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Exploring Emerging Economic Opportunities in the Columbia River Headwaters Region of British Columbia

FINAL REPORT



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ARBORVITAE ENVIRONMENTAL SERVICES LTD.

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Introduction

The Yellowstone to Yukon Conservation Initiative (Y2Y) seeks to connect and protect habitat so people and nature can thrive. Y2Y is interested in working with municipalities, Indigenous communities, businesses, and stakeholders to implement some of the principles underlying the concept of “emerging economies.”¹ The Columbia Headwaters region in British Columbia is one of Y2Y’s current focus areas because of its outstanding natural features juxtaposed with threats to the ‘sustainability’ of some of these values due to human activities. This region is, in general, economically dependent on its natural resources to support forestry, mining and world-class adventure tourism and recreation, which includes mechanized and non-mechanized skiing, snowmobiling, mountain biking, white-water rafting and backcountry lodges.

Several resource management issues have emerged in the region. On-going timber harvesting and the expansion of adventure tourism and more widespread recreational use of the backcountry have the potential to create conflict between the economic sectors and various initiatives to sustain the outstanding natural features of the region. For example, a longstanding regional challenge is the decline in the local mountain caribou populations, and for some herds their viability is at serious risk. While many people would like to see the caribou survive, there is concern that caribou recovery efforts will have negative socio-economic impacts on local communities. In addition, there are proposals from Indigenous groups to create new protected or conservation areas and Indigenous engagement processes related to caribou recovery and herd planning, as well as for broader reconciliation efforts.

The purpose of this research is to prepare an assessment of the opportunities and challenges in the study area to provide an innovative strong local economy while sustaining the region’s ecological integrity. The intention is to lay the groundwork for a discussion on how to move forward in the region so that both the economy and the environment will be sustained. Y2Y believes that community-based planning can be coordinated and implemented to help mitigate potential conflicts and provide outcomes that are more economically and ecologically sustainable. Such approaches will make greater use of science, Indigenous knowledge, and best practices, continuous improvement and new ideas for sustainable economies. Of course, the researchers advocate that these new efforts should build on the extensive local knowledge and planning that has occurred in the region over the last two decades in particular.

The natural attributes of the region are a primary reason why people choose to live there or use the area for periods of time. The region is also well known for its independence and the high level of engagement of its citizens. **All of this makes the region an excellent candidate to explore the intersection of healthy ecosystems, a healthy economy, and the emerging opportunities that may come with a more sustainable approach to resource use.**

¹ Some jurisdictions are now using terms such as the *bioeconomy* and *circular economy* to demonstrate how they are ‘decarbonizing’ and viewing social and natural capital. *Sustainable economy* and *green economy* are other terms. In BC, the term *conservation economy* has been used in land use planning efforts. All these terms could be politically charged, but the essence is to explore a more sustainable and innovative approach.

This report summarizes the researchers' observations of the key issues and emerging opportunities for the upper Columbia River region and provides their ideas on where they think the emerging opportunities are. The intention is to lay the platform for a much wider ranging and longer discussion of the topics raised; this discussion document does not presume to provide any answers.

Methodology

This study was undertaken by Jeremy Williams and Gary Bull, hired as researchers by Y2Y. While they received initial direction and resource support from Y2Y, this report contains the conclusions and recommendations of the two authors. The authors do not reside in the region and do not pretend to have a deep knowledge of it, however, they are both experienced in conducting socio-economic assessments and reviews of forest-based regions and communities.

The researchers began this project by reviewing available studies and information about the region and the issues that are present in the region. Y2Y convened a Research Advisory Committee ("Committee") intended to act as a sounding board for the project, and at an initial on-line conference in June 2019, the consultants provided a work plan and preliminary observations and received a number of valuable suggestions from the Committee. In late August, the two researchers spent a total of ten days in the region, interviewing a wide range of people, including some Committee members. A presentation of draft findings was made to Y2Y staff and the committee at a full-day face-to-face meeting in late September, and there were subsequent interviews and some additional literature review. In all, 30 people were interviewed. A draft report was shared with Y2Y staff and the Committee and additional helpful comments and perspectives were provided before a final report was prepared.

The findings in this document are based on personal interviews, since much of the basic socio-economic data for the study area was sparse, inaccurate or incoherent. In contrast, the researchers found the interview subjects to be very knowledgeable about the region. Interview notes were discussed by the research team and analyzed to produce a number of recurring themes and key insights which are reported here.

The Study Area

Geography and Administration

The study area for this project is within the headwaters of the upper Columbia River (see Figure 1), including the municipalities of Revelstoke, Golden, and Nakusp and surrounding rural areas. This study area overlaps with portions of the traditional territories of the Okanagan, Secwepemc, Ktunaxa and Sinixt First Nations. The red line in Figure 1 shows Y2Y's Columbia Headwaters focus area; however, the study area for this research project covers only the approximate latitudinal middle and southwestern portion. There is no "hard" project boundary, but rather a generalized project area.

There are a number of features that the entire area has in common, however the three principal communities are facing different circumstances. The study area has become internationally renowned as an adventure tourism and recreation destination during the past 10 to 15 years, and Revelstoke and Golden have both had large downhill ski developments. These developments have transitioned Revelstoke, and to a lesser extent Golden, from being primarily forestry towns to being tourism and recreation centres. Nakusp, which is smaller and located about two hours south of the TransCanada Highway, is developing its tourism and recreation amenities, such as the hot springs outside of Nakusp and at Halcyon. Nakusp is also re-vitalizing its downtown, but currently does not attract the same visitation as Revelstoke and Golden.



Figure 1. Map of Y2Y's Columbia Headwaters study area

Other more traditional sectors are also present, including mining, CP Rail, and BC Hydro. The area is also attracting young people with New Economy² skills, who relish the lifestyle opportunities in the area.

² The *New Economy* is a term used to describe an economy built on knowledge and information as opposed to manufacturing. Mobile digital technology and services are considered key New Economy characteristics.

The researchers were also informed that these communities are very independent and that there has been relatively little history of working together and in fact, some history of competition. The absence of many cooperative initiatives was tied by some interview subjects to the impacts of mountain geography on people's spheres of activity and vision, as well as the different situations and sizes of the three communities. Local government and other administrative boundaries have also tended to divide rather than unite; for example, Revelstoke is in the Columbia-Shuswap Regional District Area A, Golden is in Area B, while Nakusp is in the Regional District of Central Kootenay. Regional communities have also had negligible experience working with First Nations.

Land Use Planning History

Some of the people we interviewed recounted the Kootenay Boundary Land Use Planning (KBLUP) process. The BC government's web site (BC Government, 2019) has this to say about the KBLUP:

In 1992, the B.C. government directed that a strategic land use plan be prepared to identify a comprehensive and integrated vision for land and resource use in the Kootenay-Boundary region. Recommendations resulting from two land-use tables were used to develop the East Kootenay and West Kootenay-Boundary Land Use Plans released in 1995. The latter plan included a commitment to provide the community of Revelstoke with the opportunity to advise on specific resource management guidance for the Revelstoke District. The Revelstoke and Area Land Use Planning Final Recommendations were completed in 1999.³

The process leading to KBLUP was challenging, as KBLUP was imposed on the region by the province. Early in the process, Revelstoke opted out and instead had agreement to undertake what became known as the MAC Plan (Ministers Advisory Committee). There was also a residue of resentment left by the closed-door negotiations and deal-making that occurred at the close of the process without the participation of the communities. Overcoming these legacies of past land use planning is one of the challenges discussed below.

However, despite the resources put into the development of the MAC Plan, there was insufficient funding and no organizational structure in place to implement it, monitor its effectiveness, or make revisions as needed. This was widely recognized by interviewees as a short-coming that would need to be corrected if a new land use planning process were to be developed. Another short-coming of the planning process was that it did not include Indigenous people, which is unacceptable today.

Demographics

Statistics Canada census data from 2016 shows that Revelstoke has a population of 7,547, Golden has 3,708, and Nakusp is about half the size of Golden at 1,605. Compared with 2006, the population of Nakusp has grown by 5%, Revelstoke has risen by 4%, and Golden has decreased by 3%. What the

³ <https://www2.gov.bc.ca/gov/content/industry/crown-land-water/land-use-planning/regions/kootenay-boundary/revelstoke-rlup>.

Statistics Canada data do not capture, due to the way a “resident” is defined⁴, is the army of seasonal workers who are largely employed in the tourism, recreation and forestry sectors. For example, Revelstoke purchased data from a cell service provider that indicated the actual number of people living in town at any one time was roughly 15,000, and one could expect Golden’s population to be underestimated by a similar proportion.

Unfortunately, Statistics Canada census methodology gives a misleading impression of the communities and the number of people living there at any one time. Moreover, these misleading results will affect other data, such as employment statistics, especially pertaining to the service industries.

It is also challenging to obtain data on the proportion of the population that is of Aboriginal origin. Statistics Canada reports that 8.6% of the population in the Columbia-Shuswap area is of North American Aboriginal identity.⁵ Within the study area, 10% of Golden’s population is of Aboriginal identity, as is 7.3% of Revelstoke’s population. Although members of the Okanagan, Secwepemc, Ktunaxa and Sinixt First Nations used the region for millennia, prior to Canada’s existence, they were forcibly removed and no longer have villages in the region. There are a number of reserves located outside of the study area.

The consultants reviewed the recent community profiles that have been prepared for Revelstoke (ARIC and CBRDI, 2018) and for the Columbia Basin (Rethoret and MacDonald, 2018) and found that the demographic and employment data in these reports was derived from Statistics Canada census, and so were subject to the limitations discussed above. The unrepresentativeness of the key data for the region and the communities within it led the researchers to produce a more qualitative report based largely on the information and perspectives provided by the interview subjects.

This is one of the recurring themes of this study: the lack of data for the region that is both reliable and useful.

Economic Drivers

Housing

Housing and rental accommodation have changed dramatically in Revelstoke and there are major shifts underway throughout the region. As the area became a travel destination, people began purchasing second homes, attracted by relatively low prices compared with major cities such as Calgary and Vancouver. During the past 15 years, the global real estate boom also affected the region: house prices in Revelstoke have more than tripled while prices in Golden have also increased steeply, although not as severely as in Revelstoke. Escalating housing prices have pushed out some residents and others have

⁴ Statistics Canada states that “the census counts people according to their usual place of residence. The 2016 Census questionnaire included questions and instructions to determine either the person’s sole residence or their main residence as of May 10, 2016.”

⁵ Aboriginal identity includes people who are First Nations (North American Indian), Metis, or Inuk (Inuit), and/or those who are Registered or Not registered Treaty Indians, and/or those who have a membership in a First Nation or Indian band.

moved into less expensive communities, including Nakusp. The emergence of AirBnB and other short-term rental facilitators have led to many long-term rental units being converted to short-term accommodation, since the house owners can make more money. As a result, accommodation for seasonal and other workers has become both scarce and expensive. The impacts that these changes have had on the fabric of the communities are significant and it has created a group of beneficiaries and a group that has not benefited.

Tourism

The emergence of the region as a world-class adventure tourism destination may have occurred over the past 10 to 15 years, but the trend appears to be still intact. More hotels and accommodations are planned or under construction; for example, Revelstoke Mountain Resort, the owner of the downhill ski facility, has a ten-year plan that calls for a major expansion of the complex.

The expansion and twinning of the TransCanada Highway is projected to reduce travel times from Calgary to Golden from approximately two hours and 45 minutes to two hours even, and can be expected to lead to still increasing amounts of tourism and recreation. Another factor that will affect the sector in ways that are difficult to predict is that the owner-founders of many of the adventure tourism companies are retiring and the businesses are passing to new owners, including larger corporate entities. For example, the Selkirk-Tangiers heli-ski company was acquired in 2007 by Revelstoke Mountain Resort. Other companies are seeing similar changes in ownership.

The rugged mountainous setting of the region has a high abundance and diversity of wildlife, however there are significant pressures on at least several of the species, most notably mountain caribou. One of the sources of pressure on wildlife is the high amount of backcountry tourism and recreation, and the ever-expanding range of backcountry activities and the types and capabilities of the equipment and machines. Heli-skiing, cat skiing, heli mountain biking, ski tours by snowmobiles, snowmobiling, snow bikes, mountain biking, white-water rafting, and heli-rafting are all part of the lexicon of adventure tourism and recreation activities in the region. Between all of these activities combined, there is practically no part of the backcountry which is unavailable for use at any time during the year. The researchers were surprised to hear almost nothing during our interviews about hunting or fishing, which are commonly the primary rural recreational pursuits, although many local residents do both.

There are numerous provincial parks in the region, as well as Mount Revelstoke, Glacier, Kootenay and Yoho National Parks. These parks all help to draw tourists to the region; from 2015/16 to 2016/17, the number of visitors at these National Parks increased by 5% to just over two million people (Y2Y, 2017). Although the 2017/18 visitor numbers decreased by less than 1% in Mount Revelstoke / Glacier Park, the 2017/18 visitor numbers represent a 24% increase from 2011/12 (Parks Canada, 2018). These rates of growth are probably generally reflective of rates of visitor growth to the region as a whole.

Forestry

The forests in the region include large areas with high amounts of precipitation, caused by the interaction of air flows and topography. The weather patterns that produce a deep snowpack also support very productive forests: these inland rainforests are unique globally.

The forest products sector is prominent in the region. Local mills provide substantial employment, much of it at high wages. The primary local mills include the Louisiana Pacific mill in Golden (~400 jobs), Downie Timber in Revelstoke (~350 jobs), and Box Lake Lumber in Nakusp (~40 jobs). Other companies in the area include Stella Jones and Interfor and there are several small enterprises that operate with a handful of people or part time and make speciality products. The employment and income impact of forestry operations is substantial (e.g. the mayor of Nakusp estimated that forestry provided 350 jobs in that community) but there is no readily available set of statistics for the study area which would quantify these impacts.

The region is fortunate that it has little lodgepole pine and so was spared the destruction caused by the mountain pine beetle in most of the BC Interior. The abundant precipitation in parts of the region also limits the impacts of fire. In addition, the regional forest sector is diverse, with a wide range of product manufacturing facilities that use the full harvest. Large multinational companies, regional companies and smaller companies are all present, and this diversity provides a higher level of resilience and competition than one finds in areas where the sector is dominated by multi-nationals. Revelstoke and Nakusp both have Community Forests (Revelstoke's is a Tree Farm Licence that is labelled a Community Forest) which have contributed to the retention of the economic diversity in the regional forest sector.

Some are concerned that much of the wood used to supply these mills is coming from old-growth forests in the region and this results in the loss of habitat. However, a significant part of the regional wood supply also comes from fire-origin stands between 80 and 140 years of age. The debate has been clouded by a lack of reliable information regarding the sources of timber, the types of forests that have been set aside to provide habitat, and what types of stands will be harvested in the next 20 to 40 years and beyond.

Mining

Mining was rarely mentioned by interviewees as a key sector, notwithstanding the large silica mine just outside of Golden. While there are many mining claims and permits in the region, the researchers could not find any information that would indicate the level of activity or investment in the study area. Agriculture also did not enter into many of the interview discussions, even though it is especially prominent further south in the Columbia Valley.

Hydro-electricity

The hydro-electricity generated by the Columbia River has provided substantial economic benefits to the region. Four major dams were constructed on the Columbia River under the 1964 Canada-US Columbia River Treaty. The reservoirs from these dams are entirely or largely within BC. In the early 1990s, regional residents approached the provincial government to ask for a share of the benefits created by the dams, which led to the formation of the Columbia Basin Trust, which was endowed with almost \$325 million to support local projects. Today, BC Hydro retains a major regional presence and is another source of high-paying, skilled jobs.

The creation of the reservoirs has had, and continues to have, major ecological impacts. The lakes that have been created due to the inundation of land behind the dams have become obstacles to the travel

of wildlife, notably caribou and salmon, and the fisheries and agricultural potential have been significantly altered. Water control by BC Hydro leads to large swings in water levels that create dead zones along the shores of reservoirs where level changes are large and frequent. The expropriation of land in the inundated areas and the impact on towns that existed along the original river were not well received, and the creation of the Columbia Basin Trust has only partially mitigated these feelings.

Transportation

Rail transportation network through communities such as Revelstoke is acknowledged as important but it was beyond the scope of this study to undertake any analysis. Nonetheless we recognize that the existence of such infrastructure creates a large advantage for the communities such as Revelstoke and Golden in transporting goods. It was highlighted that for Nakusp, the lack of access to rail transport is a limiting factor in developing economic opportunities based on natural resources. However, the inland ferry system intrigues and attracts tourists.

What's Working

Other regions in BC and Canada more generally would likely consider the study area to be fortunate in many ways. The economy in the area is quite diverse, growing, and its setting and natural resources are spectacular. The good fortune of the area has not happened by accident, as the communities appear to these external researchers to be well-governed. Throughout our interviews, the consultants were impressed by the leadership and commitment of municipalities, First Nations and businesses in improving the quality of life in the region while seeking to maintain its natural attributes.

The tourism and recreation sector has been much discussed above: it is thriving and driving considerable growth and money flows into the region. The National Parks and the Canadian Avalanche Association and Avalanche Canada in Revelstoke add to the adventure recreation cachet. Residents also recognize the need to limit tourism and manage recreational use so that it is sustainable; the Golden Backcountry Recreation Advisory Committee (GBRAC) was an oft-cited example of a successful initiative in this respect. More recently, Nakusp has constructed a network of mountain bike trails and local trail associations have also formed in the Shuswap region. GBRAC is being re-energized since the agreement needs some updating. The trail associations include many stakeholders and First Nations, which will add to the acceptance of their plans.

Forestry is one of the traditional sectors that continues to form part of the backbone of the regional economy. Some of the mills are innovative and have had recent investment; for example, the LP mill is a laminated veneer lumber mill and Downie makes a wide variety of cedar products, including grilling planks for Costco. Revelstoke has also constructed and runs a district heating system powered by biomass from the Downie Timber facilities.

The area is also fortunate in that the forest licences in the area are not dominated by large companies, and there are Community Forests in both Revelstoke and Nakusp. While large companies have their role in the sector, locally managed forests make different decisions and are usually much more supportive of mid-sized and smaller products companies. The consultants were told that the Community Forests in

particular play a significant role in maintaining the diversity of the sector, since they make sure that the smaller players have access to timber: something that the larger companies often do not concern themselves with.

Revelstoke and Golden are also taking steps to integrate the recently arrived residents with New Economy skills into the local social fabric. The creation of “Start-up Revelstoke” is one of the most developed examples; efforts are being made to link technology to forestry, as well as tourism and recreation. Revelstoke has recently embarked on the development of a Tech Fabrication Lab, which is intended to create opportunities to develop and commercialize new products by providing access to digital manufacturing technologies, tools and training.

Lastly, as also mentioned above, the communities in the area are engaged and have capable leadership. With a healthy balance of interests, the region has a lot going for it.

Regional Challenges

Overview

A number of change drivers have arisen in the region as a result of the emergence of adventure tourism and recreation, coupled with the impacts of forestry. With more accommodation and recreational capacity being built, the continuation of timber harvesting, and with travel to the area set to become easier and faster, these trends can be expected to continue. However, many of the interviewees agreed with the hypothesis that perhaps the carrying capacity of many parts of the area for human use is already exceeded, and increasing levels of use will lead to increasing conflicts between users, a decline in the quality of the outdoor experience, and increased negative impacts on the biodiversity and natural heritage features of the area.

The ecological issue that is widely seen as most urgent is the management and conservation of the mountain caribou herds in the region. Of the five herds in the region, the Kinbasket and Columbia South herds are considered extirpated, while the Frisby-Boulder-Queest herd has ten animals, the Central Selkirks has 24 animals, and the Columbia North herd has approximately 147 animals. Nothing that has been tried to date has been successful in forestalling the decline of these herds. There are multiple factors contributing to the decline of caribou, including:

- Increased habitat fragmentation due to construction and greater use of highways, railroads, and flooding due to hydro development;
- Increased human presence in their habitat, including snowmobiles and helicopters, as well as timber harvesting;
- Increased loss of remoteness and loss of habitat to due timber harvesting and associated resource road construction;
- Increased predation from wolves attracted by increasing ungulate populations and easier predator access to caribou range via resource roads and snowmobile tracks; and potentially
- Increased impacts of a changing climate.

While mountain caribou are most at risk, these factors, and others, could be putting pressure on other keystone species, such as grizzly bears, mountain sheep, mountain goats and wolverines. There is currently research being conducted on wolverines in the region to better understand the population dynamics and potential pressures, and a recent audit by the BC Auditor-General recommends the implementation of a grizzly bear management plan.

The impacts of increasing use of the forest and the backcountry more generally intersect most strongly with the fate of the local caribou herds. Some interview subjects felt that the conservation efforts to date had been overly simplistic in that they focussed on only one or two factors affecting caribou. Government regulations that have been imposed to date have affected forestry (e.g. the researchers were informed that in the central Selkirks, 95% of the high capability winter range has been protected from timber harvesting since 2009 by Government Actions Regulation (GAR) order) but these restrictions have had little impact on adventure tourism or recreation (some areas have seasonal closures to snowmobiling). First Nations have demonstrated a high level of concern regarding the reductions in caribou herds; the Splatshin First Nation was involved in maternity pen programs and one of the reasons behind the proposal by the Okanagan Indian Band to create a National Park Reserve is to provide more protection for caribou. The lack of success with caribou recovery to date indicates a need for changes in approach.

Any solution to the survival of the local caribou will necessarily be complex. The researchers anticipate that the imposition of prohibitions on the use of extensive land areas for caribou recovery is likely not a socially or politically feasible option, although the Okanagan Indian Band's proposal for a park extension tests that hypothesis.

Recognition of the seriousness of climate change has rapidly gained salience in society at large, especially during the past year and in the recent federal election campaign. One would expect there to be major concern in an area so heavily dependent on winter sports, however interviewees expressed relatively little concern that climate patterns were changing in the study region. There is research that suggests the study area could be less susceptible to climate change than many other regions and so it may continue to receive significant snowfall.

While much is going well for the area, growth and change always creates challenges and the study area has its share of them. The three most prominent challenges that interviewees discussed with the consultants were the big increases in house prices, the shortage of affordable rental housing, especially in Revelstoke, and the threatened status of the mountain caribou herds. These are all aspects of the larger theme at play here: how 'sustainable' are the economies and the natural resources of the region? In other words, has the region been too successful at marketing itself as an adventure tourism and recreation mecca? How will this success, along with other natural resource activities, impact the local forest and mountain ecosystems?

Housing and Accommodations

House prices have skyrocketed in many countries, including in parts of Canada such as Vancouver. Low interest rates have supported these pricing gains, as have population increases, growing income inequality, the rise of online companies that facilitate short-term rentals, and Canada's reputation as a stable rule-of-law country. The point here is that there is little that individual municipalities can do to control housing prices, since the drivers are macro factors. However, like other resort municipalities, Revelstoke has begun to require that new hotel developments include the construction of affordable living quarters for staff, which is only sensible given the shortage of alternative accommodation. Some communities are also creating rules related to short-term rentals. While Nakusp is engaging in initiatives to attract more economic activity and does not have quite the same housing challenges, now is an opportune time to learn from the other communities in the region to prevent the housing and accommodation market from becoming imbalanced.

Indigenous Participation

The Arrow Lakes region was a significant Aboriginal meeting place in times past, with its abundant fishing resources being a key source of food during part of the year. As mentioned, the region is part of the traditional territories of four First Nations, however there appears to be little involvement on the part of the First Nations in the regional economy. This was in part explained by several interview subjects as being due to the lack of reserve communities in the region. In the researchers' view, there has been little concerted effort made to reach out and engage Indigenous people. Among those interviewed, there is a widespread recognition that an important part of the path forward includes ensuring meaningful Aboriginal involvement in the economy and decision-making. The Okanagan Indian Band has expressed interest in the region with a proposal to develop an Indigenous Protected and Conserved area which, if successful, would include engagement with the local communities and higher orders of government.

Tourism and Recreation

The relatively rapid ascent of the region in the global tourism landscape has brought about a great deal of change. The study team was told that Revelstoke has shifted from trying to attract investment and business to trying to manage what is there now and how new inflows are to be integrated: "from destination marketing to destination management." Many of the interviewees, particularly around Revelstoke and Golden, also agreed that the levels of tourism and recreational use exceed the carrying capacity of the backcountry, and the environment more generally. User conflicts were beginning to occur, especially in areas nearer to Revelstoke.

The conflicts have escalated due to the lack of recreation use regulations and the increasing impact intensity of many types of recreation and tourism practiced in the region; the intensity affects the quality of the experience. An example is reconciling virtually unrestricted public use of public land with the adventure tourism tenures issued by the province. This challenge has only grown as new forms of adventure recreation have been devised; for example, mountain heli-biking has expanded the area accessible to mountain bikes. Uncontrolled mountain-biking puts sensitive ecosystems such as the alpine at risk, especially when people do not stay on trails. Another challenge is reconciling the needs of

wildlife with recreation and tourism use, and forestry. Forestry tenures and adventure tourism tenures overlap considerably in the study area.

The notable exception for recreation management was in the Golden area, where a local group of tourism operators and recreationists negotiated use limits in a process managed by the Golden Backcountry Recreation Plan Advisory Committee (GBRAC). This initiative was credited with getting out in front of and preventing many land use conflicts and ecological damage in the area.

Tourism also has a reputation of generating many seasonal jobs. There was some debate among the members of the Advisory Committee on how seasonal work and seasonal workers should be considered. Historically, seasonal work has been viewed as less desirable than full-time year-round employment, however attitudes appear to be changing. The study team was informed that many seasonal workers in the study area preferred to have periods when they were not working so that they could travel or recreate; this is not uncommon in the outdoor tourism industry and may also be the view of some of the seasonal workers in the forest industry. However, seasonal workers also have trouble getting mortgages and loans from financial institutions, which creates a challenge for seasonal workers who wish to become homeowners.

The heli-ski and snow-cat industries appear to be attuned to the need for social license. Social expectations on businesses are rising around taking further actions to reduce the greenhouse gas emissions associated with their activities. While some of the companies have focussed on reducing emissions, waste and water use from their lodges, little action has been taken to date to try to reduce emissions from helicopters and snow-cats, other than efforts to fly more efficiently when taking clients out for the day.

Forestry

Although the regional forest sector has many strengths and opportunities, there are some challenges for it to navigate. Major policy changes were made in 2003 to the BC forest sector: namely the elimination of appurtenancy requirements⁶ and the creation of BC Timber Sales, which was created through tenure reform. These policy changes have resulted in a diminution of the benefits of forestry to local communities. A number of people whom the researchers interviewed felt that the communities in the study region were not seeing many benefits from the forest management sector; with the two Community Forests and the local mills being the exceptions. While the employment at the mills is of course important, it was frequently heard that one or two of the large forest companies in the region were viewed locally as poor corporate citizens with little commitment to the region.

Provincially, the sector is in turmoil as the surge of salvage harvesting of mountain pine beetle-killed lodgepole pine has ended, leaving many parts of the Interior with substantial harvest reductions.

⁶ Appurtenancy is the term for the linkage that existed between a wood supply and a forest products mill. Prior to 2003, wood supplies were linked to specific mills which made it difficult for a company to close a mill and still retain the wood supply.

Record-breaking fire seasons in 2017 and 2018 have also contributed to the decline in timber supply. Shutdowns and curtailments have been announced in more than two dozen mills in BC.

Policy changes may be coming that could generate more local benefits. The BC Premier noted in his 2018 Throne Speech that the industry's social contract with British Columbians needs to be re-vitalized and the provincial government pledged to restore appurtenancy requirements (this has not been done yet, however). At the more local level, communities such as Nakusp are seeking to expand the area under their Community Forest license and there is a possibility that this could be done as a joint venture with First Nations.

BC Timber Sales was created to provide market-based prices for timber that were expected to counter the contention of US softwood producers that Canadian timber is sold at below market prices. Unlike forest license holders, which develop their own logging projects including roads, BC Timber Sales develops timber sale projects and auctions off the actual logs. Unfortunately, since the trade issue is political, BC Timber Sales has not led to an appreciable lightening of duties on softwood lumber. In the study area, people felt that because BC Timber Sales accepts the highest bids, the timber it sells is usually cut by contractors from out of region.

Forest harvesting in the study area is highly dependent on old growth. For example, the Revelstoke Community Forest Corporation projects that 90% of its cut will be in old growth for the next 40 years. However, some of the old growth harvesting/silviculture practises are driven by climate and age-related phenomena; namely, the impacts of insects, such as Douglas fir bark beetle, and tree diseases in the forest. This is an illustrative example of a challenge in the region: how do you balance the naturally changing landscape with the need to maintain biodiversity? The project team did not have the mandate to conduct an in-depth analysis of timber harvest profiles. However, it is readily apparent there is public pressure to either reduce the harvest of old growth or to significantly modify the harvesting systems used so that old growth characteristics remain intact. Not only is this impetus coming from conservation and environmental groups, but also from Indigenous communities and the recreation and tourism sectors. It is also associated with forest management actions to reduce emissions of greenhouse gases and combat climate change. There is also growing international pressure showing up in many forums; the widespread burning of the Amazon reminded people the world over of the importance of primary forests. And of course, this challenge loops back to the mountain caribou which depend on old growth, and more broadly, to the potential loss of biodiversity.

Provincial Government

The Province of British Columbia issues licences for forestry and tourism on Crown land, sets regulations in those sectors, and makes the land use decisions on provincial land. Interview subjects informed the researchers that the provincial government is perceived as being mainly concerned with the volume and growth of tourism and recreation, and less concerned about the quality and sustainability of the experience. Similarly, the provincial government is perceived as being focussed on maintaining the harvest of timber at the expense of managing the quality and increasing the value of the asset – i.e. the

forest. The opinion was expressed that government needs to shift its mindset from one that is predominantly administrative to one that entails a greater involvement in management.

This attitude is also expressed by the manner in which the provincial government regulates both motorized and non-motorized recreational use: both are largely unregulated, with the exception of some zones where snowmobiling is managed through caribou closure areas. For snowmobiling, some people the researchers spoke with felt that enforcement of these ‘no-go zones’ was lax and the fines for anyone caught in them were the equivalent of the cost of a lift ticket, so they were not necessarily effective. A number of interviewees mentioned the stereotypical ‘out-of-province’ snowmobiler with big trucks, trailers and machines that have little regard for regulations, other users, and the resource. One interviewee pointed out that there is the potential to change this approach by using real time closures informed by animal tracking collars and greater enforcement and fines. Local clubs could assist in these efforts. Concerns were also raised that heli-mountain biking in the alpine was largely unregulated and that these very sensitive ecosystems may never recover from the damage being caused.

A critical limitation in discussing tourism and recreation use is the absence of statistics on the levels and location of use by activity. While tourism operators each have their own use data, these are not compiled on a regional basis.⁷ Outside of visitor days reported by the National Parks, which may or may not be reflective of broader regional trends, there is little basis for being able to evaluate levels of use by activity and usage trends. This makes it extremely difficult to try to manage recreational use. A second challenge that would be faced by anyone trying to manage recreational use is that most of it takes place on Crown land, which is available to be accessed by the public.⁸ Local residents tend to feel it is their right to be able to go where they want and when they want on public land, and the provincial government has done little to try to manage use.

Similarly, it is not possible to obtain a regional perspective on forestry and on how the forests can be expected to be changed as timber harvesting continues. Timber supply assessments are undertaken for each Timber Supply Area or Tree Farm Licences area, which is logical, however there are no available regional roll-ups of these plans. As a result, it is not possible to tell how much primary forest will be left at any time in the future, nor obtain an indication of what the regional forest will look like in the future.

The researchers heard from a number of interviewees that the credibility of the provincial government is not particularly high in the region when it comes to resource management and planning. The botched public forums on caribou herd management created a lot of division and mistrust that will take effort to overcome, and represents a challenge given the provincial government’s critical natural resource management role.

⁷ Helicat Canada (2019) publishes a statistical summary for the province as a whole; in BC in 2018, 41,000 skiers participated in 118,000 days of mechanized skiing. MNP (2019) estimated that there were 443,000 snowmobiler days in BC in 2018 and that the Kootenay Rockies region accounted for almost 25% of provincial activity.

⁸ One or more First Nations have existing aboriginal rights to the land as recognized s.35 of Canada’s Constitution Act.

Recommendations

Interviews and meetings with the Research Advisory Committee demonstrated there is a widespread recognition that the region needs to be proactive to get ahead of the challenges that exist. This can be done by building on the strong underlying foundation of knowledgeable people, a stable and skilled workforce, outstanding natural capital, excellent transportation infrastructure, Indigenous knowledge, people committed to sustainability, and an emerging technology sector that can assist the other economic sectors in finding more sustainable and creative solutions. People in the area recognize that now is an opportune time to begin the necessary discussions and organization of what could be a new model for sustainable planning and development at a regional and community level. The recommendations developed by the researchers on elements of solutions and a potential path forward are outlined below.

Land Use Planning

Virtually all of the people interviewed during this project supported the need for land use planning in the area. As described above, many of the challenges facing the region are rooted in land use. Land use planning provides an integrated approach to addressing current challenges and avoiding future issues while at the same time positioning the region to benefit from emerging opportunities. Many people felt that the region has an opportunity to develop a broadly sustainable footprint that will maintain its currency, or brand, as a global adventure tourism and recreation destination.

Land use planning generally would:

- Create a land use plan with several components that is responsive, dynamic and reflects the needs and interests of local communities.
- Recognize Aboriginal rights and title to the land and facilitate those rights on the land base.
- Include access management plans that are enforceable.
- Examine trade-offs between and among economic sectors.
- Identify zones and practices where wildlife conservation is a priority.
- Link to local or tactical land use plans (e.g. Revelstoke Community Forest).

British Columbia has a history of regional land use planning using a provincially prescribed process and under provincial government direction. These planning processes take a long time to result in plans and involve considerable financial and personnel resources. It is not clear that there is much appetite for another such process within government or within the study area. A more workable option might involve a step-wise series of planning tasks with well-defined goals and endpoints that can be undertaken more quickly and with fewer resources. In the meantime, processes which are under way, such as GBRAC, should be supported and offer potential lessons.

There was also broad agreement that planning should be locally driven so that it reflects local values and makes use of local knowledge and insights. However, the process should invite ‘outsiders’ to evaluate how the process generates plans that are generally in alignment with provincial, national and international goals. The objective is to make sure there is a coherent link between local to global goals. The provincial government was recognized as an essential participant, however, people wanted to ensure that decision-making was locally driven.

There was a strong consensus that any planning process must include First Nations. There have been problems with previous land use plans developed without Indigenous participation and consent. In 2019, First Nations are expecting to have a leadership or co-leadership role to be consistent with the principles of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). First Nations are undertaking initiatives of interest to them and land use planning will need to recognize these. For example, the Okanagan Indian Band has a proposal in to the federal government to create a National Park Reserve that would significantly extend the area of Mount Revelstoke and Glacier National Parks. The extension would be co-managed by regional First Nations, the Province of BC and the Government of Canada. Should this proposal proceed, there will likely be significant land use changes.

As discussed, there is a lack of accurate and useful data on the socio-economic characteristics of the key sectors and communities in the region, including the use of the lands, forests, and roads. Information on recreation and tourism use is essential for there to be a fulsome discussion of land use and access management. A key recommendation is that this information be gathered while the process and approach for land use planning is being determined.

There was not consensus on whether a land use planning process should be regional or at the community level. The role of Indigenous communities in any process is also to be determined. The communities in the study area are all quite different and advocates for a community-level process cited the benefit of being able to tailor the outcome to the community’s circumstances and aspirations. They also cited the lack of regional collaboration on other matters and the greater tractability of a small-scale process. This was especially so in the case of the smaller communities, which often feel ignored or reduced to a secondary status in a regional project. GBRAC was put forward as an effective process, and the consultants feel that the positive assessment of GBRAC was at least partially attributable to its community-level scale. Advocates of a community-level approach also felt that it would be easier to have either the municipality or a local group of citizens lead the process rather than have a regional body undertake planning.

In contrast, a regional process would reflect a number of factors that are regional in scope or impact. Timber flows, wildlife movements, and the choices made by recreationists and tourists are regional. For example, should a community limit the amount of mountain biking, the overflow of bikers will go elsewhere and perhaps overload the use capacity in those areas. Affordability is also a common issue to the region, although to varying degrees. However, there are intra-regional dynamics at play, with people moving from one community to another based on affordability. Another driver of change for the region is the expansion of the TransCanada Highway, which can be expected to greatly increase use of the area

and increase housing prices as travel times to Golden and Revelstoke from Vancouver, Kelowna and Calgary are reduced.

One interviewee expressed the view that despite a preference to have more locally-driven land use planning approaches, a regional approach would be more advantageous. Determining what the process would look like, how it would work and who would be involved would be critical to the success of the endeavour and would require a high level of discussion and creativity (Bull et al 2018; Lochhead et al 2019). This perspective reinforces the concerns expressed above about avoiding the creation of a process that is too large and time-consuming to be effective. There is a delicate balance involved in triangulating these factors.

There was broad support by research participants that land use planning should be accompanied by the creation of a body or an institution that would maintain and monitor the regional land use plan, and be able to bring about enforcement if need be. Such an institution could be financed by multiple sources over time, including government, business, and philanthropic organizations. People generally felt that the institution should be permanent given the dynamic nature of change in the region and that it should be compliant with best practices in governance, having a governance mechanism that includes First Nations and a wide range of local stakeholders. One model to learn from is the Willamette Partnership (See Appendix 1).

Recommendations

- Implement an initiative to collect and compile data on the forestry sector, including projected impacts of operations on the forest under the current forest management plans, timber supply, and employment data, at a minimum.
- Implement an initiative to collect and compile data on recreation and tourism use by area, season, and type of activity, at a minimum.
- Compile and update maps of planned and existing resource access roads.
- Develop an approach, a mechanism, and the local coalitions required to implement land use planning of feasible scope and scale. Ideally, planning would be done at a regional scale, involve First Nations, and be led or managed by a body or institution which would oversee implementation, monitoring and updating of the land use plan.

Tourism and Recreation

The proposed land use planning process discussed above includes consideration of recreation and tourism use. One of the potential benefits of land use planning would be to increase the certainty of access to land and resources, and set any conditions associated with access. There was a view expressed by some adventure tourism companies that tenure was becoming less secure, with caribou and First Nations reconciliation cited as the main sources of uncertainty. While there could be considerable variability in perspective among tourism tenure holders depending on location and whether they had infrastructure (i.e. lodges) on Crown land, there would be an opportunity through land use planning to make improvements to the tenures that could help the businesses, facilitate trade-offs, and create value.

The lack of available use data for tourism and recreation constitutes one of the largest gaps identified in this study and it should be addressed as promptly as possible. Because existing levels of recreation and tourism are thought by some to be above sustainable levels, a data collection and management program would be extremely useful in providing some quantification of use that should inform not only the land use planning process but also GBRAC and other similar initiatives.

The discussion regarding land use planning identified the potential for the process to provide an opportunity for modernizing and strengthening tourism tenures. There would be opportunities within such a process to both increase the value of the tenures to current holders and to adjust the benefits provided by the tenure holders. Increasing certainty could lead to higher levels of investment in the sector. These discussions would be supported by land use planning, however in the absence of a planning process, the conversation may still be worthwhile on its own.

For managing the climate change challenge to the industry, the researchers recommend offsetting emissions from operations. It is now a common approach for companies looking to reduce their overall greenhouse gas footprint. In general, many companies prefer to be able to purchase locally generated offsets. One of the challenges to doing so in British Columbia is that the provincial government has not decided on ownership of carbon credits from Crown land. As a result, there are no current links between forest management and forest products and the emissions problem of the heli-skiing industry. However, we feel there are opportunities to work around this obstacle, and it should definitely be explored.

Lastly, for the region to retain its global status as a desirable location for adventure tourism and recreation, the region will need to begin to look more broadly at the sustainability of these activities and the tour operators. The Global Sustainable Tourism Council standards are a good place to start, with there being separate but related standards in place for tour operators, hoteliers and entire destination areas. It is anticipated that the sector will perform well on many of the criteria and indicators but it will have work to do on others. In the future, premium destinations will need to convincingly demonstrate a sustainability ethos, which will in turn maintain the quality of the product and the value of the participating businesses (See Appendix 1).

Action on a number of these recommendations could be supported if the region capitalized on the available adventure tourism expertise to create a Centre of Excellence for adventure tourism. As mentioned, there are many supportive components in place and formalizing this could help the region form an even larger cluster of organizations involved in, supporting and advancing adventure tourism.

Recommendations

- Conduct a data collection exercise to better understand the tourism and recreation contributions and impacts in the region.
- Assess the sustainability of the recreation and tourism use in the area using the standards prepared by the Global Sustainable Tourism Council.
- Explore mechanisms to generate local forest-based offsets that can be used by the tourism and recreation sector to improve its net amount of greenhouse gas emissions.
- Create an Adventure Tourism and Recreation Centre of Excellence in the area.

Forestry and Bioenergy

A proposed land use planning process would of course include consideration of forestry. A related issue is access management and either in the land use planning process or in some different forum, the management of resource roads, in particular, needs to be considered. There are over 620,000 km of resource roads in British Columbia, many of which are no longer used or maintained by the industries that constructed them. However, once a road is built, it usually stays passable as a result of use by recreationists. The access provided by these roads is valued by members of the public but at the same time it can create user conflicts and excessive or inappropriately located access leads to negative impacts on wildlife.

There is a network of such roads in the study area and they are exacerbating the impacts of recreation on wildlife, and also providing avenues for better movement of predators, which is one of the factors implicated in the decline of caribou. There would be many benefits if the network of resource roads was reviewed with an eye to identifying which ones should be maintained and which ones should be deactivated, either physically or with the use of barriers or signage prohibiting motorized access.

The regional forest sector should also get ahead of the trends regarding old growth and primary forests by accelerating its transition away from a high level of dependence on old growth and/or finding ways to maintain old growth characteristics in the forests. The very recent appointment by the BC Minister of Forests, Lands, Natural Resource Operations and Rural Development of two individuals to canvass provincial perspectives on old growth is indicative that views are changing rapidly. While forest management practices such as thinning and spacing can contribute to the harvest to some extent, their greater impacts will be realized decades into the future. As indicated previously, the consultants did not undertake a detailed assessment of the timber profile in the region, which would be a pre-requisite for a more informed discussion about this issue.

There has also been a history of variable retention silviculture on some of the management units in the region that could be drawn upon. Variable retention silviculture is a harvest system that retains mature forest structures after harvesting, in order to retain some of the character of the primary forest and improve the biological diversity of the post-harvest area (Beese et al, 2019). While forest companies have generally moved away from this system in recent years, it could be re-established to provide more amenities and habitat after harvest.

Another aspect of the approach to transition the forest sector is to increase the value of the finished product made from each cubic metre of timber harvested, which usually generates more employment per cubic metre of wood processed. The consultants recommend that the technology hubs in the region work with existing local manufacturers to support continued investment and explore the creation of new products and services. Other forest managers besides those in the two Community Forests should be encouraged, perhaps as a condition of their licenses, to make much more effort to support and maintain small local enterprises who make high-value timber-based products. Revelstoke also has the opportunity to expand its District Heating System, and other communities could consider establishing

one. There are opportunities to increase the use of bioenergy in product streams of existing manufacturing facilities and other local municipal waste challenges.

The researchers heard a great deal about the benefits that the two Community Forests have provided. It was advised that Community Forests need to have reasonably sufficient harvests in order to have much impact on the community; an annual cut of 50,000 m³ was considered a minimum threshold by some interviewees. The Revelstoke Community Forest, with an AAC of 78,250 m³ exceeds this threshold, however there would be many benefits to expanding the area of the Revelstoke Community Forest and gradually diversifying it away from primary forest. The Nakusp Community Forest has an AAC of 20,000 m³, and so an increase in the size of that forest could improve the capabilities of the organization and the benefits to Nakusp, while presenting an opportunity to engage with First Nations as venture partners. Lastly, it is recommended that the provincial government should take steps to establish a Golden Community Forest, perhaps in partnership with First Nations. Options include taking back some of the tenure held by BC Timber Sales or other tenure holders in the area, perhaps especially those that are seen as poor corporate citizens. It is noteworthy that a September 2019 report from the provincial forest products industry association, the Council of Forest Industries, recommends the expansion of Community Forests and the increased participation of First Nations in the expansion, plus First Nations being revenue sharing partners in these new ventures.

Recommendations

- Undertake a review of resource roads to develop an access management plan, either in conjunction with or separately from the land use planning process.
- Explore approaches for transitioning the local timber harvest away from old growth and/or modifying harvest practices so that old growth characteristics are retained post-harvest.
- Support expansion of the Revelstoke and Nakusp Community Forests and create a Golden Community Forest which is large enough to be a viable entity; explore First Nations partnerships.
- Explore mechanisms to generate local forest-based offsets that can be used by the tourism and recreation sector to improve its net amount of greenhouse gas emissions.

Technology

Technology offers approaches and solutions that can be used by local industry, government, and individuals to create new products and services, reduce costs, improve quality and provide transparency. Revelstoke has begun to develop ways to connect the “digital nomads” and New Economy workers who are moving into the area with the local users of the land.

As discussed, there are opportunities to make greater use of technology to add value to harvested timber and create new bundles of products and services. Other countries are actively promoting the emerging concepts of ‘Climate Smart Forestry’, bioeconomy and circular economy. There are significant opportunities in the region to pursue the ‘decarbonizing agenda’ with the technology sector. Creating direct links between existing companies and organizations such as Start-up Revelstoke and the BioProducts Institute at UBC could facilitate and accelerate the adoption of these opportunities.

It is recommended that actions continue to be taken to make sure local economic actors are aware of the efforts of Start-up Labs (e.g. Start-up Revelstoke) and the proposed fabrication facilities.

Recommendations

- Explore and support opportunities to make greater use of technology to add value to harvested timber, enhance the tourism and recreational experience, and create new bundles of products and services.
- Regional communities should be given priority for improved access to the digital highway.

Climate Change

The large fires in the Amazon this summer and the extensive recent fires in the interior of BC have reminded everyone of the link between forests, people and climate change. Many of the previous recommendations herein have included components that are associated with fighting climate change by reducing emissions. Few people who were interviewed identified climate change as impacting the region in a noticeable way, although there may have been subtle effects to date. Interview subjects informed the researchers that recent climate modeling shows the region may be a “climate refuge” in that the climate may remain more stable in contrast to many other regions in BC.

However, other skiing areas on the West Coast are already experiencing challenges associated with climate change. A study by the Environmental Protection Agency, University of Colorado and a consultant projected that by 2050, climate change will cut ski resort winter seasons by 50%, with the hardest-hit being those in the Pacific Northwest (Wobus et al, 2017). In contrast, the central Rockies and the Sierras may experience the least reduction in the snowmobiling and cross-country skiing seasons.

Miller (2018) reported that ski resorts in the US west have made large investments in snow-making equipment to maintain season lengths and conditions. However, increasing variability of weather is also problematic. Miller continued “...unpredictable winters can still leave resorts reeling. This season, Squaw got almost no natural snow from December to February. Then came a series of big storms that are threatening the all-time record of 212 inches for March. The boom-and-bust cycle of snow in the Sierras has caused...big headaches. Without much natural snow, Squaw had to rely more on man-made snow—which is usually used to cover the base trails, not the steep slopes that skiers and boarders crave. Ideally the season would progress bit-by-bit, spreading out the powder days and the crowds. But big dumps of snow all at once can make travel difficult, and make ski vacations difficult to plan ahead of time.” The expected impacts of climate change on competing winter recreation and tourism destinations can be expected to lead to greater demand for winter recreation in the study area.

The other relevant aspect of climate change is the expectations that people have for businesses and governments to reduce emissions and decarbonize. Local businesses have indicated they are interested in reducing their net carbon footprint and the researchers recommend an exploration of how forest carbon offsets could provide a link between local forest management and the need of local industries to address net greenhouse gas emissions.

More ambitiously, the region can look at what cities and other tourism regions in the world are doing to decarbonize (see examples in Appendix 1), and create a decarbonization roadmap for the local economy that includes all important local economic sectors.

Recommendations

- Explore mechanisms to generate local forest-based offsets that can be used by tourism and other sectors to improve net amount of greenhouse gas emissions.
- Conduct research on best practices and include decarbonization imperatives into local and regional planning processes.

Indigenous Communities

There is a noticeable absence of Indigenous participation in the regional economy and there was unanimity that this was a failing that needed to be addressed. While everyone agreed that more interaction and benefit-sharing with First Nations was desirable, there are challenges. One of these is the overlap amongst the traditional territories of some of the First Nations, and people recognize this as a complicated situation. At times, because it is not understood by outsiders, it is seen as a political minefield. Some interview subjects expressed their opinion that the Indigenous communities had not yet articulated their economic or ecological interests in the region, however the Okanagan Indian Band's application to the federal government for an Indigenous Protected and Conserved Area in the region provides a good insight into that Band's interests; however, there is not broad awareness of this among other sectors. Capacity is an ongoing-challenge for the region's First Nations; revenue-sharing would provide a mechanism to enable First Nations to develop and hire needed capacity for more fulsome participation.

While there may be truth in these concerns, they need not delay or stop interaction. The researchers feel there is a lot that can be gained by having non-Indigenous and Indigenous people get to know each other and find out what their interests and aspirations are. The researchers recommend that regional leaders invite Indigenous representatives to meet and discuss how they might begin to get to know each other and find opportunities to work together on common issues. As a starting point, it may be helpful to engage with leaders at Selkirk College who already have experience in facilitating discussion with local Indigenous people and with the College of the Rockies where there are Indigenous leaders in senior positions of the institution.

Recommendations

- Develop a forum and a mechanism for non-Indigenous and Indigenous people to meet and get to know each other and find out what their interests and aspirations are.
- Seek opportunities to increase the involvement of the local First Nations in society and the economy and provide opportunities for them to increase their share of economic benefits.

Concluding Thoughts

The consultants believe that the study area has an opportunity to differentiate itself from other regions by putting in place a locally-driven, socially-acceptable and sustainable plan for community and economic development. However, there is a significant amount of work that needs to be done to get to that place, starting with addressing some of the basic recommendations, including:

- Implement an initiative to collect and compile relevant data and information to help inform further dialogue, land use planning and other decision making and community planning processes.
- Develop a forum and a mechanism for non-Indigenous and Indigenous people to come together to build relationships and trust in order to be able to work together to find solutions.
- Explore and support opportunities to make greater use of technology to add value to harvested timber, enhance the tourism and recreational experience, and create new bundles of products and services.

Fortunately, the region has so many advantages that it can leverage, including the creativity and leadership of the people who call it home. As ‘outsiders’, the researchers think the region is a globally significant gem and it has a potential to be a global leader in finding the ways and means to a truly sustainable solution for future generations of people and wildlife. It is hoped that the challenges identified in this report are transformed into an opportunity to make a difference that will be seen as a success story for many other regions of the world.

Appendix 1

International Benchmarking of Tourism Destinations and Operators

This study is intended to be both a starting point and a foundation for the residents of the study area, and other interested and affected parties, as they think about what future they would like to live in and be a part of. There was virtual unanimity amongst the people interviewed that there is a need to begin planning for the future to avoid more user conflicts, losses of biodiversity and reductions in the quality of the outdoor experience. A land use planning process, linked to municipal plans, could also contribute to addressing the cost of living and the housing issues in the region.

The study area has become an adventure tourism and recreational mecca because of its outstanding natural features, the topography, and the climate. Adventure tourism is premised on the promise of being out in the unspoiled backcountry, and yet the trends that appear to be in place regarding not only tourism and recreation, but also forestry, may be putting that premise at risk. In other words, the sustainability of the experience is at risk. It is instructive to consider what other destinations known for their sustainability have chosen to do.

Costa Rica has developed a tourism industry based on its natural resources, including coastlines on both the Caribbean and the Pacific Oceans (Verdict, 2017). Estimated to contain 5% of the world's biodiversity, Costa Rica has retained almost a quarter of the country as rainforest and conserved almost 30% of the country. Costa Rica is planning to become the world's first carbon neutral country by 2020.

Bhutan has adopted what would appear to be a radical tourism policy in order to avoid a mass influx of tourists. Bhutan describes its model as "high value with low impact", and it imposes strict entry requirements (e.g. all travellers must come with an approved tour operator) and requires a daily tariff (\$65US/day) as a tourism royalty that helps support health care and education (Verdict, 2017).

In 2007 Norway launched a national Sustainable Tourism program supported by Innovation Norway, which has assisted a number of tourism areas to become certified as sustainable (Destinasjon Roros, 2019). Oregon has hosted a more regional approach to sustainability in the Willamette Partnership (2019) where the goal and belief is that when "nature thrives, so do people". The partnership consists of a host of sponsors from industry, local, regional, state and federal governments, NGOs and others. It has created its own unique tools for planning in the region.

The main reason for providing these examples is to illustrate there are different models for developing and maintaining a tourism and recreation sector. These options have the significant advantage that they do not foreclose future opportunities. These examples also have implications for the region. How many and what types of tourists does the area want to attract? How can it position itself to attract more of those "desirable" tourists and recreationists and fewer of the less desirable types? The larger societal context also requires asking: How do you include the perspectives of First Nations in these discussions to contribute further to developing a socially acceptable outcome and increase social capital?

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