	54	13.7	54.01
TOTAL	123		271		394		

Based on the HHS, Table 2. shows the number of EMs who moved to SSO from 1950 to 2007 in 5 year intervals. From 1950 to 1974, SSO attracted 21.7% of its EMs, averaging a 4.3% increase per 5-year period. Then, from 1975 to 1994, an additional 54.8% of its total EMs moved in, averaging 13.7% per 5-year period; an increase of 9.4% per period. But from 1995 to 2007, it increased only an average of 7.8%, an average decrease of 5.9% per 5 years from the previous time period.

Comparing the two valleys, about one-third of all EMs in SSO lived in SO from 1950-2007, averaging 65.4% more EMs than in S in each 5-year period. The only time SO's lead was below 50% (a 20% lead) was in 2001-2004, with 4 EMs migrating in S compared to 5 EMs in SO. Also in this period, EMs in S increased 100% from the previous period of 1995-2000, while EMs in SO had decreased by 37.5% from 1995-2000 to 2001-2004. However, S was not able to sustain the pattern as EMs decreased again by 50% in the following period while SO's EMs increased by 37.5%, regaining their loss from the previous time period. But caution should be used, as there were only 3 years in the last period of comparison (2005 to 2007).

Although there were many more EMs attracted to live in SO, S started to attract significant numbers of EMs (more than 10% of its total number) 5 years earlier (1975-1979 with 12.5% EMs) than SO (1980-1984 with 18.5% of its EMs). The highest percentage of EMs in S was in 1990-1994 at 15.6%, while in SO it was in 1980-1984 at 18.5%. However, EMs in this period may not be the result of amenity-led migration since AM, as suggested in Table 1 has occurred much later in S and about 5 years later in SO. A more refined statistical analysis should be made in Phase II to further determine this significant relationship.

Table 2. Chronology & Magnitudes of Economic Migration to SSO

Year EMs Migrated in SSO	Similkameen Valley (S)		South Okanagan Valley (SO)		Similkameen & South Okanagan Valleys (SSO)		SO's Lead Over S in No. of EMs (%)
	Freq	%	Freq	%	Freq	%	
1950 – 1954	0	0.00	1	1.1	1	0.8	100.0
1955 – 1959	1	3.1	4	4.3	5	4.0	75.0
1960 – 1964	1	3.1	4	4.3	5	4.0	75.0
1965 – 1969	2	6.2	4	4.3	6	4.8	50.0
1970 – 1974	3	9.4	7	7.6	10	8.1	57.1
1975 – 1979	4	12.5	9	9.8	13	10.5	55.6
1980 – 1984	4	12.5	17	18.5	21	16.9	76.5
1985 – 1989	4	12.5	14	15.2	18	14.5	71.4

Year EMs Migrated in SSO	Similkameen Valley (S)		South Okanagan Valley (SO)		Similkameen & South Okanagan Valleys (SSO)		SO's Lead Over S in No. of EMs (%)
	Freq	%	Freq	%	Freq	%	
1990 – 1994	5	15.6	11	12.0	16	12.9	54.5
1995 – 2000	2	6.2	8	8.7	10	8.1	75.0
2001 – 2004	4	12.5	5	5.4	9	7.2	20.0
2005 – 2007	2	6.2	8	8.7	10	8.1	75.0
TOTAL	32		92		124		

3.1.2.4. Mobility Propensity of Study Region Residents

29.6% of the AMs in the study area stated that they had amenity-migrated to another destination previously, and 5.7% of AMs residing in the study region said they were considering moving to another high amenity place. In addition, of all other HHS respondents in SSO, 11.4% stated they are considering becoming amenity migrants elsewhere.

3.1.3 Age, Gender and Household Type

Information on age, gender and household type obtained for the SSO from the KIS corresponds highly with the HHS findings reported below. Both reflect the more general information about these AM characteristics, especially for western Canada and USA mountain regions.

3.1.3.1 Age & Gender of Respondents

The youngest age cohort of 18-34 yrs made up only 8% of the responding households. Within this AMs accounted for 0.7%, EMs 2.2%, RRs 32% and LRs 4.5%. In the 34-64 yrs cohort AMs were about 10% less than other resident types and, while in the 65-74 cohort they were about 8% more. Comparing the two valleys by these resident types showed close similarity between AMs and EMs, but with S having more than double the percentage of LR 18-34 year olds than SO (14.3% compared to 6.15%). This pattern corresponds with KIS findings for the study region, and also with related general AM information.

Approximately half the respondents to the HHS were male and half female, with more males in S than SO (58% to 47%).

3.1.3.2 Household Type

Only 13.8% of all respondent's households had or expected to have children. For AMs the percentage was 9.7%, while EM households were very similar to LR; 22.2% and 21.4% respectively. The household retirement data strongly reflects this picture, with 55.2 % of the AM type being retired, and another 18.7% semi-retired; together 73.9% of all AM households. Also, EM and LR households were 29.3% and 29.8% retired, and 47.8% and 43.6% respectively when aggregating retired and semi-retired. The KIS information corresponds well.

Comparing the two valleys indicates that S had about the same retired as SO, but over half the semi-retired (12.9% compared to 21.5%), about the same percentage of retired EMs, but less than half the semi-retired EMs (8.3% compared to 18%), and over half the retired LRs (15% to 34.4%). However, S has about double the retired LRs of SO (20% compared to 10.9%).

3.1.4 Education

The AMs generally had a little higher achievement level of formal education than both total households and LRs in SSO. Within this general picture, the difference is most pronounced for graduate studies level, with attainments of 8.3% for AMs and 3.2% for both all SSO households and LRs. For undergraduate degrees the comparison is 13.1%, 13.2% and 8.7% respectively, and for high school graduation the comparison is 27.9%, 25.2% and 16.1% respectively. For those respondents having some high school education the percentages are respectively 11.7%, 12.4% and 9.7%.

Notably the EM resident type had the highest percentages for both categories of university education (10.5% graduate studies; 15.3% undergraduate degree) compared to AMs, LRs and total SSO households. It should also be noted that the RRs type also ranked higher than AMs, LRs and total households for bachelors degrees at 14.5%.

A comparison of the two valleys indicates a few key differences. High school graduated EMs in S was approximately double that in SO (25% and 12.6% respectively). LRs in S with some high school education were 26.3% in S and 18% in SO, a pattern that reverses for high school graduation with 36% for LRs in SO and 21 % in S. While university education was similar at the bachelor level for the two valleys, for post graduate studies SO had 13.7% compared to 2.8% in S. Comparing higher education of local resident respondents, 13.1% of SO and 0% of S respectively had bachelors degrees or some graduate studies.

Referring to the general AM information available, SSO AMs appear to have less educational attainment compared to LRs than would be anticipated. This may

reflect a generally higher education attainment (urban/rural) in western Canada, and/or on the other hand high percentage of non-metropolitan originating AMs.

3.1.5 Employment & Income

3.1.5.1 Employment

Looking again first at amenity-led migrants in the whole study region, 56.9% of AMs were *retired* and 10.4% *semi-retired*, while 30.8% were *employed* (18.7% *employed* and 12% *self-employed* aggregated). Of the EMs 31.8% were *retired* and 6.7% *semi-retired*, while 60% were *employed* (36.3% *employed* and 23.7% *self-employed*). For comparison 29.1% of LRs were *retired* and 0 *semi-retired*, with 61.6% *employed* (36% *employed* and 25.6% *self-employed*). A significant percentage of AMs were economically active, the *employed* or *semi-retired* 67.3% of the total, especially given the commonly held impression in the study region that most AM were retired from economic activity.

More detailed analysis of the *other* (especially *employed* and *semi-employed*) and the *under-employed* categories should be undertaken in Phase II.

Comparing S and SO there appears to be little general difference across resident types regarding employment. However, more detailed analysis indicates that *employed* LRs were a significantly larger percentage in S than SO (71.4% and 58.5% respectively). In addition, there are some significant differences in the *self-employed*; for EMs in S 30.6%, and in SO 21.2%. Similarly for RRs in S it was 30% and in 13.7% in SO.

3.1.5.2 Income

The annual household income data obtained from the HHS is problematic. Only 46.8% of the respondents indicated their income, and for AMs and EMs in particular the percentages were lower; 23.6% and 35% respectively. Nevertheless, here are income highlights for those who did give their incomes. In the below \$25,000 annual household income bracket were 3.8% of AMs, 2.4% of EMs and 4.6% LRs. In the next highest income bracket of \$25,000 – \$99,000 were 17.6% of AMs, 22.4% of EMs and 19.3% of LRs. In the \$100,000 – \$500,000 bracket were 8.8% of AMs, 8.1% of EM and 9.15% of LRs.

In another section of the HHS questionnaire 59.3% of the SSO AMs stated they came to the study region expecting to be *living on pensions, capital and investments*. In the KIS interviewees advised that this wealth was being substantially augmented in both valleys by equity that AMs in particular brought with them from the sale of their previous place of residence, especially where housing prices were substantially higher than in the SSO, such as Vancouver, Calgary and Edmonton.

Comparing S and SO with this limited data suggests in general there was not an appreciable difference in income between S and SO. However, it does indicate that in the \$25,000 – \$99,000 income bracket for EMs there were 28% in S and 18.3% in SO. For the same resident type in the \$100,000 – \$500,000 income bracket there was 2.9% in S and 13.4% in SO. Similarly for this income bracket of LRs there was 5.6% in S and 12.7% on SO. The KIS information conforms to this picture, and it also indicates that AMs in SO and S had similar incomes, but that there are a larger number of wealthy AMs in SO. This is also reflected in a KIS general opinion that discretionary wealth plays a greater role as a motivator for AMs to SO than S. Further, that AMs in Upper S generally have greater discretionary wealth and income than those residing in Lower S.

3.1.5.3 Business Activity

The respondents' business activity gives further insight into SSO employment and income. The percentage of the total respondents to have started a business in the study region was 25.2%. By resident type 46.9% of EMs started a business, 42.5% of LRs, 22% of RRs and 16.5% of AMs. The survey respondents invested a total of \$201.5 million and created 963.5 jobs. Notably, of this amount the AM group were responsible for \$167.7 million.

The percentage of respondents responsible for starting businesses was about the same in S and SO; 23.5% and 25.9% respectively. The number of businesses started by them in S was 23 and in SO 80, and investment in these businesses in S was \$165.3 million, and in SO \$36.2 million. The number of jobs they created was 174.5 in S and 789 in SO.

The economic impact of both AMs and EMs on the study region has been significant, both in direct investment and job creation and also in the wealth migrants have access to for local spending. The latter is partially reflected in property purchase, construction, improvement and value increase in the housing and land use characteristics outlined next (Section 1.3.6).

3.1.6. Housing and Land Use Characteristics

3.1.6.1. Residence and Property Type

70.1% of the HHS survey respondents indicated they owned and resided in single detached houses. Considerably fewer owned: mobile homes (10.1%), condominiums (8.9%), townhouses (4.3%), apartments (1.2%), with *other* accounting for 5.3%. Those who purchased a vacant lot and built their residence on it numbered 23.7% while 16.7% purchased a property with a home on it and replaced it with a new one. AMs were about as likely as other resident types to purchase and build a new house (15% and 17% respectively). For both valleys

95.3% of the respondents stated they had not subdivided their property nor had an intention to do so.

73.9% of the respondents had property of 1 ac or less, 18% 1.1 to 10 ac and 8.4% more than 10 ac. And 76.9% of AMs, 67.2% of EMs, 72.9% of RRs and 73.2% of LRs had property 1 ac or less. The average land size for residential property of less than 10 ac was 1.1 ac, and the number of respondents residing on more than 10 ac was 56. More AMs lived on 1/2 acre or less than any other resident type, and appear under represented in all larger property size classifications.

Comparing the two valleys found several notable differences. The percentage of single detached homes was 74.5% in S and 68.3% in SO, and mobile homes were 13.9% and 8.6% respectively. Townhouses accounted for 2.3% in S and 5.1% in SO, and condominiums 0 in S and 12.6% in SO. The below 10 ac average lot size was 1.2 ac for S and 1.0 ac for SO, while the number of respondents residing on more than 10 ac of property was 23 in S and 33 in SO. In the S 54% of AMs' property was 0.5 ac or less, while in the SO the percentage was 71.2%. For LRs this compares in the S with 47.6% and 60.9% in the SO.

The pattern of the above residential characteristics conforms highly with that described in the KIS.

3.1.6.2. Residential Property Value

Of the total respondents in the study area 59.9% (excluding extreme data) answered the question asking them the cost of their real property, including improvements made. The mean cost was \$224,000, and the median cost was \$200,000. 53.9% (excluding extreme data) also estimated the present value of their property and the mean was \$468,000, and median was \$400,000. These amounts indicate SSO mean and median increases of \$244,000 and \$200,000 respectively. These appreciations do not take into account the number of years property has been owned. AMs' house values appeared average, while RRs had the most houses valued over \$500,000.

In comparing the two valleys, both the mean and median for cost and estimated present value were lower in S than in SO. See Tables 3 and 4. Further analysis of property value data disaggregated into the 5 resident types awaits additional project funding.

Housing information from the KIS coincides well with the above HHS finding. Also, the increase in real property values indicated in the survey results fits the general characteristic for high amenity places. The difference between the two valleys likely reflects to a considerable extent the more developed stage of amenity migration and the greater urbanization of SO compared to S. Compared

to the limited figures available for other western North American high amenity inland valleys the increase in monetary value indicated for SSO, and especially S, are not exceptional.

Table 3. Cost of SSO Respondents Real Property (Including Improvements)

Property cost	Similkameen Valley	South Okanagan Valley	Total (Both Valleys)
Total \$ (excluding extreme data)	17,157,000	66,882,000	84,040,000
Number of responses (excluding extreme data)	104	270	374
Mean \$	165,000	248,000	224,000
Median \$	145,000	200,000	200,000
Min. \$ price	4,000	8,000	4,000
Max. \$ price	1,000,000	985,000	1,000,000
Extreme data excluded	\$200, \$240, \$200,000,000	\$150,000,000	\$200, \$240, \$150,000,000, \$200,000,000

Table 4. Estimates Selling Price of SSO Respondents Real Property

Property anticipated selling price	Similkameen Valley	South Okanagan Valley	Total (Both Valleys)
Total \$ (excluding extreme data)	42,900,000	154,754,000	197,654,000
Number of responses (excluding extreme data)	111	311	422
Mean \$	386,000	498,000	468,000
Median \$	290,000	400,000	400,000
Min. \$ price	37,000	20,000	20,000
Max. \$ price	2,500,000	2,000,000	2,500,000
Extreme data excluded	\$270, \$400 & \$390,000,000	\$350, \$600, \$2500 & \$345,000,000	\$270, \$350, \$400, \$600, \$2500, \$345,000,000, & \$390,000,000

3.2 Key Motivating & Facilitating Factors

The motivating and facilitating factors identified in the KIS for amenity migration fit the more global pattern outlined above in Section 1.1. These interviews also indicate that while varying in degree, the same key factors motivated and facilitated the migration and residency of EMs (economic migrants), RRs (returned residents) and LRs (local born & raised) in both valleys. Although the key informants stated a difficulty in ranking key motivating factors because they are systemically inter-related, they ranked as 1st *superior natural environment*, 2nd *cultural differentiation*, 3rd *flight from large cities*, and 4th *leisure*. *Learning*, which includes spirituality, and *economic gain* were also ranked important, but 5th and 6th respectively. A number of key informants stated that *economic gain* will likely become more important in the future, along with *flight from large cities*. More specifically, *climate, clean environment, rural lifestyle, quietude and outdoor recreational opportunities* were the main natural and cultural attractions for both moving to and remaining in the study region.

Among the key factors that facilitated amenity migration to the SSO identified in the KIS, *discretionary wealth* ranked 1st, *comfort amenities* 2nd, *discretionary time* 3rd and 4th *access technologies* (IC&T). A number of interviewees stressed that while *discretionary wealth* is the most important facilitator, many amenity migrants came with equity they obtained from selling properties they previously owned elsewhere in high value housing markets, and so have more than enough to purchase land in SSO, where it remains comparatively cheap. This was stated as pertaining more so in S than SO and other well-known high amenity locations in Canada, such as Canmore, Whistler, the Kootenay area (and also Vancouver), where many SSO amenity migrants were said to come from (see Section 3.1.2 above). Further, although access technologies have greatly improved in SSO in recent years, the electronic communications component is not widespread, with many rural areas not having internet and cell phone access. Consequently, amenity migrants, while having excellent highways and roads, and good airports, have to date not depended very much on this aspect of the technological facilitating factor. However, a common interviewee opinion was that it will become more significant in the future.

To obtain more detailed and quantitative information about motivators and facilitators, and test veracity of the survey tools, HHS Question 4. was asked: *If you came to the Valley as an adult (migrant or returned resident), what were your reasons for coming and how important were those reasons to you at the time? OR if you are a local person what are your reasons for remaining in the Valley?* A list of 29 choices were given, including one *Other*. The resulting ranked motivators and facilitators can be found in Table 5; the former in blue and the latter in yellow. It should be emphasized that in the KIS 6 motivators and 6 facilitators were actually ranked in importance (1 through 6) by interviewees, while in the HHS ranking is based on the total number of times each motivator

and facilitator was identified by the respondents. Also, only *Very Important Reasons* in the HHS have been ranked, which is sufficient for Phase I purposes. A more detailed ranking analysis will be undertaken in Phase II.

HHS results show that superior natural environment type reasons ranked 1st. This was not only among AMs, but also across all resident types, including EMs. Economic migrants in S chose *To enjoy clean rivers and lakes* most often, although its lead was only 5.5% over *For a job*, which came 2nd (54.1% to 48.6%). In SO EMs ranked *For a job* 1st, then 2nd, *Because of the climate*, with the first ranked 7.9% above (62.4% to 54.5%).

As indicated by the KIS also, facilitating factors for moving to or remaining in SSO were more important than motivators for EMs, LRs and RRs when compared to AMs, especially *For a job* and *Lower cost of living*. It should also be noted that the ranking of OMs on this specific topic is very similar to that of AMs, which suggests many may also be AMs. The main difference between these two groups is the AMs' most important facilitating factor was *Cheaper property*, compared to *Lower cost of living* and *Good facilities for seniors* for OMs. In Phase II those migrants that classified themselves as *Other* need to be further studied, as it appears most will actually be better classified as AMs or EMs based on their stated reasons for moving to SSO.

The HHS also reveals that except for RRs residing in S, migrants as well as residents in S chose either *Clean air* or *Clean rivers and lakes* as the premier motivating factor, while the SO respondents chose *Climate* most frequently.

One difference in motivators identified in the KIS compared with HHS results is the clear identification and higher ranking of cultural differentiation or distinctiveness in the former. A likely reason is that the KIS format of in-depth personal interviewing allowed cultural amenities to be discussed and further explained if wished by the interviewee. This is a comparative strength of the KIS interview method, as the HHS type does not allowing discussion of things recipients may find difficult to understand. However, from experience with previous amenity migration surveys, the following reasons were included in the list in reference to cultural amenities: *Because it is culturally distinct*, *To live in a rural community*, *To be in a safer place* and then *For peace and quiet*. When aggregating the choice of these reasons KIS results correspond with that of both migrants and other residents in S, but not in SO. In SO, leisure comes 2nd as a motivator, and cultural distinctiveness comes 3rd.

Table 5: *Very Important* Reasons for Migrating to or Remaining in Similkameen and South Okanagan Valleys, BC, Canada

VERY IMPORTANT REASON	RANK BASED ON NUMBER OF TIMES MENTIONED										
	Amenity Migrant		Economic Migrant		Local Born or Raised		Returned Resident		Other Migrant		Over-all Rank
	S	SO	S	SO	S	SO	S	SO	S	SO	SSO
1) For a job	17	14	2	1	4	6	5	7	7	7	14
2) To pursue a business opportunity	18	19	4	6	4	12	6	11	8	9	22
3) For peace and quiet	2	4	5	6	3	5	2	5	2	2	4
4) To live in an area of diverse plants/wildlife	5	7	12	7	4	8	5	8	2	5	10
5) To be near parks	12	8	12	8	6	10	5	9	5	5	13
6) To enjoy clean air	1	2	3	3	1	2	3	3	1	2	2
7) To enjoy clean rivers and lakes	2	3	1	4	2	3	2	2	1	3	3
8) Because of the climate	2	1	3	2	3	1	1	1	4	1	1
9) Because of mountains and mountain views	3	5	8	6	2	4	3	4	4	4	5
10) To be near abundant outdoor recreational opportunities (egs. golf, fishing, skiing)	7	6	NA	5	4	7	6	6	5	5	9
11) To be near Crown land for motorized recreation (trail bikes, ATVs)	14	23	16	15	6	12	5	10	9	NA	25
12) To be near Crown land for	13	18	14	11	6	11	6	12	NA	NA	24

VERY IMPORTANT REASON	RANK BASED ON NUMBER OF TIMES MENTIONED											
	Amenity Migrant		Economic Migrant		Local Born or Raised		Returned Resident		Other Migrant		Over-all Rank	
	S	SO	S	SO	S	SO	S	SO	S	SO	SSO	
hunting/fishing												
13) Because of diverse outdoor recreational opportunities (eg. golf, swimming, skiing)	10	9	13	5	7	9	7	13	8	7	12	
14) Because of the wineries	21	21	15	12	9	19	NA	16	NA	9	27	
15) To be in farm or ranch country	NA	16	11	12	4	9	6	14	8	7	23	
16) To live in a rural community	8	12	7	10	5	13	1	12	3	2	8	
17) To be close to family or partner	NA	20	10	14	5	13	4	14	NA	4	16	
18) To have a lower cost of living	9	14	7	10	6	14	5	15	5	5	18	
19) Because of cheaper property	8	13	6	9	8	16	5	15	7	7	19	
20) To retire	4	10	9	13	8	16	7	NA	6	6	6	
21) To prepare for retirement	11	14	14	17	7	15	4	14	8	8	15	
22) Good facilities for seniors	12	15	10	14	8	17	NA	NA	5	5	17	
23) To be in a safer place	6	11	6	9	5	13	3	13	2	2	7	
24) Because of its comfort amenities (restaurants, shops, entertainment, walk to most	16	22	15	17	9	18	7	17	6	6	20	

VERY IMPORTANT REASON	RANK BASED ON NUMBER OF TIMES MENTIONED										
	Amenity Migrant		Economic Migrant		Local Born or Raised		Returned Resident		Other Migrant		Over-all Rank
	S	SO	S	SO	S	SO	S	SO	S	SO	SSO
services)											
25) Access to health care	12	15	9	13	6	14	6	16	6	6	11
26) To enjoy the music or cultural scene	19	24	NA	NA	9	18	NA	NA	7	7	26
27) Because it is culturally distinct	22	26	NA	NA	10	19	NA	NA	8	8	28
28) Because of spiritual attraction of landscape	15	17	13	16	8	17	6	16	7	7	21

Note: Blue indicates motivating reasons (motivators) and yellow facilitating reasons (facilitators). For each resident type (AMs, EMs, etc.) all reasons have been ranked by the number of times it was chosen as Very important, with 1 being chosen most and 28 the least. NA means no respondent thought this reason was very important.

3.3 Attitudes and Behaviour

3.3.1 Amenity Migration As Opportunity & Threat

While the majority of KIS interviewees thought AM is definitely an opportunity, especially in S, a number of them considered it a threat, especially for SO, where it was associated with uncontrolled population growth. Those who thought it is an opportunity however, stated this only if AM is appropriately planned and managed. Otherwise, they stated that cost of living increases while incomes remain low or fixed, and uncontrolled population growth results in negative environmental and socio-economic issues, such as unaffordable land and housing and a general decrease in the *quality of life* (QL) (see Appendix 3 for KIS interpretations of the meaning of QL).

According to almost all KIS interviewees, QL in S is either improving or holding steady, while half stated that it is declining in SO; due to uncontrolled and rapid population growth coupled with infrastructure and services unable to keep pace with growth. Although the quality of life in SO was considered to have decreased, almost all KIS were in agreement that AMs are staying; not moving on. This is confirmed by response to a question in the HHS (see Section 3.1.2.3 above).

Findings from the HHS on whether AM is an opportunity or a threat for the study region reveals a more cautious or perhaps a more uninformed or less informed condition among the sample respondents. For the entire SSO 39.1% stated that AM was an opportunity, 14.6% a threat, but 41% had no opinion, while 5.1% considered it both. Comparing S and SO, 46% of the former and 39% of the latter had no opinion. Also in S 90% of RRs and 66.7% of OMs stated they have no opinion on this topic, while AMs, LRs, and EMs were about equal for it being an opportunity and having no opinion. However, SO reflects a more varied opinion than in S with 15.7% of respondents considering it a threat and 6.2% both an opportunity and threat. An important observation here is that 39% of respondents had no opinion in a place where AM has been for at least two decades ago, along with about one third of the KIS interviewees, although it was stated as negatively impacting residents' quality of life.

20.2% who answered AM was an opportunity wrote reasons which can be summarized as follows: 1) will foster planned and managed growth and development; 2) will protect the natural and cultural amenities that attracted AMs to the valley because of their new ideas and participation in community decision-making; 3) will bring economic development through the new businesses and capital they bring; and 4) will improve the level of public services in the area. On the other hand, the answers of the 28.4% who thought AM was a threat can be grouped into six key reasons: 1) lack of SSO skills to appropriately plan and manage growth and development; 2) limited resources for too many people (especially elderly) to share; 3) AMs' values and behaviours in conflict with LRs; 4) environmental degradation due to AMs' resource-consuming behaviours; 5) considerable socio-economic issues, particularly lack of affordable housing and increase in cost of living; and 6) economic stagnation.

For the total study region, when asked about their *quality of life* 18.4% said it was *improving*, 42% *holding steady*, 28.3% *declining*, and 11.3% had *no opinion*. Comparing the two valleys, 16.44% in S and 19.22% in SO said it is was *improving*; 50.66% in S and 38.43% in SO stated it was *holding steady*, 21.46% in S and 31.16% in SO said it was *declining*, while 11.42% in S and 11.19% in SO had *no opinion*. Based on these finding there were more respondents in SO who think their QL is declining, which corresponds to the general response from the KIS.

HHS respondents were also asked what issues from a list would probably decrease their QL, how major or minor the issues were, and what would cause

them to leave their valley. A score of “5” indicates the most major issue, “1” the most minor, with responses ranked by means. For the study region no issues of major importance were stated (those having as mean of 4 to 5). Nine out of 12 issues were perceived as of moderate importance (3 to 3.99) and included: *Lack of health care facilities* (3.98), *Shortage of water* (3.91), *Environmental degradation* (3.88), *Level of crime* (3.75), *High cost of living* (3.69) *Loss of wildlife* (3.61), *too fast rate of growth* (3.43), *Climate change* (3.26) and *Can't afford to own property* (3.14). The remainder of the issues were rated of minor importance (mean of 1 to 2.99), and included: *Limited access to recreational facilities* (2.87), *Can't make a decent living* (2.73), and *Slow rate of growth* (2.26). Except for the *Lack of health care facilities*, for which 43.5% stated they would leave and 48% would stay, no other issue came close to being a cause for more than 40% to leave.

When comparing the two valleys the following was found. In S, there were no issues perceived as major, while in SO respondents stated major issues of *Shortage of water* (4.02) and *Lack of health care facilities* (4.01). However, the majority would stay although these issues decrease their quality of life (57.1% for *shortage for water* and 49.8% for *Lack of health care facilities*).

For moderate QL issues in S they included: *Lack of health care facilities* (3.95); *Environmental degradation* (3.89); *Shortage of water* (3.80); *Level of crime* (3.71); *Loss of wildlife habitat* (3.68); *High cost of living* (3.61); *Too fast rate of growth* (3.21); *Climate change* (3.19); and *Unable to afford to own a property* (3.13). In SO, *Environmental degradation* (3.87); *Level of crime* (3.79); *High cost of living* (3.76); *Too fast rate of growth* (3.64); *Loss of wildlife habitat* (3.54); *Climate change* (3.33); *Can't afford to own a property* (3.14) and *Limited access to recreational facilities* (3.0). In both S and SO, the majority would not leave, except for the *Lack of health care facilities* among S respondents, at 47.8%. Furthermore, issue-to-issue, higher percentage of SO respondents would stay compared to S, which suggests a higher level of tolerance in SO to negative impacts of AM.

Later the results of this analysis can be strengthened by separating the responses by migrant/ resident type and by using a t-test to ascertain the differences in the mean assessments between S and SO respondents and among migrant/ resident type. This will show a true divergence of opinion and not just variation inherent to the samples drawn from the present analysis.

3.3.2 Natural Environment & Energy

3.3.2.1 Conservers and Consumers

Research about amenity-led migration indicates that amenity migrants generally tend toward two types: amenity conservers and amenity consumers (Moss 1994,

2006; Price *et al* 1997, Glorioso 1999, 2006). The data in Table 6 indicate, in rank order from most to least participation, how HHS respondents personally behave to sustain their environment by their participation in 14 conservation activities. It also indicates the comparative level of participation by SSO resident type. AMs were more likely to recycle garbage, conserve energy use, avoid use of pesticides, use low-volume toilets, use solar power and use gray water for watering. LRs were the least likely to follow these practices. LRs were indicated as most likely to bicycle to work, share rides, own hybrid cars and use public transit. RRS were most likely to use native plants and practice xeriscaping. The EMs were close to the average in all conservation behaviour categories.

Caution must be used with these percentages, as the total number for each resident type differs. For example, 84 LRs responded compared to 432 AMs. However, the data indicates that AMs are generally resource-conservers, and more resource conserving than LRs, contrary to some KIS and HHS respondents' opinion that AMs are characteristically resource consumers. Further, because of the comparatively high percentage of AMs in the study region their impacts may be greater than other resident types in either valleys. The top 3 environmental conservation actions in SSO Valleys were: 1) *Separate recyclable garbage* (92.25%); 2) *Conserve household energy use* (88.3%); and 3) *Avoid use of pesticides and chemical fertilizers* (62.8%).

Table 6 also indicates people living in SO are more resource conserving than those in S. The extent respondents' level of education, income, age and motivation type affects respondents' environmental attitude and behaviour can be indicated by a more sophisticated statistical analysis when more funding is available.

Table 6. Environmental Conservation Behaviour of SSO Residents

ENVIRONMENTAL CONSERVATION BEHAVIOUR	RESPONDENTS' LEVEL OF PARTICIPATION			
	S		SO	
Separate recyclable garbage	EM	97.3%	OM	96.0%
	AM	92.8%	AM	95.2%
	RR	90.0%	RR	94.3%
	OM	86.7%	EM	91.9%
	LR	66.7%	LR	90.5%
	Total	90.5%	Total	94.0%
Conserve household energy use	RR	100%	RR	98.1%
	EM	89.2%	OM	92.0%
	AM	87.8%	AM	90.8%
	OM	80.0%	LR	85.7%
	LR	76.2%	EM	83.8%
	Total	86.9%	Total	89.7%

ENVIRONMENTAL CONSERVATION BEHAVIOUR	RESPONDENTS' LEVEL OF PARTICIPATION			
	S		SO	
Avoid use of pesticides and chemical fertilizers	RR	80.0%	OM	76%
	AM	65.5%	AM	63.1%
	LR	61.9%	RR	62.3%
	OM	60.0%	EM	58.6%
	EM	59.5%	LR	49.2%
	Total	64.4%	Total	61.2%
Use low-flow flush toilet	RR	60.0%	RR	60.4%
	LR	47.6%	AM	52.9%
	AM	43.2%	LR	47.6%
	EM	37.8%	EM	43.4%
	OM	33.3%	OM	28.0%
	Total	42.8%	Total	50.1%
Use low impact or non-motorized forms of outdoor recreation	EM	51.4%	RR	58.5%
	RR	50.0%	EM	49.5%
	OM	46.7%	AM	48.1%
	AM	44.6%	OM	44.0%
	LR	33.3%	LR	34.7%
	Total	45.0%	Total	47.7%
Use native plants	OM	53.3%	OM	60.0%
	RR	50.0%	RR	54.7%
	AM	43.9%	LR	49.2%
	LR	38.1%	AM	48.1%
	EM	35.1%	EM	46.5%
	Total	42.8%	Total	49.2%
Use xeriscaping	OM	26.7%	OM	56.0%
	EM	21.6%	RR	41.5%
	AM	20.1%	EM	36.8%
	LR	14.3%	AM	35.5%
	RR	10.0%	LR	33.3%
	Total	19.8%	Total	37.0%
Use solar panels or wind energy	OM	33.3%	AM	28.3%
	EM	24.3%	OM	28.0%
	LR	23.8%	RR	24.5%
	AM	23.0%	EM	24.2%
	RR	10.0%	LR	23.8%
	Total	23.4%	Total	26.6%

ENVIRONMENTAL CONSERVATION BEHAVIOUR	RESPONDENTS' LEVEL OF PARTICIPATION			
	S		SO	
Share a ride to work	EM	27.0%	LR	31.7%
	OM	20.0%	RR	30.2%
	AM	19.4%	OM	28.0%
	LR	19.0%	EM	26.3%
	RR	10.0%	AM	24.2%
	Total	20.3%	Total	26.3%
Bicycle to work	OM	13.3%	LR	14.3%
	EM	10.8%	EM	11.1%
	AM	6.5%	AM	10.2%
	LR	4.8%	OM	8.0%
	RR	0.0%	RR	7.5%
	Total	7.2%	Total	10.5%
Use grey water for watering the lawn	OM	20.0%	AM	11.9%
	AM	6.5%	RR	9.4%
	LR	4.8%	EM	8.1%
	EM	2.7%	OM	8.0%
	RR	0.0%	LR	7.9%
	Total	6.3%	Total	10.3%
Use public transportation	OM	6.7%	RR	13.2%
	EM	5.4%	LR	9.5%
	LR	4.8%	AM	8.5%
	AM	3.6%	EM	6.1%
	RR	0.0%	OM	4.0%
	Total	4.1%	Total	8.4%
Drive a hybrid or "smart car"	AM	0.7%	OM	4.0%
	EM	0.0%	LR	1.6%
	OM	0.0%	AM	1.4%
	LR	0.0%	EM	1.0%
	RR	0.0%	RR	0.0%
	Total	0.5%	Total	1.3%
Other	AM	2.9%	OM	4.0%
	EM	2.7%	RR	3.8%
	OM	0.0%	LR	3.2%
	LR	0.0%	AM	2.7%
	RR	0.0%	EM	2.0%
	Total	2.3%	Total	2.8%

3.3.2.2 Parks & Protected Areas

Answers to questions in the HHS about the Park Canada's (PC) feasibility study for a national park reserve in the Lower Similkameen and South Okanagan area rendered both specific information for new park study, and also further insights into the residents' environmental attitudes and behaviour. It indicated that 73% of the SSO respondents were aware of PC's project: 17.6% were *a little bit aware*; 30.2% *somewhat aware*; and 25.4% *very aware*. S respondents were a bit less aware than SO's; (62.4% compared to 77.6%). In S, the most aware were the RRs and EMs at 81.0%, followed by LRs at 71.4%, then AMs at 56.5%, and the least aware were OMs at 46.7%. SO's most aware resident type was LRs at 89.4%, followed by RRs at 81.1%, then AMs at 76.2%, with EMs and OMs the least aware with both 73.0%.

While a high percentage of awareness existed among SSO respondents, only 38.7% support the new park reserve, of which 29.6% *strongly support* and 9.1% *slightly support*. 15.6% *strongly oppose* the project, 3.8% *slightly oppose*, 9.9% were neutral, while 4.7% *did not know* if they support or oppose, and 27.1%, said they *needed more information* about it. Across resident type and the two valleys, the strongest opposition came from LRs at 36.4%, of which 52.4% were from S and 31.3% from SO. It should be noted that in terms of the location of the park, S would be more affected, particularly lower Similkameen. In SSO, the strongest support was by RRs at 37.5%, followed by OMs at 31.7%, then AMs at 30.1%, EMs at 29.9% and last was LRs at 21.6%.

The number of times the respondents stated they would use the park mirrors the above results. Some 20.8% of SSO respondents stated they would *not use the park at all*, which is roughly equal to the percentage of respondents who would *strongly to slightly oppose* the project. Only 8.7% of SSO respondents would *frequently* use the park, 10.9% *regularly (3-6 times/ year)*. A large percentage of respondents, some 38.5% would use it *occasionally (1-2 times/ year)*, and the remaining 21.1% said they would use the park *once every few years*. Comparing resident types the reported highest intention to use the park was RRs with 83.9%, followed by AMs and EMs with 81.7%, then OMs with 77.5% and LRs with 60.8%.

When asked for the 3 most important benefits of the national park under consideration, based on the number of times mentioned, SSO respondents chose 1st with 43.9% *As a place to experience outdoors*, 2nd with 35.7% *As a peaceful, quiet place*, and 3rd at 26.6% *As a place to bring family and friends*. SSO respondents thought that the least important park benefit was *As a place for learning* at 11.1%. Some 21.2% claimed they would not benefit from the park, which was fairly consistent with the percentage of SSO respondents not supporting the park (19.4%) and will not use the park at all (20.8%). This is also consistent with motivations identified by SSO respondents, where only 24.2%

stated *To be near parks* as a very important reason for either moving or remaining in SSO.

All resident types rated *As a place to experience outdoors* as their number one most important new park benefit, with RRs first among resident types at 53.1%, followed by EMs at 45.1%, AMs at 43.3%, OMs at 41.5% and LRs at 38.8%. Only LRs rated 2nd *Will not benefit*, with *As a peaceful, quiet place* the 2nd most important benefit for RRs (43.8%), AMs (38.1%), EMs (32.3%). This was ranked by LRs the 3rd most important benefit. *As a place for recreation and discovery* was 3rd for RRs at 23.4% and OMs at 34.1% , while *As a place to bring family and friends* was 3rd for AMs at 28.9% and EMs at 25.6% . But It was for OMs the 2nd most important.

The top three most mentioned outdoor activities in the new park were *Day hiking* at 56.0%, followed by *Roadside sightseeing* at 48.2% then *Camping* at 39.5%. Comparing within resident types, *Day hiking* was the most popular activity in a park among all with EMs leading at 59.2%, followed by AMs (55.8%), then OMs (55.3), LRs (54.7%) and RRs (53.1%). Parallel to the SSO pattern, *Roadside sight seeing* and *Camping* were the 2nd and 3rd most liked activity in a park by OMs (55.3%, 42.1%), AMs (49.1%, 35.4%) and EMs (45.02%, 40.8%) respectively. On the other hand, both LRs and RRs rated slightly higher *Camping* (50.2%) to *Roadside sightseeing* (45.6%) as their 2nd and 3rd most preferred park activity.

In comparing S and SO for these 3 most important park benefits, the 1st two were ranked the same. However the 3rd most important in S at 28.1% of respondents was *As a place for exploration and discovery*, while for SO, at 22%, it was *As a place to bring family and friends*.

Past research on amenity migration shows a general strong interest in and use of public parks and protected areas by amenity migrants, with AMs location being typically highly dependent on the existence of this natural amenity, particularly in economically developed countries. The SSO HHS survey indicated for AMs and across all resident types, parks were valued moderately with a ranking of 10th and 13th respectively, out of 28 choices offered for reasons to migrate to or remain a resident. For local born and raised the existence of parks ranked higher at 8th as a motivator of their residence. While there was high awareness of the potential new national park the support for it seems to correspond with the moderate value respondents gave to parks generally. The obvious exception indicated was for LRs who appear to support parks generally more highly than this new national park. More detailed analysis of the data could test this indication, including for more detailed community specificity.

3.3.3 Community Participation

While AMs are more environmental amenity conserving than LRs, the former participate less in their local community according to both KIS and HHS findings. This pattern corresponds with the more general research on amenity migration for western North America. According to about a quarter of KIS interviewees, this participation characteristic is an important attitudinal and behavioural difference among AMs, EMs and LRs. Further, the same number of interviewees thought that EMs participate more in the community compared to AMs because their source of income is more tied to the local economy. In addition, they reported that EMs are younger people and have younger and more children going to local schools, which involved them in the local community and its culture. Indeed, HHS results also show that AMs are less active in the community compared with LRs and EMs (see Table 7). In addition, there is less community participation in SO than S, which may suggest lower community participation is more of an urban characteristic rather than an AM characteristic *per se*. This parallels the findings above on respondents' environmental behaviour, where most of the activities identified in general seem to be more common urban practices today, such as xeriscaping, waste separation, energy conservation, etc. Both AMs and SO respondents, who are more culturally urban, scored higher on this aspect than other residence types and also in S.

Regarding increasing more participation of AMs in local communities, most KIS interviewees were of the opinion that public and volunteer entities, such as local councils, schools, Chambers of Commerce, the Legion, had to reach out much more to involve AMs in their communities. Such outreach should become a specific objective or project of such entities.

Table 7. Community Participation Behaviour of SSO Residents

COMMUNITY PARTICIPATION BEHAVIOUR	RESPONDENTS' LEVEL OF PARTICIPATION			
	S		SO	
Attend public hearings	RR	72.7%	RR	57.4%
	EM	59.5%	EM	51.5%
	LR	47.6%	LR	51.5%
	OM	46.7%	AM	50.01%
	AM	44.2%	OM	50.0%
	Total	51.9%	Total	51.2%
Donate money	EM	54.1%	LR	44.1%
	RR	45.5%	EM	42.6%
	AM	38.8%	OM	42.3%
	OM	33.3%	AM	39.3%
	LR	28.6%	RR	31.5%
	Total	43.1%	Total	39.9%
Participate in community meetings	OM	60.0%	OM	57.7%
	LR	57.1%	EM	37.6%

COMMUNITY PARTICIPATION BEHAVIOUR	RESPONDENTS' LEVEL OF PARTICIPATION			
	S		SO	
	EM	45.9%	RR	35.2%
	AM	41.5%	AM	34.3%
	RR	36.4%	LR	30.9%
Total	47.7%	Total	35.7%	
Volunteer time and skills	EM	54.1%	OM	53.8%
	RR	45.5%	EM	39.6%
	LR	42.9%	AM	38.0%
	OM	40.0%	LR	36.8%
	AM	34.0%	RR	31.5%
	Total	41.7%	Total	38.3%

The limited community participation by AMs is not unique to SSO, and may be one of the more unrealized opportunities of AM generally. In fact, when Moss initially developed the AM paradigm in 1986 from a study of Santa Fe, NM (a small town with high environmental and distinct cultural amenities), he observed that many people who were migrating to Santa Fe acted quite similarly to tourists, including having little involvement in local community affairs. AMs being unengaged in the community they move into seems a common characteristic found in AM studies. On the other hand, some are involved, and they also become local leaders.

Interestingly, most KIS interviewees said that AMs in both valleys have developed a sense of belonging to the place, which may be expected to be demonstrated by more community participation than is indicated. However, about half these interviewees also stated that LRs do not have a good relationship with AMs, which may be a reason why they are less involved. Key informants also indicated that LRs typically fear the changes that AMs usually bring and may impose on them. AMs are also resented due to their more sophisticated ways and material wealth. One key informant offered that this situation was typical of more agricultural or traditional societies/ cultures where acceptance of the *Outsider* takes a long time. There are ethnographic studies that corroborate this interpretation. Other key conditions identified in AM related research that discourage greater AM community participation are: 1) resistance to spending money which is a common trait of more rural municipalities, typically due to scarcity of funds; 2) the comparative length of time it takes to undertake tasks in more rural places; 3) less skilled and professional staff in local agencies and organizations, which includes limited global awareness and experience; and 4) language and cultural custom barriers, especially for foreign AMs.

3.3.4 Key Future Issues and Government Action

The most common SSO issues identified for the next 20 year period by key informants were: 1) *Degradation of water and air quality*; 2) *Unmitigated growth pressures*, such as *Lack of affordable housing and Developable land* (especially in SO); 3) *Failing public infrastructure*; 3) *Loss of rural character/ lifestyle*; 4) *Lack of economic diversity*; 4) *Lack of resources to serve an aging population*; 5) *Lack of ability to embrace change and plan for it*; 6) *Difficulty in finding the balance between AMs and LRs ways of life* ; 7) *Lack of appropriate land use management*; and 8) *Lack of funding*. The key informants thought that appropriate planning and management is essential to mitigate the above issues, which they went on to identify specifically as including: 1) a strategic assessment of how global issues influence the valleys; 2) a community vision; 3) good understanding of the impacts of AM; 4) good resources inventory to see what they have and don't have; 5) a strategy that will promote sustainability; and 6) holistic approach or context for solving problems. In addition, 7) tougher enforcement of laws and regulations are needed and most of all, 8) enlightened political leaders who have the will and determination to act on the necessary changes. The greatest fear of many KIS was the lack of preparedness of local governments to deal with the challenge of managing AM, and a lack of action of political leaders, which would lead to certain environmental degradation and loss of rural character of land.

The HHS results mirror well the above KIS findings, but gives greater specificity. Issues that both S and SO respondents thought will be major (mean ratings from 4.00 to 5.00) within the next 20 years were: *Water quality* (S 4.20; SO 4.36); *Availability of medical services* (S 4.19; SO 4.29); *Public safety and crime* (S 4.14; SO 4.18); *Water infrastructure systems* (S 4.08; SO 4.20); *Air quality* (S 4.08; SO 4.10); *Preservation/ loss of open spaces* (S 4.00; SO 4.10); *Hazard from wildfires and/or pine beetles* (S 4.00; SO 4.08). Salient interregional differences were: SO respondents considered *Sewer systems* a major issue (4.06), while S respondents rated it of moderate importance (mean ratings from 3.00 to 3.99). Ranked minor importance (mean ratings from 1.0 to 2.99) in S was *Public transit*, and for both, *Too slow economic growth*.

Further, the HHS respondents were asked to choose their top 3 priorities from the above issues. For the whole study region, 74.6% of respondents ranked 1st *Availability of medical services* and *Water quality*, with 29.4%; then 2nd *Air quality* with 17.2% and 3rd *Public safety & crime* with 17%. For the S out of the 31% of the respondents replying to this question, *Availability of medical services* is rated 1st, *Water quality* 2nd and *Air quality* came 3rd. On the other hand, out of 69% of SO respondents answering, *Water quality* was 1st priority, *Availability of medical services* 2nd, and *Housing for lower income residents* was 3rd.

A great majority (83.5%) of SSO respondents stated that the local government should do more regarding their top three prioritized issues identified above. However, when asked if local governments have the necessary capability (planning, managerial and financial) to act on the issues, out of 753 respondents

who answered in SSO, 28.3% answered *Yes*, 25.1% said *No*, 35.1% answered *Don't know*, and 11.5% had *No opinion*. When asked if local government had the will to act on the issues, out of 736 respondents answering this question, 15.4% answered *Yes*, 25.8% said *No*, 43.1% said *Don't know* and 15.5% had *No opinion*.

Comparing the two valleys indicated the following differences. There were 7% more SO respondents than in S who thought local government was capable to act on their identified problems, and 6% less SO respondents than in S who did not know if local government was capable or not. Larger differences are indicated for EMs and RRs: there were 23.6% more EMs and 15% more RRs in SO than in S who thought local government was capable. The patterns of AMs and LRs were quite similar in the two valleys. However, in regard to the will of local government to act on issues, there were 7.2% less SO respondents than S ones who thought local government had it. There were 4% more AMs, 10% more EMs, and 27.3% more LRs in S than in SO who believed local government had the will to act. One KIS key informant stated that although there are more challenging issues in SO, public officials and local politicians are trying to do something about it. Whereas in S, where the population growth has exceeded SO for the first time in many years, there are no public control measures to deal with this key issue.

The recently formulated RDOS Growth Management Strategy was generally unknown to the interviewees (KIS) and respondents (HHS). In S this was principally because the valley had opted out of participating in the Strategy. At the same time the survey was undertaken the Strategy was too new for most SO respondents to know much about. Nevertheless, a few of KIS were very much aware of it and approved of either the concept or the reported direction it was taking.

4. Next Steps

This survey probably provides the most complete and useful information developed to date in North America on a region's amenity-led migration and local response to this growing force that is changing rural communities and their ecologies. It offers a baseline of knowledge for the strategic next steps to plan for and manage in a sustainable manner in-migration to the Similkameen and South Okanagan Valleys. The next steps will be to formulate for each valley a set of alternative future scenarios of amenity-led change. These scenarios should be plausible, internally consistent, long term and identify key issues for managing amenity-led migration in each valley (see the project's Phase II description for details). The conditions in the two valleys are judged to be different enough that each needs its own scenario formulation for the scenarios to be specific enough for effectively guiding the following tasks: formulation of 1) a strategy, 2) an action plan and 3) a monitoring and assessment tool for implementation for

sustaining the quality of local communities in regional context and the integrity of the natural ecological system upon which their future depends.

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Appendix 3

Key Informants' Interpretations of *Quality of Life*

- access to clear air and water;
- good climate;
- slow pace of living;
- environment safe for children;
- beautiful landscape/ natural environment;
- freedom to do what one wants to do in one's own backyard, including no building by-laws;
- an individual existing in harmony with physical and social amenities of an area;
- ability to generate a supportive local economy;
- good people to people relationship;
- basic human rights reasonably assured;
- guaranteed liveable income and good health;
- ability to support a variety of people at different ages and socio-economic levels; and
- higher quality of life experiences, creativity, intimacy and influence.

Amenity-Led Migration in the Similkameen and South Okanagan Valleys

Phase One: Baseline Migration Surveys

Part 1: Key Informant Survey: Interview Guidelines

Prepared for: Similkameen Valley Planning Society

Prepared and Conducted by: International Amenity Migration Centre

This study is supported by:

British Columbia Real Estate Foundation

Parks Canada

Regional District of Okanagan-Similkameen

Town of Princeton

Village of Keremeos

KEY INFORMANT INTERVIEW GUIDE

Interview Date _____
Time Started _____
Time Ended _____

A. Interviewee Preparation (5-7 min): Explain 1) in-migration: amenity migration (permanent & part-time), economic migration, and migration not resulting from amenity. Also note capital attracted by amenity growth unaccompanied by migration; 2) the purpose of the study; 3) who is conducting the study; and 4) the study region, including advising that in the course of the interview, if the KI wishes to differentiate among parts of the study region (ie. SO, S, upper S, lower S) s/he should do so.

Inform the KI that what s/he says is strictly confidential, and s/he will not be quoted.

B. PERSONAL INFORMATION

Name _____

Position/ Occupation _____

Business Address _____

Tel. _____ Fax: _____

E-mail: _____

C. QUESTIONS

1) Do you think amenity migration phenomenon exists in the study region?

2) What % of the study region’s population do you think are amenity migrants (permanent, seasonal, and intermittent?)

- 2.1) % of total population _____
- 2.2) permanent _____
- 2.3) seasonal _____
- 2.4) intermittent _____

3) Are there other kinds of migrants in the study region aside from amenity migrants?

4.1) What do you think are the key motivators of amenity migration in the study area?

4.2) The following are the key motivators of amenity migration that are generally identified elsewhere. Are any of these motivators not present here?

- 4.1.a) superior natural environment _____
- 4.2.b) cultural differentiation _____
- 4.3.c) leisure _____
- 4.4.d) learning (including spirituality) _____
- 4.5.e) economic gain (secondary) _____
- 4.6.f) flight from large cities _____

5) How would you rank these motivators in significance for this region, with 1 being the most important?

- 5.1) superior natural environment _____
- 5.2) cultural differentiation _____
- 5.3) leisure _____
- 5.4) learning (including spirituality) _____
- 5.5) economic gain (secondary) _____
- 5.6) flight from large cities _____

6) Do their motivations change over time? For example, recent research indicates that negative aspects of living in large cities and economic gain have increased as key motivations of amenity migrants. Do you think this is true, and is this the case in the study region?

7) Do motivations change with the type of amenity migrant(s)?

(Interviewer to define "local people" before asking question #8: local people are those who have been born and/or raised in the study region. Ask for comment.)

8.1) Are the amenity migrants' motivations the same ones that local have for remaining in the study region?

8.2) Does this differ for SO and S?

9.1) What do you think are the key facilitators of amenity migration in the study area?

9.2) The following are the key facilitators of amenity migration that are generally identified elsewhere. Are any of these facilitators not present here?

9.2.a) discretionary wealth _____

9.2.b) discretionary time _____

9.2.c) access technology (IC & T) _____

9.2.d) comfort amenities _____

9.3) How would you rank these facilitators in significance for this region, with 1 being the most important?

- 9.3.a) discretionary wealth _____
- 9.3.b) discretionary time _____
- 9.3.c) access technology (IC & T) _____
- 9.3.d) comfort amenities _____

10) Do these facilitators change over time? For example, research indicates that amenity migrants have less discretionary time than in the past due to computers and internet allowing them increased work access (including work in their homes). But this IC technology also allows them to locate almost anywhere as place-based work becomes less important. In addition, IC technology has created more discretionary wealth for some.

11) Do the facilitators differ by type of amenity migrant:

11.1) permanent

11.2) seasonal

11.3) intermittent

12) Do the amenity migrants' facilitators also facilitate local people remaining?

13.1) Where do you think the amenity migrants are coming from, and roughly what % do you think come from, let's say: Alberta, BC, rest of Canada, USA and elsewhere?

PLACE	Total AM	AM-Permanent	AM-Seasonal	AM-Intermittent
Alberta				
BC				
rest of Canada				
USA				
elsewhere				

13.2) Do you think this differs with types of AM (permanent, seasonal, intermittent) (Interviewer use table above) _____

14) Can you estimate when the study region start to attract amenity migrants?

15) Why do you think amenity migrants began moving here at that time?

16) How long do you think this condition will continue? _____

17) Research, especially in the western USA, indicates that from about the mid-1980s, natural or environmental amenities became more valued in themselves or more as is, and started replacing more traditional use of resources, particularly mining, timber, agriculture, etc. Is this true in the study region? If so, when?

18) How does amenity migration compare to more traditional economic activities as means or tool for economic development?

19.1) Research in the USA also shows that natural parks and protected areas attract AMs whose economic activity may or may not depend on a place's amenity attributes, such as computer software developers, health care, art galleries, restaurants, etc. Is this true here? If so, what kind of economic activity has been generated?

19.2) Does it differ for SO & S?

20) Is the study region becoming a location of new or expanded (suggest following list)

20.1) formal educational activities/institutions _____

20.2) non-formal educational activities/institutions _____

20.3) other information/ knowledge intensive activities _____

20.4) artistic activities (performing, literary, fine arts) _____

20.5) Do you have other observations? _____

21) What are improvements in the IC (information and communications) and transportation technology in the study region, and since when?

22) How important to income is this technology for:

22.1) amenity migrants

22.2) local people

23) For a sustainable economy, to what extent does or should your community work toward attracting new, external capital or developing a local community-based economy to generate jobs and incomes (latter strategies attempt to minimize dependence on external actors and

organizations by promoting local ownership and control of local resources: land, amenities/natural resources)?

(If KI asks how to develop local community-based economy, say we don't have enough time to discuss this but s/he may wish to read Michael Shuman (1998) *Going Local: Creating Self-Reliant Communities in a Global Age*, published by The Free Press.)

(Interviewer introduces next part of the guide with "In the next questions I will ask you to focus on the values and behaviours of amenity migrants and local people and responses to them".)

24) Do amenity migrants behave differently from local people? How?

25) Do part-time or second-home owners behave differently from permanent amenity migrants? How?

26) How about compared to tourists?

27) Do economic migrants behave differently from:

27.1) amenity migrants

27.2) local people

28) For better understanding and management of amenity attributes, should part-time residents, specifically second-home owners, be categorized as tourists or amenity migrants? Why?

29) What is the attitude of the local people of the study region toward amenity migrants, and why?

30) Does their attitude differ toward permanent and part-time amenity migrants? If so, how?

31) Does their attitude differ toward tourists and amenity migrants? If so, how?

32) Is amenity migration an opportunity or a threat to the study region; and does it differ for SO and S bioregions? Why?

33) Are these opportunities and threats being realized? Why and why not?

34) Are there differences in threats and opportunities between permanent AM and part-time AM? Why and how?

35) Are the opportunities and threats of amenity migrants the same or different as those from economic migrants?

36) Are the AM opportunities and threats different from local people's effects?

37) Amenity migration has often been characterized as bringing about a reduction of "quality of life" in the destination. What is your opinion about this?

38) How do you describe or define "quality of life"?

39) There are indications that amenity migrants tend toward two types: amenity conservers and amenity consumers. Can you suggest policy tools that may attract the conservers and dissuade the consumers from migrating to the study region?

40) What, if anything, do you think should be done to modify the negative impacts of amenity migrants on amenities?

41) Do you think amenity migrants have developed a sense of belonging to the study region, or a part of it? And is there a difference between the more permanent and part-time types? If yes, in what ways are they exhibited?

42) If “belonging” is weak, how can it be strengthened?

43) What do you think will cause the amenity migrants to leave the study region or cease to come?

44) Are amenity migrants already leaving the study region?

45) Is the SO Growth Strategy’s Act bringing about coordination on issues that cross municipal boundaries and has it brought resources from provincial ministries and agencies to implement regional and municipal projects and programmes? (The Growth Strategy Act became a law in 1995.)

46) In your opinion, what are the key issues that the study region may face in the next 20 years? Does it differ for SO and S?

47) Should the study region's local governments do more regarding these issues, and what should they do? Does it differ for SO and S?

48) Do you find that the "quality of life" in the study region is: improving, holding steady or declining? Does it differ for SO and S?

49) What is your greatest fear for the study region's future? Does it differ for SO and S?

50) Are you an amenity migrant, or considering becoming one elsewhere?

Interviewer's Name:

Remarks:

Dear Resident of the Similkameen and South Okanagan Valleys:

You have been randomly selected for a survey conducted by the Similkameen Valley Planning Society with the assistance of the Regional District Okanagan Similkameen and its member municipalities.

The movement of people to the South Okanagan and Similkameen Valleys is one of the main sources of growth and development. This survey will assist communities to understand how in-migration is shaping our Valleys and how residents feel about it.

Recently, researchers have identified a type of migrant to rural areas called an “amenity migrant.” Amenity migrants are people who move permanently or part-time to the countryside, or to small towns and villages attracted by environmental and/or cultural amenities. In the Similkameen and South Okanagan Valleys our amenities are beautiful scenery, parks and wilderness, working farms, ranches and vineyards, great opportunities for outdoor recreation, rural lifestyle and friendly people, arts and music, and native cultures. We distinguish “amenity migrants” from “economic migrants”. Economic migrants are people who move to our area primarily for income and other economic reasons.

Whether you were born and/or raised here, or a migrant (permanent or second home resident) to our area, we want you to complete the survey below. The questionnaire is intended to gather information about how in-migration is affecting our social, economic and cultural life and the quality of our environment. You will have an opportunity to tell us what you think are the important issues related to in-migration, growth and development. The information from this survey will assist us in learning considerably more about this amenity-led migration and its potential positive and negative effects on our communities and environment.

This questionnaire is distributed in Penticton, Okanagan Falls, Oliver, Osoyoos, Areas A, C and D of the Regional District Okanagan Similkameen and all communities in Similkameen Valley.

Thank you for taking approximately 25 minutes to complete the survey and for returning it in the stamped, addressed envelope provided. We prefer that surveys are returned by July 31, but we will accept them up until August 31.

In order to protect your privacy, please do NOT write your name on this questionnaire. Individual surveys will not be available to any agency.

AMENITY-LED MIGRATION IN THE SIMILKAMEEN AND SOUTH OKANAGAN VALLEYS

Household Survey

In order to protect your privacy, please **DO NOT** write your name on this questionnaire. **Valley** refers to either Similkameen or South Okanagan Valley.

1) Check if you are an

_____ owner resident _____ second-home owner _____ renter

in

Similkameen Valley

- _____ a) Keremeos
- _____ b) Princeton
- _____ c) rural lower Similkameen (Area B or G)
- _____ d) rural upper Similkameen (Area H)

South Okanagan Valley

- _____ e) Oliver or Okanagan Falls
- _____ f) Osoyoos
- _____ g) Penticton
- _____ h) rural South Okanagan (Area A, C, D)

2) How would you describe your residence here?

- _____ a) *Permanent (reside most of the time here)*
- _____ b) *Seasonal (reside for one or several periods each year here, such as a second-home owner residing for summer.)*
- _____ c) *Intermittent (moves between/ among residences more frequently, such as a person residing in Vancouver and staying in her/his second or permanent home week-ends.)*
- _____ d) *Other, please specify _____*

3) Are you a (**please select just one**)

- _____ a) **Local person** (born and/or raised in the Valley);
- _____ b) **Returned resident** (left the Valley and returned as an adult)
- _____ c) **Amenity migrant** (a person who **primarily** moved here because of the natural or environmental amenities such as mountains, lakes, rivers, forest, climate and recreational opportunities; and/or socio-cultural amenities such as safe/friendly communities, rural values and lifestyle. Your **residence** can be **permanent, seasonal or intermittent**. For definitions, please refer to question #2.)
- _____ d) **Economic migrant** (a person who **primarily** moved here for a job, to start a business, or other economic reasons);
- _____ e) **Other**, please specify _____

4) If you came to the Valley as an adult (**migrant** or **returned resident**), what were your reasons for coming and how important were those reasons to you at the time? **OR** if you are a **local person** what are your reasons for remaining in the Valley?

	Very important	Somewhat important	Not important (or irrelevant)
<i>For a job</i>	___	___	___
<i>To pursue a business opportunity</i>	___	___	___
<i>For peace and quiet</i>	___	___	___
<i>To live in an area of diverse plants/wildlife</i>	___	___	___
<i>To be near parks</i>	___	___	___
<i>To enjoy clean air</i>	___	___	___
<i>To enjoy clean rivers and lakes</i>	___	___	___
<i>Because of the climate</i>	___	___	___
<i>Because of mountains and mountain views</i>	___	___	___
<i>To be near abundant outdoor recreational opportunities (egs. golf, fishing, skiing)</i>	___	___	___
<i>To be near Crown land for motorized recreation (trail bikes, ATVs)</i>	___	___	___
<i>To be near Crown land for hunting/fishing</i>	___	___	___
<i>Because of diverse outdoor recreational opportunities (eg. golf, swimming, skiing)</i>	___	___	___
<i>Because of the wineries</i>	___	___	___
<i>To be in farm or ranch country</i>	___	___	___
<i>To live in a rural community</i>	___	___	___
<i>To be close to family or partner</i>	___	___	___
<i>To have a lower cost of living</i>	___	___	___
<i>Because of cheaper property</i>	___	___	___
<i>To retire</i>	___	___	___
<i>To prepare for retirement</i>	___	___	___
<i>Good facilities for seniors</i>	___	___	___
<i>To be in a safer place</i>	___	___	___
<i>Because of its comfort amenities (restaurants, shops, entertainment, walk to most services)</i>	___	___	___
<i>Access to health care</i>	___	___	___
<i>To enjoy the music or cultural scene</i>	___	___	___
<i>Because it is culturally distinct</i>	___	___	___
<i>Because of spiritual attraction of landscape</i>	___	___	___
<i>Other: _____</i>	___	___	___

IMPORTANT: If you are a **local person** (born and/ or raised in the valley) **who never resided outside of the valley (school, military service, etc. excepted)**, please skip to question #11. If you are an **amenity or economic migrant, or a returned resident**, please continue.

5) If you are a person who spends time in a 2nd home here, do you consider yourself a

- _____ a) Resident _____ b) Part-time resident
_____ c) Tourist _____ d) Other
_____ e) **Not applicable**

6) If you own a second home in the Valley, do you intend to retire or reside in it permanently?

- _____ a) Yes _____ b) No
_____ c) Don't know _____ d) **Not a second home owner**

7) When and how you migrated:

a) In what year did you first arrive or return here, more or less?

- _____ a) First arrived _____ b) Returned

b) Did you first learn about this valley as a tourist and then decide to reside here, **or** were you seeking a new place to live and migrated directly **or** did you learn about this valley some other way (example: while on business, visiting family)?

- _____ a) As a tourist first
_____ b) As a direct migrant
_____ c) Other, please specify _____

8) What was your place of residence before you came to the Valley?

Country name: _____

Province or state name: _____

City or town (if you lived in a city or town) name: _____

Nearest city or town (if you lived in the country) name: _____

9) When you came to the Valley to live, if you did not have a job waiting for you, how did you expect to derive an income? Were you

- _____ a) Drawing a pension
_____ b) Able to live from your capital and investments
_____ c) Working but able to live in places distant from where your work was performed (for example, if you were an airline pilot)
_____ d) A business person who could settle in several places
_____ e) A person who decided to come to the Valley and worry about how to earn a living afterward
_____ f) Other, please specify: _____

10) No matter how or why you first came to the Valley, have you had job or business opportunities to move elsewhere and you turned them down because you preferred to continue to live here?

- _____ a) Yes _____ b) No

11) Recall, an amenity migrant is a person who selects a place to live primarily because of its natural and/or cultural amenities. In your opinion, is amenity migration an opportunity or a threat here? Why?

- _____ a) Opportunity _____

- _____ b) Threat _____
- _____ c) No opinion

Research has shown a connection between Parks and amenity migration. That is why we ask you questions about a proposed National Park.

12) There is a proposal for a new National Park in the South Okanagan-Lower Similkameen area. How aware of you of this proposed park?

- _____ a) Not aware at all
_____ b) A little bit aware
_____ c) Somewhat aware
_____ d) Very aware

13) Do you support or oppose the establishment of this National Park?

- _____ a) Strongly oppose
_____ b) Slightly oppose
_____ c) Neither oppose nor support
_____ d) Slightly support
- _____ d) Strongly support
_____ e) Don't know
_____ f) Need more information

14) If a National Park was created, how will it affect your desire to remain living in the Valley?

- _____ a) Strongly decrease
_____ b) Slightly decrease
_____ c) Neither decrease nor increase
- _____ d) Slightly increase
_____ e) Strongly increase
_____ f) Don't know

15) If you are an amenity migrant and this National Park had been established before you moved here, how much would the Park have affected your desire to move here?

- _____ a) Strongly decrease
_____ b) Slightly decrease
_____ c) Neither decrease nor increase
_____ g) **Not an amenity migrant**
- _____ d) Slightly increase
_____ e) Strongly increase
_____ f) Don't know

16) If this National Park is created, how often do you think you would use the park?

- _____ a) Not at all
_____ b) Once every few years
_____ c) Occasionally (1 to 2 times per year)
_____ d) Regularly (3 to 6 times per year)
_____ e) Frequently (7 or more times per year)

17a) If this National Park is created, how may it benefit you (and your family)? Please check the **three most** important benefits.

- _____ a) As a place to experience the outdoors
_____ b) As a place to escape from the ordinary
_____ c) As a peaceful, quiet place
_____ d) As a place to bring family and friends
_____ e) As a place for recreation
_____ f) As a place for learning
_____ g) As a place for exploration and discovery

- _____ h) As a place to get fit or stay in shape
 _____ i) Will not benefit
 _____ j) Others, please specify: _____

17b) If this National Park was created, which of the following activities would you use it for?
 (Please check all that apply.)

- | | |
|--|---------------------|
| _____ day hiking | _____ camping |
| _____ overnight hiking with backpacks | _____ swimming |
| _____ roadside sightseeing | _____ rock climbing |
| _____ canoeing/rafting/kayaking | _____ fishing |
| _____ bird watching/ wildlife watching | _____ bicycling |
| _____ horseback riding | _____ skiing |
| _____ star-gazing | |
| _____ natural history appreciation/interpretation | |
| _____ cultural history appreciation/interpretation | |
| _____ other, please specify: _____ | |

18) Below is a list of key issues Similkameen and South Okanagan Valleys may face in the next 20 years. Please circle how major or minor you think the key issue will be.

Issues	minor << Rating >> major				
	1	2	3	4	5
Developing a diverse economy	1	2	3	4	5
Values and behaviours of amenity migrants	1	2	3	4	5
Too rapid economic growth	1	2	3	4	5
Too slow economic growth	1	2	3	4	5
Uncontrolled, haphazard economic growth	1	2	3	4	5
Availability of liveable wage jobs	1	2	3	4	5
Preservation/ loss of open spaces	1	2	3	4	5
Preservation/ loss of farmland	1	2	3	4	5
Lack of land for development	1	2	3	4	5
Hazard from wild fires and/or pine beetles	1	2	3	4	5
Air quality	1	2	3	4	5
Water quality	1	2	3	4	5
Traffic congestion	1	2	3	4	5
Water infrastructure systems	1	2	3	4	5
Sewer systems	1	2	3	4	5
Public transit, e.g. a bus system	1	2	3	4	5
Sidewalks, trails, bike lanes	1	2	3	4	5
Community appearance	1	2	3	4	5
Public recreation facilities, parks	1	2	3	4	5
Services for seniors	1	2	3	4	5
Public safety & crime	1	2	3	4	5
Housing for lower income residents	1	2	3	4	5
Housing for seniors	1	2	3	4	5
Improvement of telecommunications infrastructure	1	2	3	4	5
Loss of small town or rural life style	1	2	3	4	5

Availability of medical services	1	2	3	4	5
Fossil fuels shortage	1	2	3	4	5
Food security	1	2	3	4	5
Others, please specify: _____	1	2	3	4	5
_____	1	2	3	4	5

19) Should Similkameen or South Okanagan local governments do more regarding these issues?

_____ a) Yes _____ b) No

If **yes**, which of the above issues rank as the top three for local government attention? Top 3 key issues: **(Please choose from the above list.)**

1. _____
2. _____
3. _____

20) In your opinion, does your local government have the necessary capability (planning, managerial and financial) and the will to act on the top 3 key issues you identified above?

Capability:

_____ a) Yes _____ b) No
 _____ c) Don't know _____ d) No opinion

Will:

_____ a) Yes _____ b) No
 _____ c) Don't know _____ d) No opinion

21) Do you find that the quality of life in the Valley is:

_____ a) Improving _____ b) Holding steady
 _____ c) Declining _____ d) No opinion

22) In the table below is a list of things that might decrease your quality of life. **For those things that would decrease your quality of life**, please circle the number that rates how minor or major the issue is to you. Also, please indicate if the issue **could** cause you to leave the Valley,

Issues	minor << Rating >> major					Would you leave?	
	1	2	3	4	5	yes	no
a) High cost of living	1	2	3	4	5	yes	no
b) Can't make a decent living	1	2	3	4	5	yes	no
c) Limited access to recreational facilities	1	2	3	4	5	yes	no
d) Rate of growth: too fast	1	2	3	4	5	yes	no
e) Rate of growth: too slow	1	2	3	4	5	yes	no
f) Level of crime	1	2	3	4	5	yes	no
g) Shortage of water	1	2	3	4	5	yes	no
h) Loss of wildlife habitat	1	2	3	4	5	yes	no
i) Environmental							

degradation	1	2	3	4	5	yes	no
j) Can't afford to own a property	1	2	3	4	5	yes	no
k) Lack of health care facilities	1	2	3	4	5	yes	no
l) Climate change	1	2	3	4	5	yes	no
m) Other: _____	1	2	3	4	5	yes	no
n) Other:_____	1	2	3	4	5	yes	no

23) How do you personally sustain the environment? **Please check all that apply.**

- _____ a) *Separate recyclable garbage*
- _____ b) *Use solar panels or wind energy*
- _____ c) *Use native plants*
- _____ d) *Avoid use of pesticides and chemical fertilizers*
- _____ e) *Conserve household energy use*
- _____ f) *Use low-flow flush toilet*
- _____ g) *Use low impact or non-motorized forms of outdoor recreation*
- _____ h) *Use xeriscaping*
- _____ i) *Use grey water for watering the lawn*
- _____ j) *Use public transportation*
- _____ k) *Share a ride to work*
- _____ l) *Bicycle to work*
- _____ m) *Drive a hybrid or "smart car"*
- _____ n) *Others, please specify* _____

24) What actions have you taken in the past to resolve community issues or issues that matter to you most? **Please check all that apply.**

- _____ a) *Attend public hearings*
- _____ b) *Participate in community meetings*
- _____ c) *Volunteer time and skills*
- _____ d) *Donate money*
- _____ e) *Others, please specify* _____

25) Amenity migration status:

a) If you **are not** an amenity migrant, are you considering becoming one elsewhere? If so, where?

_____ Yes ; where _____
 _____ No **OR**

b) If you **are** an amenity migrant, are you considering becoming one elsewhere? If so, where?

_____ Yes ; where _____

_____ No **OR**

c) Have you been an amenity migrant elsewhere? If so, where?

_____ Yes ; where _____

_____ No

26) Age and gender:

a) Your age (in years) is best described as:

_____ 18-34 _____ 35-54 _____ 55-64 _____ 65-74 _____ 75 or older

b) Are you ___ **male** or ___ **female**?

27) Check the category that best describes your highest level of education.

_____ *Some High School* _____ *High School Graduate* _____ *Some College*
_____ *Associate of Arts Degree* _____ *Bachelor's Degree* _____ *Some Graduate School*
_____ *Master's Degree* _____ *Beyond a Master's Degree*

28) What best describes your household?

_____ a) Family expecting to have children
_____ b) Single person or couple with children
_____ c) Single person or couple with children gone from the home
_____ d) Single person or couple with no children or intention of children
_____ e) Semi-retired individual or couple
_____ f) Retired individual or couple
_____ g) Other, please specify _____

29) Are you currently:

_____ a) *Employed* _____ b) *Self-employed*
_____ c) *Under-employed* _____ d) *Unemployed*
_____ e) *Semi-retired* _____ f) *Retired*

30) If you own your residence, for how much would it sell, do you think?

\$ _____ _____ *Don't know*

31) How much did your home and property cost, including improvements since you arrived here?

\$ _____ _____ *Don't want to say*

32) Did you purchase a property with a home on it, and replace the home with a newly built home?

_____ a) Yes _____ *new home square feet*
_____ b) No

33) Did you purchase a vacant lot and build a home on it?

_____ a) Yes _____ *new home square feet*
_____ b) No

34) How large is the residential property you currently live on?

- a) Less than 1/2 acre
- b) Between 1/2 acre and 1.0 acre
- c) Between 1.1 acres and 5.0 acres
- d) Between 5.1 acres and 10.0 acres
- e) Over 10.1 acres

35) What kind of dwelling do you currently rent or own in the Valley?

- a) Apartment
- b) Condominium
- c) Town house
- d) Single-family or Detached
- e) Mobile home
- f) Other, please specify _____

36) Have you sub-divided or do you plan to sub-divide your residential property?

- a) Yes
- b) No

37) Roughly, what is your before-tax annual household income?

\$ _____ ___ Don't know ___ Don't want to say

38) Have you ever started up a business in the Valley? **(If no, you have finished the survey.)**

Yes No

39) How much did you invest in your business since you arrived in the Valley?

\$ _____

40) How many people, excluding yourself, does or did your business employ?

=====

THANK YOU FOR YOUR PARTICIPATION IN THIS SURVEY.

PLEASE RETURN IT AT YOUR EARLIEST CONVENIENCE USING THE POSTAGE PAID ENVELOPE.

RESULTS FROM THIS SURVEY WILL BE CIRCULATED IN MUNICIPAL NOTICES OR REPORTED IN SOME OTHER PUBLIC FASHION.