
THE ECONOMIC IMPACT OF THE NORTH BALA FALLS SMALL HYDRO PROJECT



November 2010

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Summary

ECONOMIC IMPACT OF THE NORTH BALA FALLS SMALL HYDRO PROJECT

INTRODUCTION

This report was prepared by the Centre for Spatial Economics (C4SE)¹ at the request of Swift River Energy Limited (SREL) to assess the economic impacts of the North Bala Falls Small Hydro Project on the Bala Community, the Township of Muskoka Lakes, the District of Muskoka and the Province of Ontario. We approached this assignment using three different procedures:

- We assessed the anticipated economic impact of both the construction and operating phases of the project on the Bala Community by undertaking a detailed survey of more than 100 local business operators and by evaluating the survey's results.
- We assessed the broader impacts of both phases of the project on the Township of Muskoka Lakes by building a profile of the Township's economic base.
- We assessed the broader impacts of both the construction and operational phases of the project on the District of Muskoka and on the Province of Ontario using our input-output model for the District and the Province.

SURVEY EVIDENCE REGARDING THE IMPACTS ON THE BALA COMMUNITY

To quantify the expected economic impacts of the construction and operational phases of the project by the Bala Community we carried out a detailed survey of the businesses in Ward A of the Township of Muskoka Lakes. The Centre for Spatial Economics (C4SE) developed a 20 question survey instrument in conjunction with the SREL, the Township of Muskoka Lakes and the Muskoka Lakes Chamber of Commerce. The distribution list of 119 local businesses was developed by the Township, the Chamber and the SREL. Initial email notification (containing the survey internet link) was sent on September 12. The 9 businesses for which no email addresses were available were sent a printed survey on September 13. Subsequent email reminders were sent to non-respondents on September 19 and 26. The local radio station – Moose FM – broadcast a reminder to all businesses on September 27. The Chamber of Commerce sent out email reminders to its non-responding members on September 28. As of October 10 a total of 47 surveys had been completed, representing a 39.5 percent response rate. Surveys received after October 10 were too late for inclusion in the results.

In view of the apparent considerable local opposition to the project – and in view of the significant effort that went into identifying local businesses, obtaining their email addresses, mailing out paper surveys to those without internet access, and sending email and radio broadcast reminders to those that had not responded – C4SE is very disappointed that the response rate to the survey was less than 40 percent. One reasonable interpretation of the low response rate is that opponents to the project among Bala business owners are in the minority.

¹ The research for this report was carried out by Tom McCormack and Robin Somerville, both partners of the Centre for Spatial Economics, and by Gerald Bierling, a senior research associate of the Centre. Any questions about this report should be directed to Tom McCormack by phone at 1-888-774-9009 or by email at tmccormack@c4se.com.

C4SE concludes that the survey results provide several key messages:

- All respondents operate during May through October but only two-thirds operate the rest of the year. Most (80 percent) operate all 7 days of the week during the peak season including on statutory holidays. Most (80 percent) ranked Saturday as their first or second most important sales day while 66 percent ranked Monday through Friday as either their first or second most important sales days. In-person sales are the major source of business for most respondents and most customers arrive either by car or boat.
- Cottagers account for 43 percent of the market of survey respondents. The remaining 57 percent is accounted for by tourists (20 percent), local residents (20 percent) and other businesses (17 percent).
- Most respondents – 60 to 75 percent – expect the construction phase – including both the road-related and powerhouse/intake activities – to impact their business. This impression was noted by both the ‘store-front’ and the ‘non-store-front’ respondents.
- More than half the respondents expect the project to have a permanent impact.

The responses and comments provided by a number of those that completed the survey suggest there is a significant misunderstanding among many with respect to their perception of the project and the project actually being proposed by SREL. This misunderstanding appears to have influenced the concerns expressed by many respondents with respect to the impact they believe the project will have on local businesses. This misunderstanding is especially evident with respect to their concerns regarding potential disruptions to traffic during the construction period.

IMPACTS ON MUSKOKA LAKES TOWNSHIP AND THE BALA COMMUNITY

Cottagers and tourism are very important to the economy of Muskoka Lakes. Our analysis of Census and other data reveals that Muskoka Lakes is a major tourism player within the District which itself is a major tourism player within Ontario. Regrettably we have access to only a limited amount of Census information regarding the Bala Community² and what we know about it relates only to the year 2006. Based on that data we can say the following:

- The permanent population (the population the census measures) of the Community totalled 455 persons. Just over 10 percent (49 of the residents) are of aboriginal origin. These 455 people lived in 200 dwelling units of which 181 were owned and were 19 rented. All the dwellings are single-detached units.
- Since 20 of the dwelling units were built between 2001 and 2006 the number of dwellings increased by about 13 percent suggesting the Bala Community’s population probably also increased by about 13 percent or at a rate faster than that achieved by Muskoka Lakes (7.0 percent) and Muskoka District (8.4 percent) over that period.
- The share of the Bala Community’s population accounted for by persons 65 years of age and older was 36 percent in 2006 compared to only 14 percent for the province as a whole. Thus a higher than average share of the Community’s residents is likely retired.

² We define the Bala Community as being equivalent to Dissemination Area number 440221 within the Census Sub-Division of Muskoka Lakes (CSD number 3444053, all in Statistics Canada parlance). A map of the 11 Dissemination Areas that make up the Township of Muskoka Lakes is attached as Appendix B.

- The Census data suggest that the Bala Community is not a major employment base within the Township or within the District and that many local residents who do work commute to jobs in nearby communities. The responses to the survey of businesses described above suggest that those employers located in Bala are weighted toward food and beverages, professional services and construction.
- Based on other studies we estimate there could be as many as 770 cottages in the Bala Community over and above the 200 dwellings occupied by permanent residents (we were unable to find any published information about the accrual number of seasonal residents. Whatever the correct number cottagers are important to local businesses.
- Finally, there is no information available for the Bala Community to indicate how many tourists visit each year, how long they stay on average, and how much they spend on average. Again it can be safely assumed that Bala attracts a portion of Muskoka Lakes and Muskoka District tourists each year, we just don't know how many.
- In the absence of information regarding the number of people employed in Bala, and in the absence of information regarding the number of cottages, cottagers and tourists in Bala, we are unable to quantify the size of the Bala Community economy in either employment or dollar terms. That means, in turn, we are unable to quantify the negative impacts of the construction phase of the project on economic activity in Bala.
- At best we can say the construction phase of the project is likely to impact tourism-related business more than cottager-related and local-resident-related business since tourists can choose to avoid Bala altogether whereas cottagers and local residents cannot because of their ties to the Community. Nevertheless it might be expected that more-than-normal outside-of-Bala cottager and local-resident shopping will occur during the construction phase simply because, no matter how much the negative impacts of construction are mitigated, construction activities by their nature from time to time interrupt nearby activities resulting in people choosing different routes and or different destinations to meet their shopping and recreation needs.
- That having been said it should also be noted that construction projects such as the one to be carried out in Bala themselves can generate considerable traffic and visitation among those fascinated by major construction activity. This project has attracted considerable local media attention. Once construction begins there is an opportunity to turn the construction project itself into a short-term tourism attractor, one that, in turn, could create opportunities for local businesses to capture some tourism spending.
- The survey results reveal, however, that many local businesses are in a position to provide products or services that SREL will need during the construction phase of the project. This is an important revelation. Each construction dollar spent on a local business is a dollar that would not have been spent on that business had the project been located elsewhere. New dollars received by local businesses have a good chance of being spent, in turn, by local business owners on locally-provided goods and services. This cascading effect has the potential to boost the local business not only of those selling to SREL but the business of all local commercial activities. In other words the active participation of local businesses in supplying SREL with products and services needs to be encouraged and supported.

IMPACTS ON MUSKOKA DISTRICT AND THE PROVINCE OF ONTARIO

The construction and operation of a 4.5 MW hydroelectric generator adjacent to the North Bala Falls represents a net new source of income and jobs for the Community and, at the same time, it will provide a clean source of electricity for the province for decades to come. While the project could have a negative impact on businesses in close proximity to the falls serving visitors the impacts cannot be quantified. What is clear is that a high rate of local participation in supplying goods and services to SREL during both the construction and operational phases of the project would impact the Community in a very positive way for years to come.

- Construction costs of the project total \$19 million. Construction is expected to take between 12 and 18 months to complete. The amount spent on construction over that period will benefit the province as a whole and Muskoka District for sure, and could significantly impact the economies of Muskoka Lakes and the Bala Community if a high rate of local servicing can be achieved.
- A further \$7.7 million has been spent or will be spent on a variety of services and activities that include: pre-development costs, the environmental assessment, engineering fees, project management, finance and legal costs, interest costs and the cost of connecting to the power grid.
- The direct employment impact from construction in Muskoka District is 45 jobs and the total employment impact for Ontario is 81 jobs with 65 of those in Muskoka District. Local spending in Muskoka District is estimated to be \$10.8 million generating an additional \$5.5 million in GDP in the region and \$7.0 million in Ontario.
- The operating revenue and expenses for the hydroelectric facility indicate the facility will generate revenues of \$2.7 million, operating expenses estimated at \$380,000 per year and principal and interest payments estimated at \$1.4 million per year. The project anticipates a 10-year holiday on taxes. In year 11 these taxes will be in the order of \$120,000 per year representing a Gross Revenue Charge to account for municipal taxes, water rental fees and land rental from the province. Furthermore the project will be leasing land from the District at a yet-to-be determined annual rate or lump-sum payment.
- The direct employment impact from ongoing operations in Muskoka District is 3 jobs and the total employment impact for Ontario is 6 jobs with 5 of those in Muskoka District.

In other words the economic benefits of the project are significant.

OBSERVATIONS AND RECOMMENDATIONS

The Project in Context

The Province of Ontario's Green Energy Act of September 2009 seeks to facilitate the development of renewable energy projects so that the province can ultimately eliminate its current significant dependence on coal-fired generated electricity. Coal-fired electricity represents 18 percent of Ontario's current generating capacity (compared to 32 percent for nuclear, 24 percent for gas, 22 percent for hydro and 3 percent for wind). The Province aims to eliminate coal-fired power by 2014 and describes this goal as "the single largest climate change initiative in North America".

The North Bala Falls facility will produce 4.5 MW of electricity each year, enough to power more than 4,000 homes.³ The Ontario Waterpower Association notes there are currently about 200 hydroelectric projects in Ontario with a combined capacity of 8,000 MW representing one-fifth to one-quarter of the province's electricity generating capacity. A study commissioned by OWA in 2005 showed that the potential for hydropower development across Ontario is 5,000 MW.

Thus projects like the one proposed for North Bala Falls represent a significant part of the Province of Ontario's solution to the elimination of coal-fired power generation and the reduction of greenhouse gas emissions.

The Economic Benefits of the North Bala Falls Project

Our report demonstrates that this project's economic impact will be positive both over the construction phase and over the operational phase province-wide. The economic benefits of the project are significant.

There is the potential for the Bala Community to share in these economic benefits both directly – through the participation of local businesses in supplying goods and services to SREL in both the construction and operational phases of this project – and indirectly through the cascading effects this increased construction-induced business would have on other business activities in the area.

While the environmental and economic benefits of the project cannot be challenged it is equally true that the construction phase of the project could have negative impacts on the Bala Community's economy even if the construction impacts are minimized.

It will be the businesses located in the Bala Community, especially those serving tourists and, to a lesser extent, those serving cottagers and local residents that will be impacted most from the existence of the construction activity. It must be recognized therefore that, notwithstanding the positive impacts of construction on local business activities, the mere existence of this construction activity could reduce the amount of business in the community so long as construction is underway. All local residents, businesses and cottagers could face inconvenience.

Despite the above, it is important to recognize that it is next to impossible to assign a financial value either to the potential local business losses or to the potential local inconvenience costs imposed on residents and cottagers stemming from the construction. And because this is so, it is impossible to draw up any kind of a fair direct payment compensation scheme.

It is our collective judgment that the operation of the project over the long-term will not negatively impact local business activity. Indeed, the existence of the project in the area could actually promote future business in the Bala Community.

Recommendations

We recommend that SREL should continue to work with local businesses in establishing a construction schedule that minimizes its negative impacts and that maximizes local business participation in the provision of goods and services to the construction phase of the project.

³ As a point of reference there were 2,675 permanent resident households in Muskoka Lakes in 2006.

Our survey reveals that well over half the local businesses responding to the survey are in a position to do so. SREL assistance in posting signs throughout the area indicating that the Community is still in business would be helpful (and welcomed according to the survey).

SREL's proposal to include an observation deck and park as part of the North Bala Falls project in our opinion presents the community with an enormous opportunity to rectify the current inaccessibility of the falls. An observation deck and the creation of community-wide signage about the deck and park could generate a significant increase in tourism traffic in the future.

Our experience in working with other communities in Ontario suggests there is not likely a consensus in the Bala Community regarding its future. We would expect, for example, that local businesses and residents likely want tourism development but that local cottagers likely oppose it.

We suggest that the Community ought to be using this issue as a catalyst for debate on its future. The District through the Township should spearhead a local debate that engages Bala representatives on District and Township councils, citizens (permanent and cottager) and businesses alike in what the Bala Community of say 2021 ought to be. This community engagement could be an update to, or revalidation of, the discussions that took place almost a decade ago and culminated in the area's Economic Development Strategic Plan of May 2002. That plan made a number of recommendations that we understand have yet to be implemented.

The North Bala Falls project through its leasing of land from the District of Muskoka will result in a yet-to-be negotiated lump sum or future revenue stream payable by SREL to the District. Once that lease agreement has been signed by both parties the District ought to earmark a significant portion of those funds to the funding of Bala Community projects that its businesses and residents feel will benefit them in achieving whatever future they choose for themselves for the decades ahead.

ECONOMIC IMPACT OF THE NORTH BALA FALLS SMALL HYDRO PROJECT

Section 1 INTRODUCTION

This report was prepared by the Centre for Spatial Economics (C4SE) at the request of Swift River Energy Limited (SREL) to assess the economic impacts of the North Bala Falls Small Hydro Project on the Bala Community, the Township of Muskoka Lakes, the District of Muskoka and the Province of Ontario.

We approached this assignment using three different procedures of economic impact assessment.

- We assessed the anticipated economic impact of both the construction and operating phases of the project on the Bala Community by undertaking a detailed survey of more than 100 local business operators and by evaluating the survey's results.
- We assessed the broader impacts of both phases of the project on the Township of Muskoka Lakes by building a profile of the Township's economic base using Census data. This allowed us to gauge the relative importance on the local economy of traditional economic drivers such as agriculture and manufacturing and of non-traditional drivers such as tourism. This assessment places into context the relative importance of tourism – short-term visitors and cottagers – to the Township's economy and allowed us in conjunction with the survey results to draw some conclusions about the potential impacts of the construction phase on the Bala Community.
- We assessed the broader impacts of both the construction and operational phases of the project on the District of Muskoka and on the Province of Ontario using our input-output model for the District and the Province.

Our report consists of five sections.

- Section 1: Introduction and Summary of the Scope of the Project
- Section 2: Survey Evidence Regarding Expected Impacts on the Bala Community
- Section 3: Impacts on Muskoka Lakes Township
- Section 4: Impacts on Muskoka District and the Province of Ontario
- Section 5: Observations and Recommendations

The research for this report was carried out by Tom McCormack and Robin Somerville, both partners of the Centre for Spatial Economics, and by Gerald Bierling, a senior research associate of the Centre. Any questions about this report should be directed to Tom McCormack by phone at 1-888-774-9009 or by email at tmccormack@c4se.com.

SUMMARY OF THE SCOPE OF THE NORTH BALA FALLS SMALL HYDRO PROJECT

Based on the October 2009 *Environmental Screening Report (ESR)* prepared by HATCH energy the scope of the North Bala Falls Small Hydro Project can be summarized as follows:

- It is a 4 to 5 MW waterpower project.
- Water for electricity generation will be taken from Lake Muskoka through a concrete intake located on the crown land bordered by Muskoka Road 169 (MR-169), Bala Falls Road, Purk's Place / CP Rail land, and Bala's North Channel of Lake Muskoka (see Figure 1 for an overhead photo of the site and Figure 2 for a map of the site).
- The water will be conveyed through an underground concrete box culvert, under MR-169 to a new concrete powerhouse, located approximately 35 metres south of the Bala Falls (North Dam), west of MR-169, and east of Moon River. Water will be discharged back into the Moon River through a tailrace approximately 35 metres south of Bala Falls (Figures 1 and 2).
- After construction of the concrete structure, the powerhouse, built largely underground, will be buried and professionally landscaped to incorporate a public park area with two lookout areas, maintenance driveway and walking paths with interpretive signage (Figure 3 provides an artist's rendering of the completed project).
- The project will include a safe facilitated path/stair down to the water's edge between the new powerhouse and the Bala Falls for visitors and tourists.
- Construction is expected to take 12 to 18 months from October 2011 to April 2013.
- Work under an approximately 30 metre section MR-169 is scheduled to occur outside of the tourist season from the end of Cranberry Festival (mid October 2011) to before Victoria Day (late May 2012).
- Road interruptions associated with this work would be limited to:
 - Four weeks of single lane reductions in October/November 2011.
 - One night road closure in late November 2011 from approximately 8 p.m. to 6 a.m.
 - One night road closure in April 2012 from approximately 8 p.m. to 6 a.m.
 - A maximum of four weeks of single lane reductions in April/May 2012.
- The north end of Bala Falls Road between Purk's Place and MR-169 will be closed to traffic during the construction period. It is proposed that a temporary traffic light be installed at the south end of Bala Falls Road as mitigation for this partial road closure to facilitate traffic movement in this area. SREL has indicated that the closed portion (approximately 30 metres in length) will still be available for snowmobile traffic in the winter. In addition, it may be possible to reopen this length of road for the summer tourist season (to be confirmed once a contractor is chosen).
- Some discussions have been held between SREL and the Township of Muskoka Lakes with respect to having SREL assist with the Township's pedestrian / snowmobile bridge project, while SREL's contractor is on site. Discussions have also included the possibility of SREL installing new docks at Bala's Wharf for the Township. These discussions have not yet been finalized.

Figure 1
Overhead Photo of the North Bala Falls Small Hydro Project Site



Figure 2
Map of the North Bala Falls Small Hydro Project Site

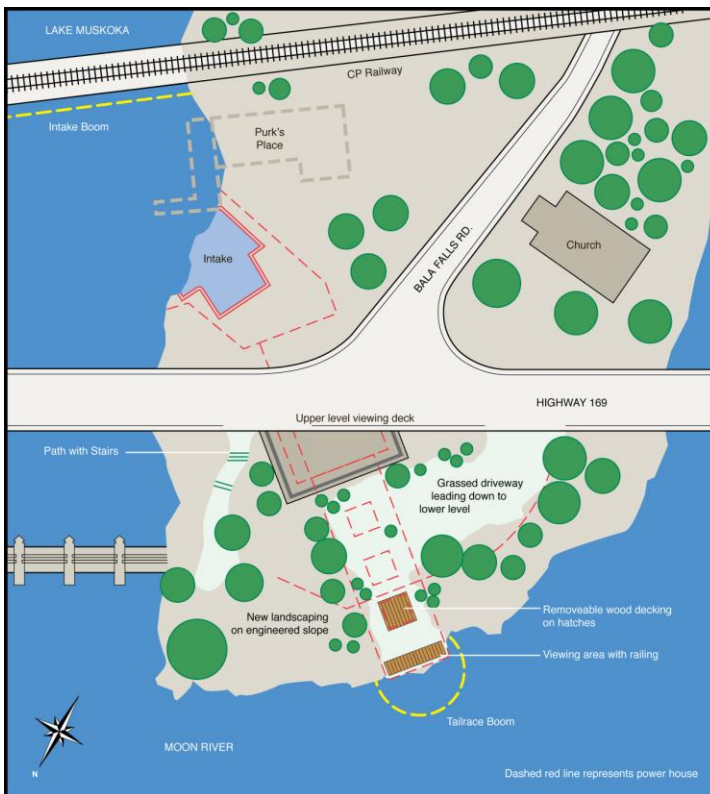
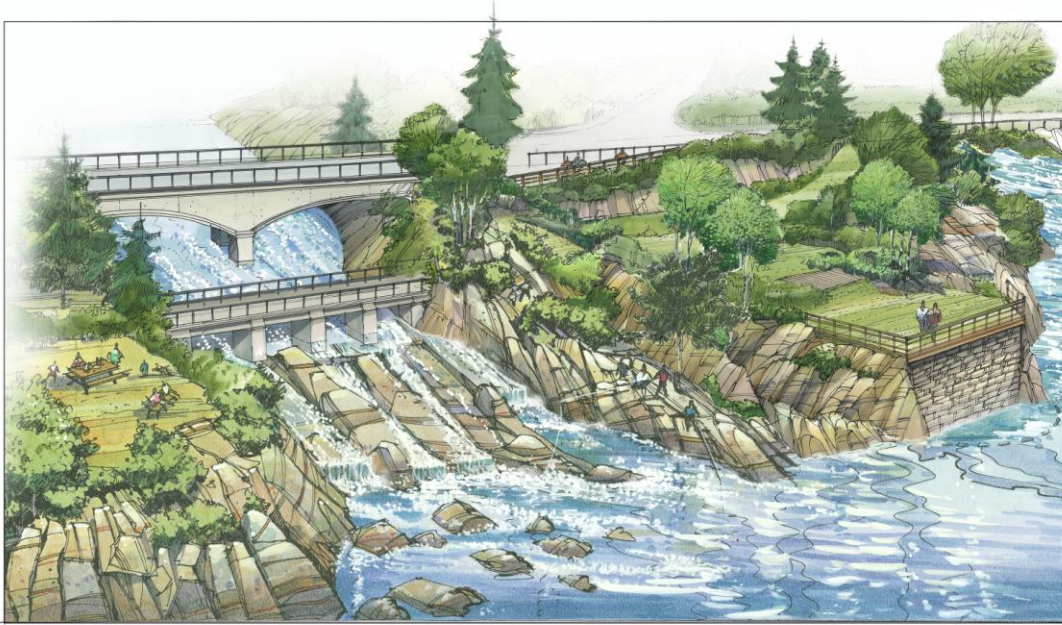


Figure 3
Artist's Rendering of the Completed North Bala Falls Small Hydro Project Site



Section 2

SURVEY EVIDENCE REGARDING THE IMPACTS ON THE BALA COMMUNITY

To quantify the expected economic impacts of the construction and operational phases of the project by the Bala Community we carried out a detailed survey of the businesses in Ward A of the Township of Muskoka Lakes.

THE SURVEY METHODOLOGY

Tom McCormack and Gerald Bierling of the Centre for Spatial Economics (C4SE) developed a 20 question survey instrument in conjunction with the SREL, the Township of Muskoka Lakes and the Muskoka Lakes Chamber of Commerce. The questionnaire received final approval from the Township and the Chamber. The final version of the questionnaire (as coded into SurveyMonkey) is attached as Appendix A. The distribution list (the ‘population’ of businesses surveyed) was developed by the Township, the Chamber and the SREL. This list was supplied to C4SE for the purpose of distributing the survey through the online SurveyMonkey service. This list contained 119 businesses for which 110 email addresses were available.¹ These email addresses were used for the initial email notification (which contained the survey link) sent on September 12. The 9 businesses for which no email addresses were available were sent a printed survey (including an addressed, postage-paid return envelope) on September 13. Subsequent email reminders (with the survey link) were sent by the consultants to non-respondents on September 19 and 26. The local radio station – Moose FM – broadcast a reminder to all businesses on September 27. The Chamber of Commerce sent out email reminders to its non-responding members on September 28. As of October 10 a total of 47 surveys had been completed, representing a 39.5 percent response rate. Surveys received after October 10 were too late for inclusion in the results.

THE SURVEY RESULTS

The questionnaire was designed to provide information about the business community itself and about the business community’s expected impacts on business of the project’s construction and operational phases. The survey provided information regarding the construction phase of the project such as that found on page 2 of this report (see Appendix A for a copy of the complete survey). The answers provided by many respondents to the survey suggest many business owners do not have an accurate understanding of the design, scope, geography and/or construction schedule of the project.

In view of the apparent considerable local opposition to the project – and in view of the significant effort that went into identifying local businesses, obtaining their email addresses, mailing out paper surveys to those without internet access, and sending email and radio broadcast reminders to those that had not responded – C4SE is very disappointed that the response rate to the survey was less than 40 percent. One reasonable interpretation of the low response rate is that opponents to the project among Bala business owners are in the minority.

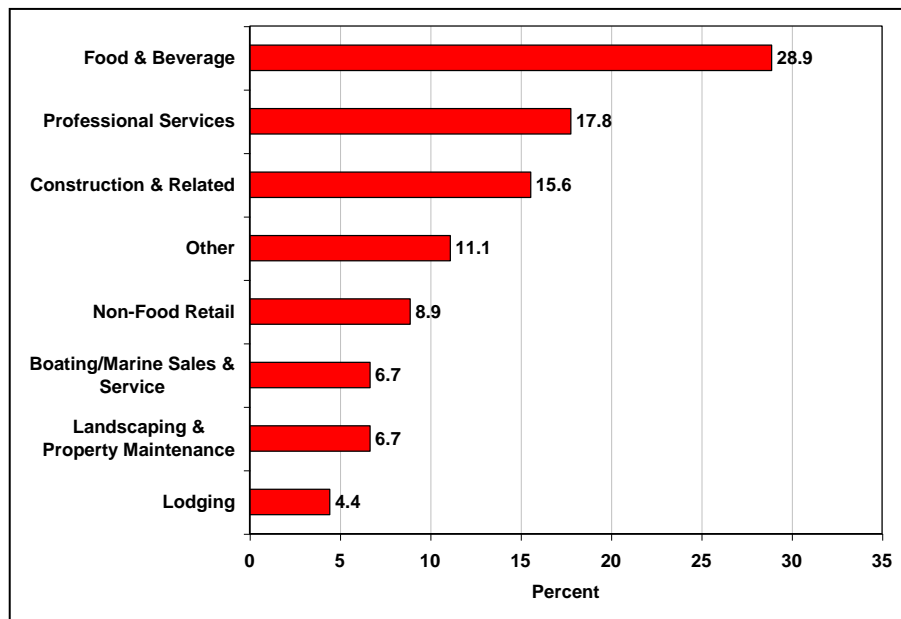
¹ Approximately 10 email addresses in the initial email notification were incorrect. A search of the Chamber of Commerce directory identified correct addresses for most of these businesses. Where no correct email address could be found a printed survey was mailed. Two of the mailed surveys were returned designated by Canada Post as having an Unclaimed/Unknown address. Subsequent searching indicated the mailing addresses provided to C4SE were in fact correct. In addition, 4 emails with the survey link were sent out to businesses that had not been included in the original distribution list.

The Bala Business Community

Figure 4 illustrates the categories of businesses that responded to the survey:

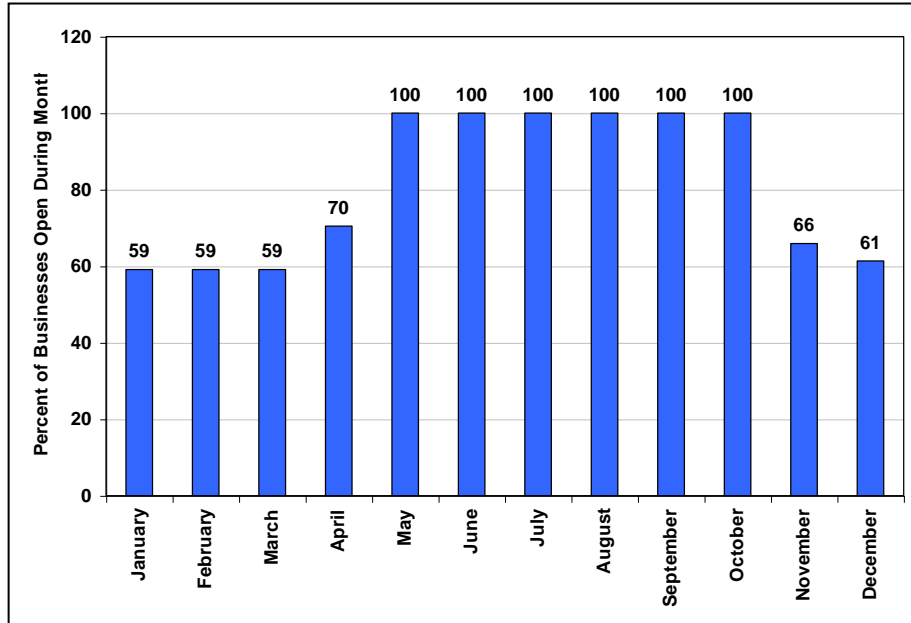
- The single largest category of businesses responding to the survey – almost 30 percent – includes those involved in the sale of food and beverages (Figure 4). This group includes both restaurants and retail outlets of food and beverages.
- The next two largest categories of respondents are those in professional services (accounting, real estate, etc.) at almost 18 percent and those in construction related businesses at almost 16 percent.
- These three categories collectively accounted for 62.3 percent of all the responses.
- Retail other than food (at almost 9 percent), boating/marine sales and service (almost 7 percent) and landscaping and property maintenance (also almost 7 percent) accounted for another 22.3 percent of the responses.

Figure 4
Survey Respondents by Type of Business



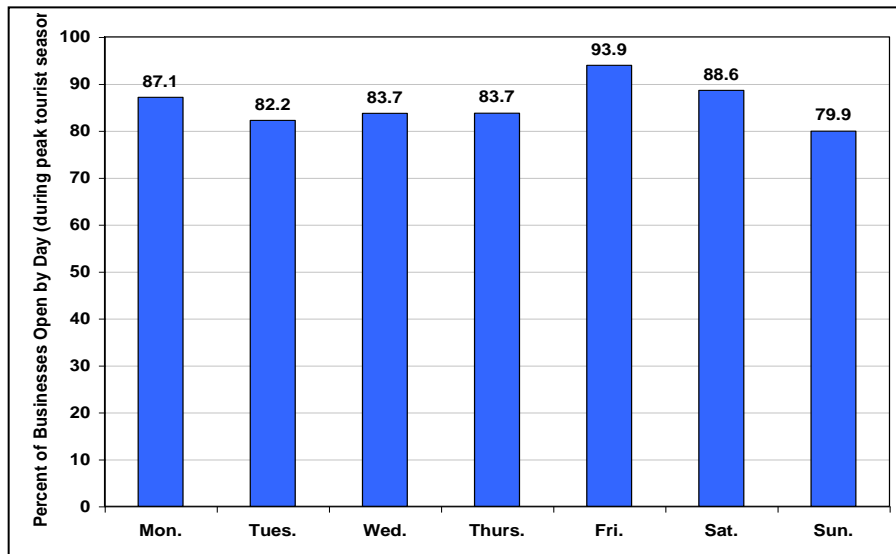
Many businesses in Bala are seasonal. Figure 5 indicates that all businesses reported being open from May to October but less than two-thirds reported being open year-round.

Figure 5
Percent of Businesses Open by Month (Entire Year)



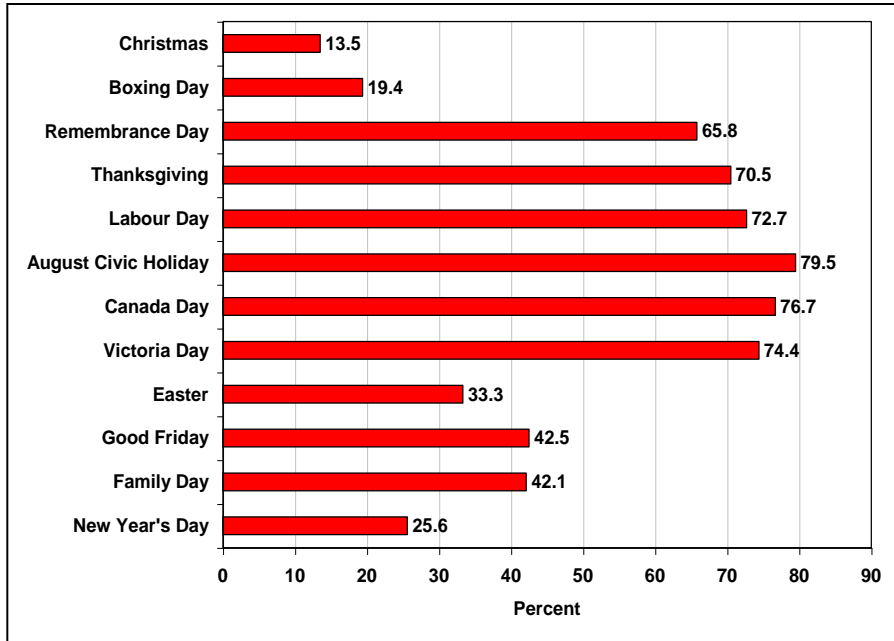
Most businesses reported being open 7 days a week during the peak tourist season from May to October (Figure 6). Friday (almost 94 percent) and Saturday (almost 89 percent) were the most frequent days of operation and Sunday (just under 80 percent) was the least frequent.

Figure 6
Average Percent of Businesses Open by Day of the Week (May to October)



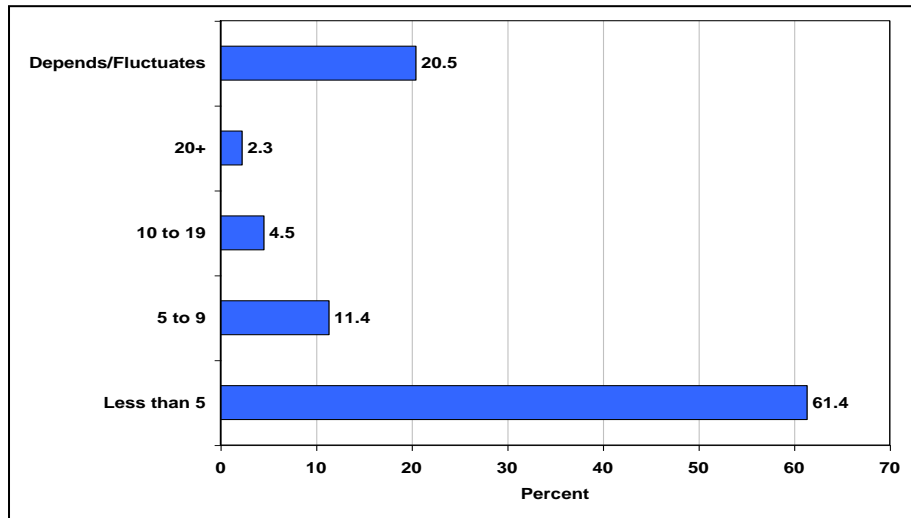
Most businesses are open during the holidays that occur between May and October.

Figure 7
Average Percent of Businesses Open During Holidays (Entire Year)



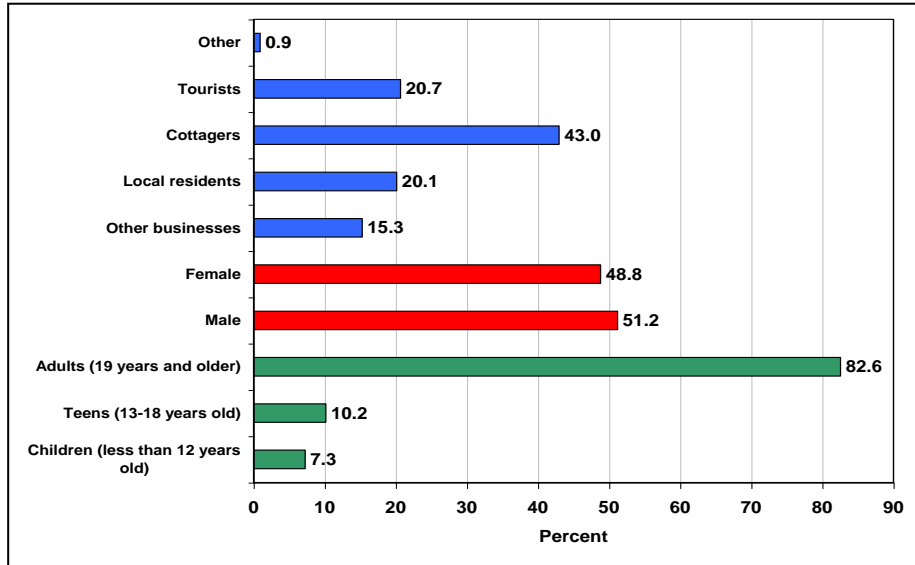
Most businesses (61 percent) reported having fewer than 5 staff on shift at one time (Figure 8). However, a significant percentage (21 percent) indicated the number of staff fluctuated depending on the season (for example summer vs. winter months) and also the time of the day (for example breakfast vs. lunch service).

Figure 8
Percent by Number of Staff on Shift



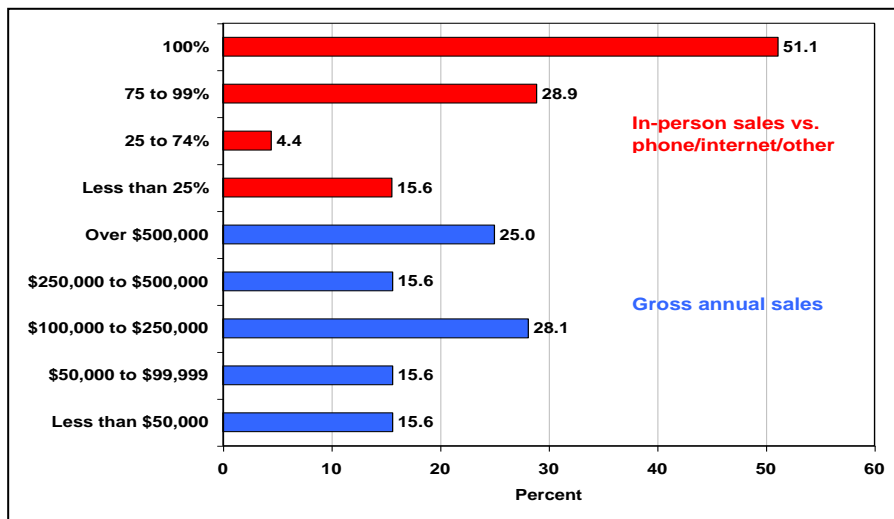
In terms of the clientele that the businesses serve (Figure 9) almost two-thirds are geared towards cottagers (43 percent) and tourists (21 percent). Most products/services (83 percent) are geared towards adults with an almost equal mix between males and females.

Figure 9
Key Target Demographics of Businesses



Only 68 percent of respondents provided information about gross annual sales. Those reporting this information indicated no common type of business in terms of dollar sales volume. Most businesses reported most of their sales come from in-person (as opposed to other methods such as by phone, over the internet, etc.). Just over half indicated 100 percent of their sales came from in-person sales while almost 30 percent indicated more than 75 percent came from that source.

Figure 10
Annual Sales and In-Person vs. Other Sales Methods



Most customers arrive by automobile (Figure 11) explaining why most businesses have a parking facility. A significant portion of businesses report customers arrive by boat which explains why almost one-third of businesses also report having some sort of docking facility.

Figure 11
Methods of Customer Arrival and Availability of Parking/Docking

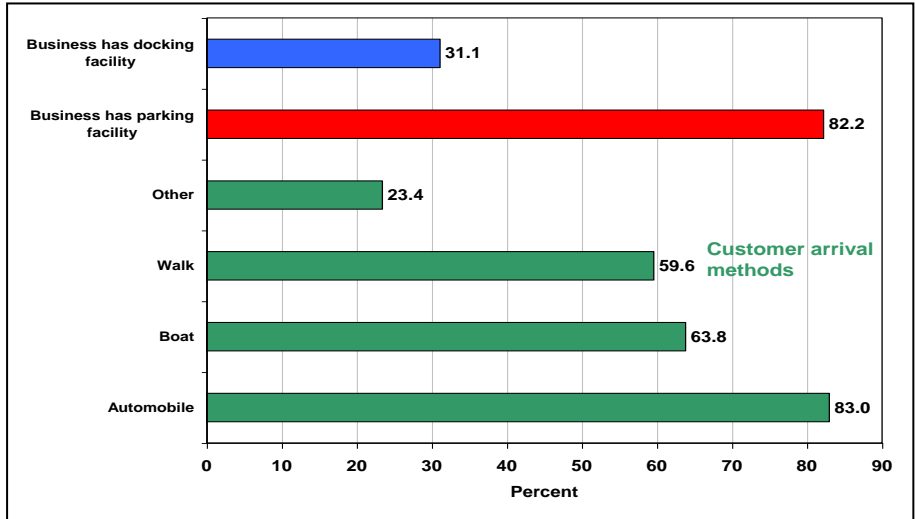
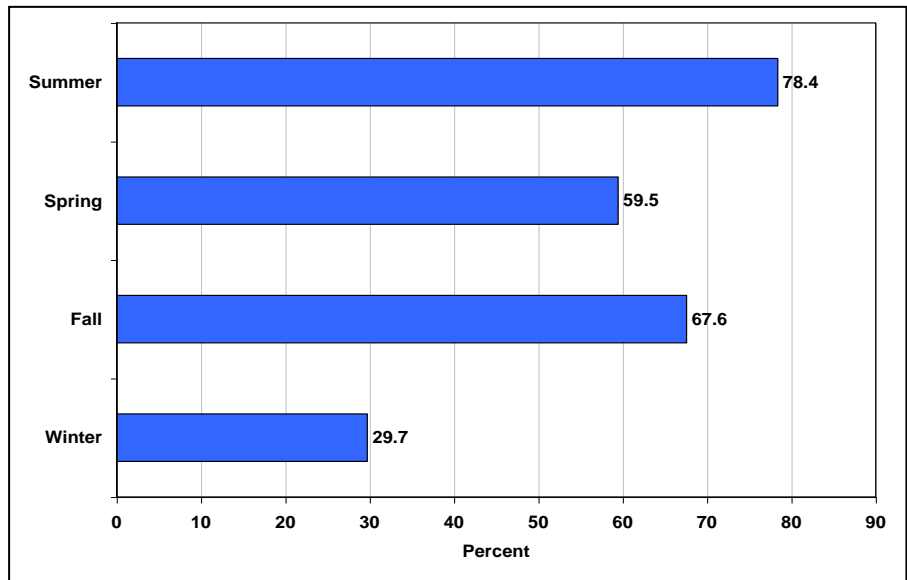


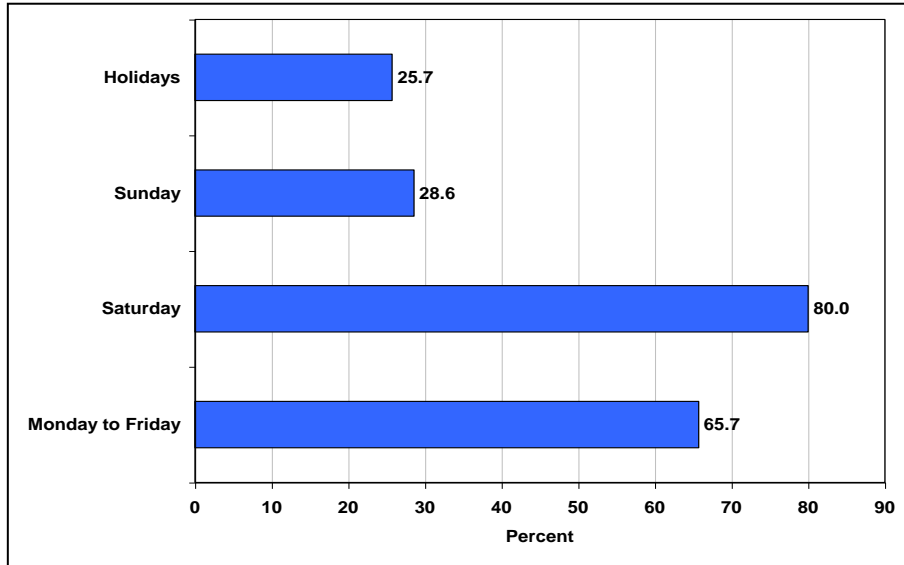
Figure 12 shows the percentage of businesses ranking the seasons as being either the most or second most important in terms of sales. Summer is clearly the peak sales season followed by Fall and Spring.

Figure 12
Peak Sales Period



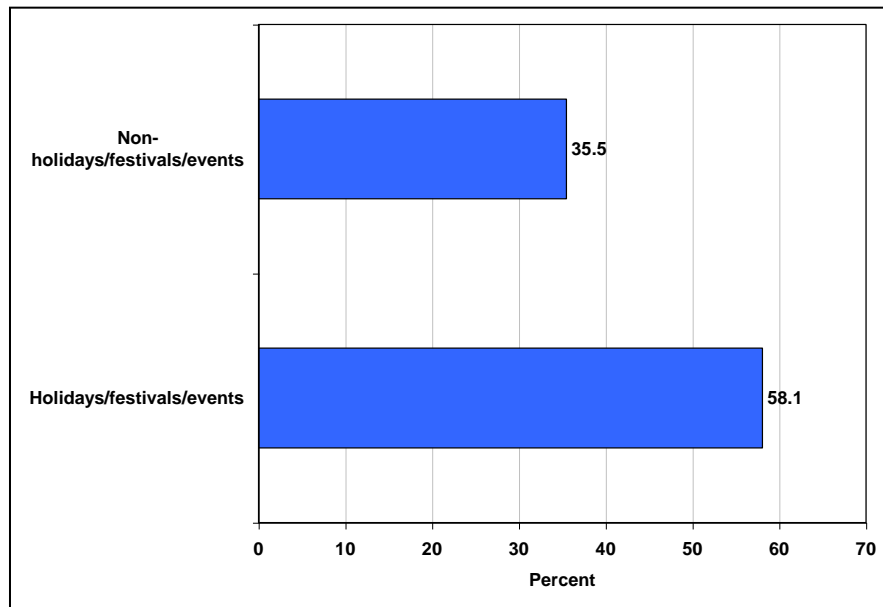
Saturday was ranked by 4 out of 5 businesses as being either the most important or the second most important day for business (Figure 13). Monday through Friday was ranked by almost two thirds of the respondents as being the most important or the second most important.

Figure 13
Peak Sales Days



Holidays, festivals and event days are more important than other days for business (Figure 14).

Figure 14
Peak Sales Times



The Construction Phase of the Project

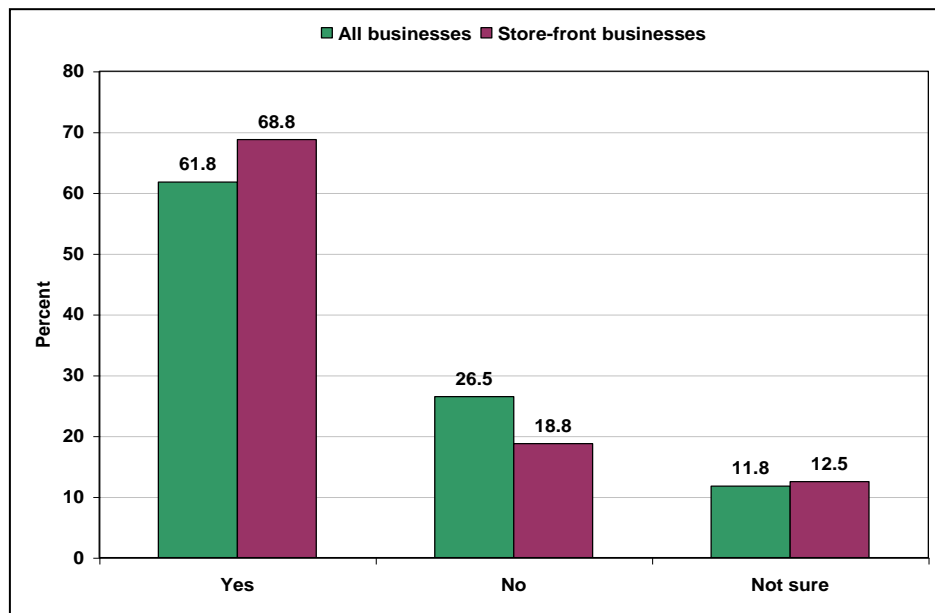
SREL has proposed to confine construction activities on and under MR-169 to outside of the main tourist season to reduce impacts on businesses. In particular this work, and the associated lane reductions and road closures, will be restricted to the period immediately following Cranberry Festival (mid October 2011) and before Victoria Day weekend (late May 2012). The remaining work pertaining to the intake and powerhouse construction, located away from MR-169, will be conducted year round.

The survey first asked businesses about the expected impact the proposed lane reductions and road closures (see the project description in Section 1 on page 2 or the Survey itself in Appendix A) may have on their businesses. Expected impacts from the remaining powerhouse and intake construction were sought in a separate section of the questionnaire.

Lane Reductions and Road Closures

A majority of the businesses that are open during the November 1 to May 15 period (approximately 2/3 of respondents) feel that the two sets of 4-week lane reductions (one in November 2011 and one in April/May 2012) and the two one night road closures (one in late November or early December 2011 and one in April or early May 2012) between 8 p.m. and 6 a.m. will affect their business (Figure 15). ‘Store-front’ businesses² that depend on walk-in customers are slightly more concerned than businesses in general that these lane reductions and road closures will have an impact. A small percentage of these businesses are not sure if the lane reductions and road closures will have any impact on their business.

Figure 15
Will Proposed Lane Reductions and Road Closures Impact Your Business?



² ‘Store-front’ businesses are those identified as being involved in retail, restaurant and other in-store sales as opposed to businesses providing professional services.

Respondents were asked to provide comments and recommendations with respect to the proposed lane reductions and road closures.

Concerns expressed by respondents included the following:

- Traffic in general could be delayed because MR-169 is the major artery through Bala.
- Construction at and under the road could negatively impact the number of customers (who might avoid the area because of perceived traffic delays and go to other nearby areas such as Gravenhurst or Bracebridge).
- Work might delay business related traffic (such as the delivery of construction materials by construction companies in the area).
- Construction activity could negatively impact Cranberry Festival activities identified by respondents as being vital to the economy of Bala.

With regard to the last bullet point it should be noted again that lane reductions and road closures are not planned to occur at the time of the Cranberry Festival.

Suggestions by respondents regarding minimization of the impacts of lane reductions and road closures included those cited below. Our evaluation of each suggestion is also provided.

Business Survey Respondent Suggestions	C4SE Evaluation of Suggestions
Cancel the project (single largest response)	This is not a reasonable approach to mitigation
Have print, radio advertising and proper signage prior to and during the periods of lane reductions and road closures emphasizing that businesses are still open	SREL has already committed to doing this
Install a temporary bridge	A temporary bridge is being proposed to maintain two lanes of traffic for the vast majority of the work
Reduce lanes of traffic only during the evening	This is probably not feasible as noise bylaws likely restrict work being done in the evening. Restricting lane reductions to evenings would likely extend completion of construction into the tourist season.
Ensure work is done on time	SREL is already committed to doing this
Provide financial compensation to local businesses	This is not easily evaluated (see Section 3)

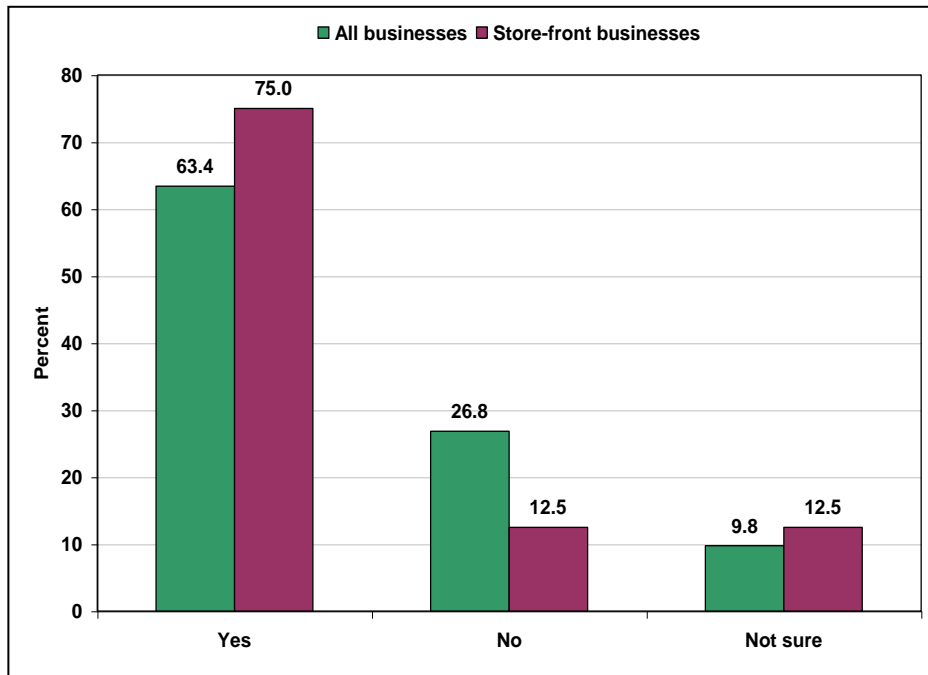
C4SE notes that the duration of the lane reductions (two 4 week periods) and road closures (two-1 night road closures) and timing (outside of the peak tourist period) provides significant mitigation efforts to reduce impacts to local businesses. (It should be noted, as well, that the section of road affected by the lane reductions and closures is only about 30 metres long.) However, we do recommend that SREL work closely with businesses and the community to ensure all lane reduction and road closures are well communicated in advance. In addition, SREL should ensure that all efforts are made to maintain sufficient traffic flow during lane reduction periods by hiring flag persons and/or installing temporary traffic signals.

Intake and Powerhouse Construction

A majority of businesses indicated that the intake and powerhouse construction to be completed on land away from MR-169 will have an impact on their businesses (Figure 16).

The level of concern is equal to that expressed regarding lane reductions and road closures. Again, ‘store-front’ businesses expressed a higher level of concern than other businesses over the expected impacts of site construction work.

Figure 16
Will Intake and Powerhouse Work
Impact Your Business During Peak Summer Season?



Further comments from business owners centred on two main themes:

- Traffic delays occurring due to truck traffic into and out of the site.
- Construction-related noise and dust which will detract from the appeal of the area.

Suggestions by respondents regarding minimization of the impacts of the intake and powerhouse site construction included those cited below. Our evaluation of each suggestion is also provided.

Business Survey Respondent Suggestions	C4SE Evaluation of Suggestions
Cancel the project (single largest response)	This is not a reasonable approach to mitigation
Limit construction work to off-peak hours and keep construction equipment away from pedestrian areas	This is probably not feasible as noise bylaws will likely restrict work being done in the evening. Construction areas will be well delineated and restricted for pedestrians. The main sidewalks along the road will remain open during this period
Provide financial compensation for lost business	This is not easily evaluated (see Section 3)
Post signage that businesses remain open during the construction phase	SREL has already committed to doing this
Ensure that the recreational uses and the aesthetics of the falls remain intact	Restricted areas will be well delineated both in water and on land. These areas are shown in the three figures provided with the survey (see Appendix A). The flows over the falls will not be changed during construction and will be managed by MNR not SREL during this period.

C4SE notes that the work completed for the intake and powerhouse will occur well away from the road and should not interfere with traffic with the exception of construction vehicles entering and exiting from the site. This construction traffic is unlikely to have any significant impact on traffic during this period. We recommend that SREL ensure that all reasonable measures are taken to reduce traffic impacts during this period by ensuring sufficient flag persons are present during this period to facilitate construction traffic merging onto and off of the main roads.

SREL understands that there will be construction noise and dust during the construction phase of the project. Such impacts are not readily mitigated except to ensure that the work is not done during the night hours when the area is generally quiet. It should be noted that at least some of the construction noise will be masked by routine daily sound stemming from road traffic, trains and water flows over the dams.

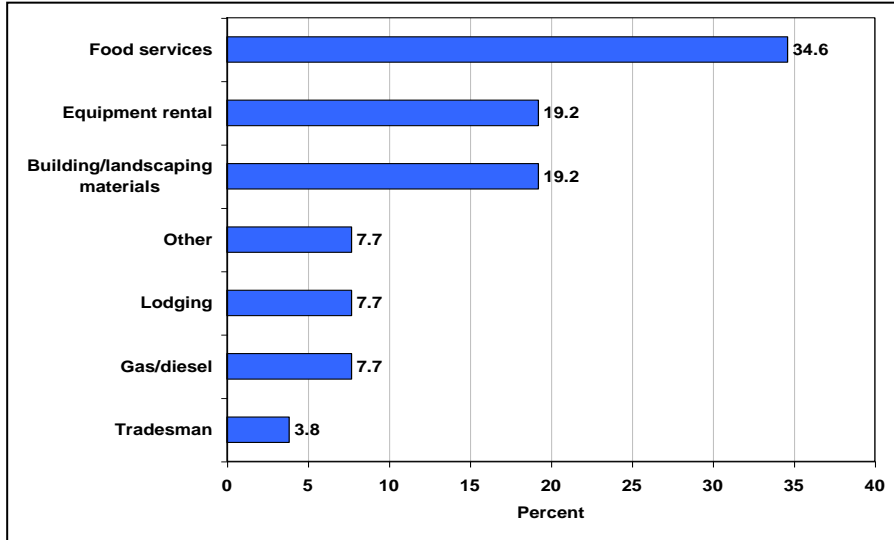
There were 26 instances of businesses indicating that they provide services/products that could be used during the construction phase of the project (with some businesses indicating they provide more than one type of relevant service or product). In other words 26 out of 47 respondents – more than 55 percent – indicated an interest in servicing the construction phase. Within this group of 26 businesses (Figure 17) just over one-third are food services followed by construction equipment rental and building/landscaping materials and services.

Among companies that operate only between May and October only 2 indicated they would be willing to remain open year-round to provide services for the project. An additional 2 businesses indicated they might consider remaining open (if business was guaranteed).

More than half of the businesses (55.6 percent) responded there are specific days and times when it would be beneficial for SREL to limit construction (Figure 18).³ The most commonly-requested days for limiting construction centre on Friday, Saturday and Sunday (corresponding to the most important business days for most businesses).

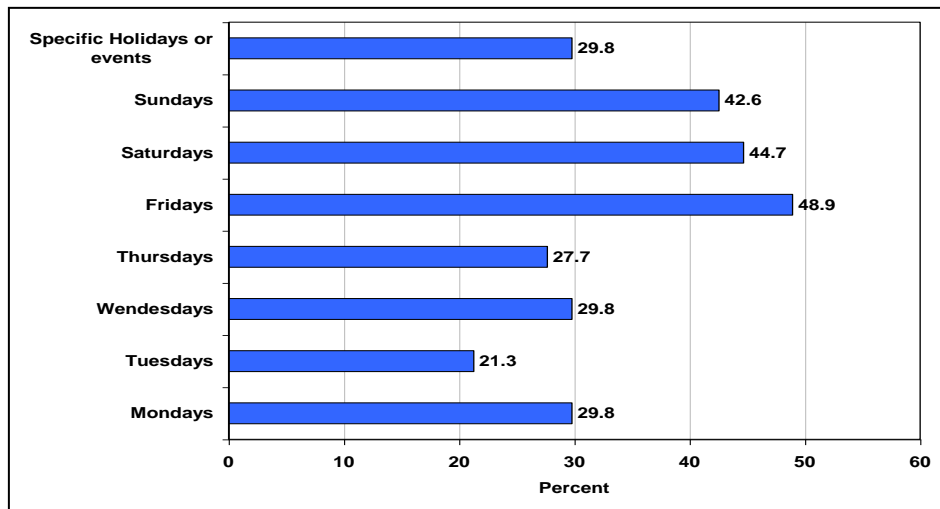
³ Eleven businesses did not respond to this question.

Figure 17
Does Your Business Provide Services
That Could Be Required During the Construction Phase of the Project?
Percent Share of 26 Interested Respondents



Respondents were asked to respond to a list of specific holidays or events during which construction should be limited. Specific dates mentioned (again, Figure 18) included all long weekends, school breaks (such as March Break), the Cranberry Festival, July 24 (the re-enactment of the 1922 arrival of L.M. Montgomery in Bala), November 30 (the anniversary of the birth of L. M. Montgomery), the Bethlehem Trek (around December 5) and major tourist times.

Figure 18
Specific Days That Construction Should Be Limited



The Operational Phase of the Project

Various details were provided in the survey regarding park/lookout developments proposed by SREL in conjunction with the project and regarding the preservation of future water flows and of the aesthetics of the falls. Respondents were asked for their reaction.

General Reaction to Operations

Just over half of the business owners responding to the survey feel the operations phase will have an impact on their business (Figure 19). But a notable portion – 1 in 4 businesses – is unsure about the operational impacts of the project. The shares are slightly higher for ‘store-front’ than for other businesses.

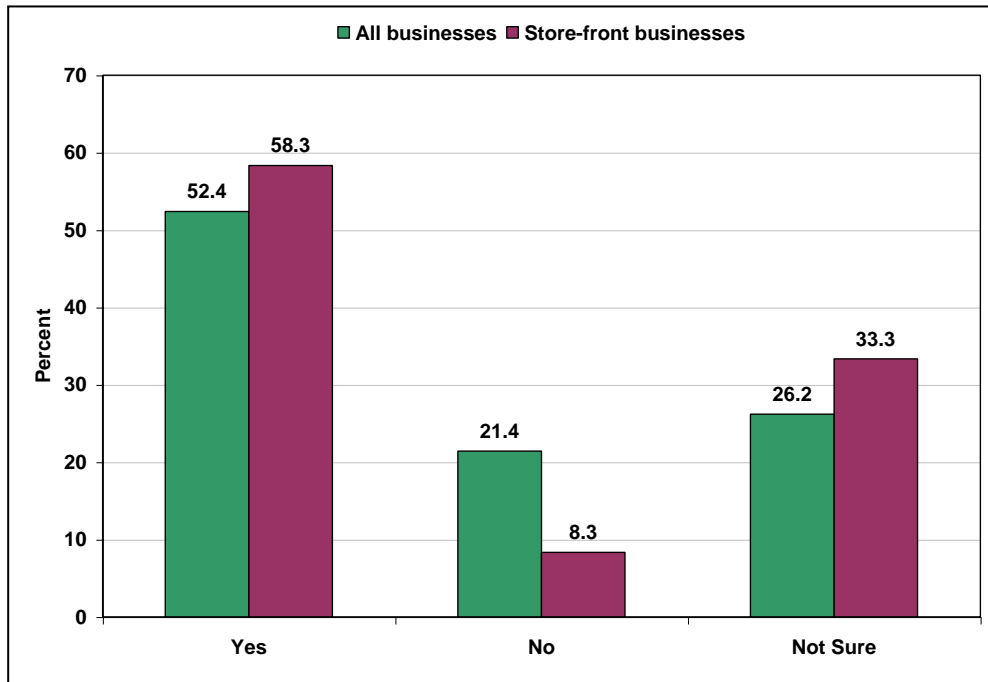
Comments from respondents regarding the operational phase included the following:

- The project will detract from the natural beauty of the falls and therefore the area will no longer be a tourist attraction.
- Tourists will go elsewhere, and the resulting loss of business will lead to layoffs.
- The project will negatively impact diving opportunities around the falls.

Two comments included by respondents in the operational phase section of the survey but relating more to the construction phase of the project were as follows:

- Questions/concerns over construction delays, noise and fencing, and how this will impact the amount and type of land still available in the area.
- Traffic delays and blocked entrances due to construction will increase business costs and negatively impact the number of people/customers arriving by car and boat. [Note: It is not clear to what blocked entrances this respondent is referring.]

Figure 19
Does Business Owner Foresee
Any Impacts on their Business from this Project?



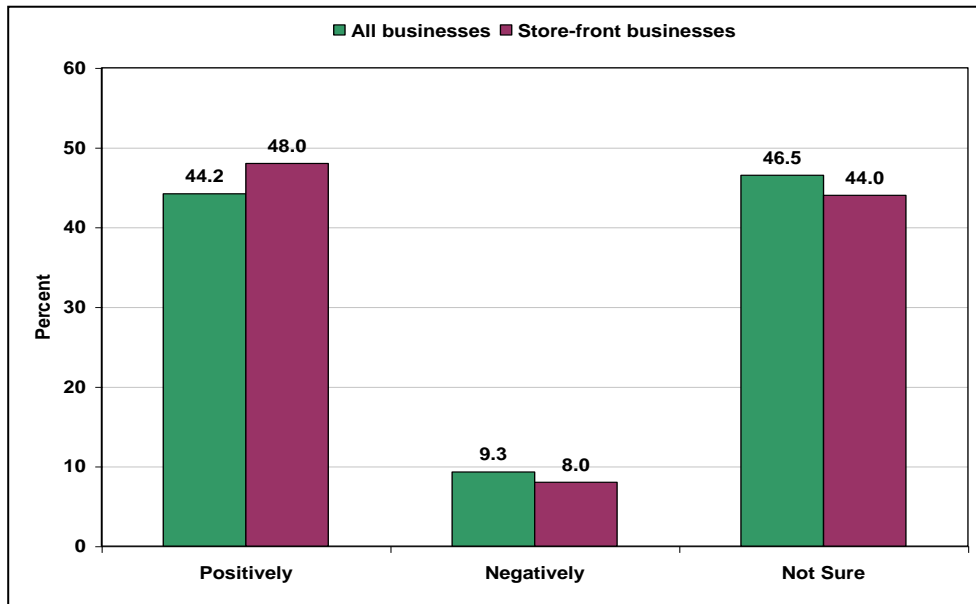
Reaction to All-Year Pedestrian/Snowmobile Bridge

Figure 20 shows that business owners were almost evenly split between positive and unsure attitudes toward the proposed pedestrian/snowmobile bridge (with only a slight difference depending on the type of business). More specific comments by the respondents regarding the bridge can be summarized as follows:

- The bridge is good idea, but has been in the works for years already.
- Some business owners felt it wouldn't benefit their business (and wouldn't make up the loss of business due to construction), but a few owners felt it could increase business.
- The bridge would take away valuable, publicly-accessible space.

It should be noted that this initiative was recommended by a previously completed economic development study for the Township of Muskoka Lakes and the Chamber of Commerce by another consultant. That study suggested this initiative would be a way to better link the two main business areas for pedestrians and to provide a safer route for the existing snowmobile trail by replacing the currently dangerous snowmobile route over MR-169 in this area.

Figure 20
Impact of All-Year Pedestrian/Snowmobile Bridge



Reaction to New Docks at Municipal Wharf

Reaction to the proposed new docks is also mixed between positive and uncertain opinions (Figure 21). However, ‘store-front’ business owners more than business owners in general view the docks as having a negative effect.

Specific comments echoed those with respect to the bridge, with differing views around whether there is already enough dock space in the area vs. whether or not it will have any impact on my business. One respondent noted new docks would take away business from marinas already in the area.

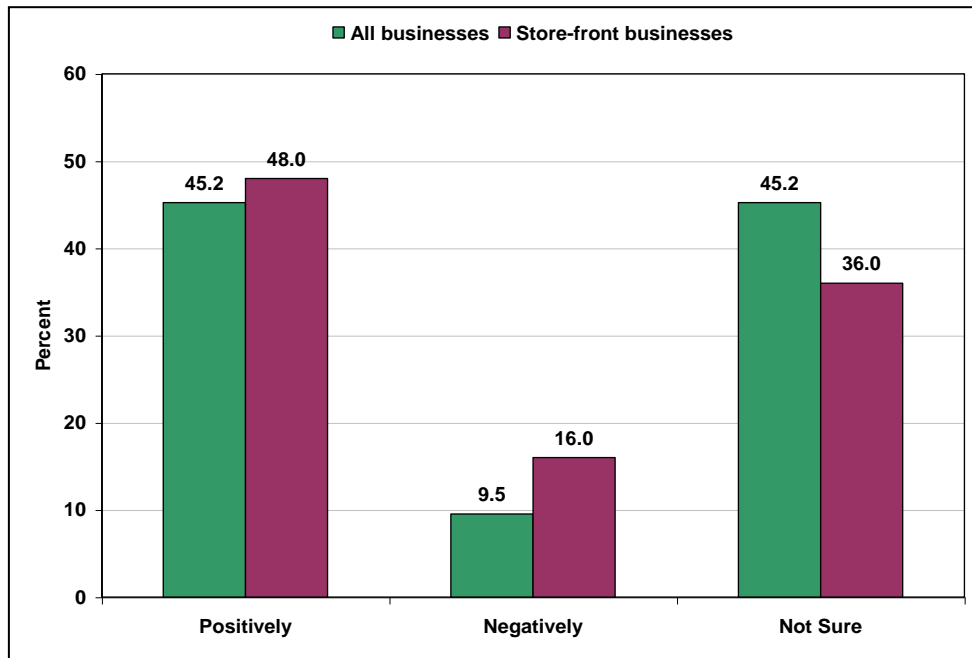
It should be noted that this initiative, too, was suggested in the above-referenced economic development study for its value as a means of access and because of the history of boating in the community.

Ideas for Initiatives

Respondents were given the opportunity to provide ideas that could benefit their businesses. The most common response among the 17 written comments was that the project should involve local workers, services and goods. Other specific comments included the need to:

- Increase parking spaces.
- Compensate businesses for lost income.
- Develop and implement an advertising campaign to prevent tourists from staying away.

Figure 21
Impact of New Docks at Municipal Wharf



Three additional comments, not found elsewhere in the survey results, were that:

- There is a need to conduct a proper examination of why people come to Bala.
- Hopefully the project will not negatively affect diving opportunities in the area (a key economic driver for the town according to one respondent).
- The name “The Moon River Lookout” is a registered company name for a business in the area and should not be used as part of the project.

Other Comments and Ideas

A total of 15 respondents provided final written comments, including the following:

- The project is environmentally positive and could be mutually beneficial (one respondent noted this should be highlighted more).
- The project will have impacts similar to those of the recent sewer/water project. [Note: The sewer/water project resulted in storefront sidewalks being excavated over a two year period. In contrast construction of this project will occur well away from storefronts.]
- The project should be cancelled.
- SREL should establish a plan to financially compensate businesses for lost revenue.

KEY MESSAGES FROM THE SURVEY RESULTS

C4SE concludes that the survey results provide several key messages:

- All respondents operate during May through October but only two-thirds operate the rest of the year. Most (80 percent) operate all 7 days of the week during the peak season including on statutory holidays. Most (80 percent) ranked Saturday as their first or second most important sales day while 66 percent ranked Monday through Friday as either their first or second most important sales days. In-person sales are the major source of business for most respondents and most customers arrive either by car or boat.
- Cottagers account for 43 percent of the market of survey respondents. The remaining 57 percent is accounted for by tourists (20 percent), local residents (20 percent) and other businesses (17 percent).
- Most respondents – 60 to 75 percent – expect the construction phase – including both the road-related and powerhouse/intake activities – to impact their business. This impression was noted by both the ‘store-front’ and the ‘non-store-front’ businesses responding to the survey.
- More than half the respondents expect the project to have a permanent impact.

The responses and comments provided by a number of those that completed the survey suggest there is a significant misunderstanding among many respondent’s with respect to their perception of the project and the project actually being proposed by SREL. This misunderstanding appears to have influenced the concerns expressed by many respondents with respect to the impact they believe the project will have on local businesses. This misunderstanding is especially evident with respect to the concerns some expressed regarding potential disruptions to traffic during the construction period.

We will have more to say about the survey results in Section 5.

Section 3

IMPACTS ON MUSKOKA LAKES TOWNSHIP

This section of the report draws on the results of the survey described in Section 2 and on information available from the Censuses of 2001 and 2006 to assess the key economic drivers of the Township of Muskoka Lakes and of the Bala Community. The key message of this section of the report is that cottagers and tourists are the key drivers of the Muskoka Lakes economy and of the Bala Community.

THE ECONOMIC BASE OF MUSKOKA LAKES TOWNSHIP

The population of Muskoka Lakes Township reached 6,467 in 2006, up some 450 people – or by 7.0 percent – from a total of 6,042 in 2001. By way of comparison the population of Muskoka District grew slightly faster over that period – by 8.4 percent – while that of the province grew somewhat slower – by 6.6 percent.

Employers in Muskoka Lakes provided jobs to a total of 2,290 people in 2006, up 12.2 percent from the number provided in 2001. Over the same five year period jobs grew by 11.9 percent in the District and by 5.7 percent province-wide.

In other words Muskoka Lakes is keeping pace with both economic and demographic growth when compared to Muskoka District, and both the Township and the District are growing faster than the province on both counts. Regrettably indicators of population and employment growth beyond 2006 are not available for the Township. Statistics Canada's post-censal population estimates, however, suggest that the population of the District grew by only 0.9 percent between 2006 and 2009 compared to 3.2 percent for the province as a whole. It appears that the recent recession slowed population growth in the District to a pace less than that of the province.

Using 2006 Census data regarding the population and number of employed persons by place-of-work for Muskoka Lakes and Ontario we have decomposed the Township's economy into its economic-base and community-base components. Figure 22 illustrates this decomposition. But first a word of explanation is in order.

The economic activities occurring in a community can be divided into those that are export-based and those that are community-based. Export-based industries – the economic drivers or the economic base of a community – produce goods that are shipped to markets outside the community (agriculture, forestry, fishing, manufacturing and mining), or they provide services to visitors and seasonal residents of the community (hotels, restaurants, retail outlets, recreation attractors, specialized hospitals, colleges and universities) or to businesses outside the community (specialized financial or professional services). Community-based industries produce services that meet the needs primarily of the local residents in the community (retail, medical, primary and secondary education, and personal and government services).

In order to determine which industries are the key drivers of Muskoka Lakes we developed location quotients on an industry by industry basis for the Township as reflected in Figure 22. Figure 22 decomposes Muskoka Lakes' employment by place-of-work by industry data for 2006 into its economic-base (EB) and community-base (CB) components based on its activity rates (ratios of employment per 1,000 residents) compared to those for Ontario as a whole.

In this decomposition, all jobs in the agriculture, forestry, mining and manufacturing sectors are by definition considered to be economic base or export-based. Export-based jobs in all the other industries are determined where the activity rate in Muskoka Lakes exceeds the rate for Ontario.

Figure 22
The Economic Base of Muskoka Lakes

	EPOW	Activity Rate		Muskoka Lakes		
	ML	ML	Ont	LQ	EB	CB
Total population	6,467					
Total employed by place of work	2,290	354	458	77	844	1,446
Agriculture, forestry, fishing, hunting, mining	55	9	10	85	55	0
Utilities	25	4	4	107	2	23
Construction	345	53	14	368	251	94
Manufacturing	65	10	68	15	65	0
Wholesale trade	50	8	23	34	0	50
Retail trade	400	62	54	115	51	349
Transportation, warehousing	50	8	19	42	0	50
Information, cultural industries	30	5	13	37	0	30
Finance, insurance	30	5	25	19	0	30
Real estate, rental, leasing	95	15	9	156	34	61
Professional, scientific, technical services	105	16	34	47	0	105
Management of companies, administrative support	150	23	19	124	29	121
Educational services	40	6	32	19	0	40
Health care, social assistance	55	9	46	18	0	55
Arts, entertainment, recreation	230	36	10	369	168	62
Accommodation, food services	385	60	30	197	189	196
Other services (except public administration)	125	19	22	88	0	125
Public administration	55	9	27	31	0	55

In Figure 22 the first column shows the number of jobs supplied by employers in Muskoka Lakes in 2006 by industry by place-of-work (EPOW). The second column indicates the number of jobs for each industry in the Township per 1,000 residents (the activity rate). The third column provides the activity rate by industry for Ontario as a whole. The fourth column provides the Location Quotient (LQ) for each industry for Muskoka lakes where the Location Quotient simply expresses the Muskoka Lakes activity rate by industry divided by the rate for Ontario by industry in index form.

In decomposing jobs into their economic base and community base components we assume (as noted above) all jobs in the agriculture and manufacturing sectors in Muskoka Lakes are producing products for people outside the Township and, therefore, these jobs are part of the Township's economic base. With respect to all other industries we assume for industries where the Location Quotient for the Township exceeds 100 – that is the number per capita exceeds the norm of most other Ontario communities – the extent to which jobs in those industries exceed the norm reveals the extent to which those excess jobs must be providing services to people who usually live outside of the Township (in Muskoka Lakes' case to tourists and cottagers).⁴

⁴ For example, the Location Quotient for retail trade for Muskoka Lakes is 115, which exceeds 100 by 15. We divide 15 by 115 and multiply it by 100 to determine that 13 percent of all Muskoka Lakes' retail trade jobs are serving non-residents. Taking 13 percent of the Township's total of 400 retail jobs reveals that 51 of them are economic base jobs.

Figure 22 indicates that 844 of the 2,290 jobs provided by employers in Muskoka Lakes in 2006 are economic-base jobs. Thus about 37 percent of all the jobs found in Muskoka Lakes are economic driver positions to the Township.

Within the economic base category construction accounts for the largest number of positions at 251, suggesting that Muskoka Lakes is the location of construction firms carrying out activities for businesses and communities well beyond the borders of the Township. Construction accounts for 30 percent of the Township's economic base jobs.

The accommodation and food services industry accounts for the next largest number of economic base jobs in the Township at 189, followed by the arts, entertainment and recreation industry at 168. Retail trade accounts for another 51 of the economic base jobs in Muskoka Lakes. In communities where these three industries together account for a sizable number of economic base jobs it can be concluded that tourism – supplying services to tourists and cottagers – is big business. These three industries together accounted for 405 economic base jobs in 2006 in Muskoka Lakes, far more than construction. Thus tourism accounts for almost half – 48 percent – of the Township's economic base.

Construction and tourism together account for 85 percent of the economic base activities of Muskoka Lakes. The rest of the area's economic base is accounted for by relatively few jobs in manufacturing (65 jobs), agriculture and other primary industries (55), real estate, rental and leasing (34) and management and support of companies, etc. (29).

Figure 23
Employment by Place-of-Work in Muskoka Lakes
2001 and 2006

	2001	2006	Change	Percent Change
Total	2,040	2,290	250	12.3
Agriculture, forestry, fishing, hunting, mining	40	55	15	37.5
Utilities	0	25	25	--
Construction	330	345	15	4.5
Manufacturing	80	65	-15	-18.8
Wholesale trade	40	50	10	25.0
Retail trade	300	400	100	33.3
Transportation, warehousing	45	50	5	11.1
Information, cultural industries	15	30	15	100.0
Finance, insurance	20	30	10	50.0
Real estate, rental, leasing	120	95	-25	-20.8
Professional, scientific, technical services	45	105	60	133.3
Management of companies, administrative support	135	150	15	11.1
Educational services	40	40	0	0.0
Health care, social assistance	65	55	-10	-15.4
Arts, entertainment, recreation	190	230	40	21.1
Accommodation, food services	440	385	-55	-12.5
Other services (except public administration)	80	125	45	56.3
Public administration	55	55	0	0.0
Tourism	945	1,045	100	10.6

Figure 23 shows the number of jobs on a place-of-work basis in Muskoka Lakes in 2006 compared to the number in 2001 on an industry by industry basis. The total number of jobs is indicated for each industry and thus includes both economic base and community base employment. Figure 23 reveals that the number of jobs in the industries that service both tourism and local community needs – food and accommodation; arts, entertainment and recreation; retail trade; and information and culture – grew by 10.6 percent between 2001 and 2006 in Muskoka Lakes, or at a rate almost equal to the 12.3 percent overall gain in employment in the Township over that period.

Figures 19 and 20 together, therefore, suggest that cottagers and tourism are very important to the economy of Muskoka Lakes and that those industries servicing the needs of cottagers and tourists grew quickly in the Township over the period for which the most recent data are available.

Another measure of economic activity is that provided through the gross domestic product (GDP). GDP measures in dollar terms the contribution of each industry to overall economic output. GDP measures the value added to final output by each industry – that is each industry’s contribution to the goods it produces and to the services it provides – after recognizing that some of each industry’s inputs represent the final output of other industries.⁵

Figure 24
Estimated Gross Domestic Product by Industry
Muskoka Lakes in 2006 Measured in 2002 Dollars

Major Industries	Gross Domestic Product (Millions of 2002 dollars)		Employed by Place-of-Work (Number)		Muskoka Lakes Percent Share
	Muskoka Lakes	Muskoka District	Muskoka Lakes	Muskoka District	
Total all industries	176	1,964	2,290	26,055	9.0
Agriculture, forestry, fishing, hunting, mining	4	20	55	295	18.6
Utilities	6	52	25	230	10.9
Construction	48	266	345	1,925	17.9
Manufacturing	7	326	65	2,890	2.2
Wholesale trade	5	67	50	605	8.3
Retail trade	16	191	400	4,675	8.6
Transportation, warehousing	4	71	50	840	6.0
Information, cultural industries	4	42	30	325	9.2
Finance, insurance	32	318	125	1,250	10.0
Professional, scientific, technical services	7	69	105	1,065	9.9
Management of companies, administrative support	9	48	150	760	19.7
Educational services	2	76	40	1,315	3.0
Health care, social assistance	3	131	55	2,550	2.2
Arts, entertainment, recreation	9	40	230	1,040	22.1
Accommodation, food services	10	99	385	3,860	10.0
Other services (except public administration)	5	49	125	1,120	11.2
Public administration	4	99	55	1,310	4.2

⁵ As an example, restaurants provide meals and beverages to their customers. They purchase vegetables, meat, beverages, printed menus, etc. from other industries; they provide their services on tables and chairs purchased from other industries in a building constructed by yet other industries. The value added by the restaurant industry to the economy is represented by the wages and salaries paid to the people it hires to prepare and serve the food plus any profits the restaurant owners make through providing these services. This value added approach to accounting for industrial activity avoids double counting the activities of industries along the production and service chain.

Statistics Canada provides estimates of GDP by industry only at the national and provincial level, not at the sub-provincial level. However, using Ontario data for GDP by industry and Ontario data for employment by industry we can calculate the value added per worker in each industry at the provincial level (output per worker, or productivity). We can then apply that province-wide estimate to employment by industry at the community level to derive a rough estimate of the dollar size of the economy of any community in Ontario. Figure 24 provides such a calculation for both Muskoka Lakes and for Muskoka District for the year 2006.

Figure 24 reveals that the Muskoka Lakes economy generated an estimated \$176 million worth of goods and services across all industries in 2006 representing 9.0 percent of Muskoka District's total production of \$1,964 million (or almost \$2 billion), both measured in constant 2002 dollar terms. Figure 24 suggests that the four industries that service tourists and cottagers – food and accommodation; arts, entertainment and recreation; retail trade; and information and culture – collectively accounted for \$39 million of services in 2006 and accounted for a disproportionately high 11.5 percent of the value of such services produced by the District as a whole.

In other words Muskoka Lakes is a major tourism player within the District which itself is a major tourism player within Ontario.

THE ECONOMIC BASE OF THE BALA COMMUNITY

Regrettably we have access to only a limited amount of Census information regarding the Bala Community⁶ and what we know about it relates only to the year 2006. Based on the data to which we have access we can say the following:

- The permanent population (the population the census measures) of the Community totalled 455 persons. Just over 10 percent (49 of the residents) are of aboriginal origin.
- These 455 people lived in 200 dwelling units of which 181 were owned and were 19 rented. All the dwellings are single-detached units.
- Since 20 of the dwelling units were built between 2001 and 2006 the number of dwellings increased by about 13 percent suggesting the Bala Community's population probably also increased by about 13 percent or at a rate faster than that achieved by Muskoka Lakes (7.0 percent) and Muskoka District (8.4 percent) over that period.
- The share of the Bala Community's population accounted for by persons 65 years of age and older was 36 percent in 2006 compared to only 14 percent for the province as a whole. Thus a higher than average share of the Community's residents is likely retired.
- A total of 178 of the people had jobs in 2006, or 39 percent. By way of comparison the proportion of the total population of Muskoka Lakes holding a job in 2006 was 54 percent. The lower share for the Bala Community no doubt reflects its higher share of persons over the age of 65.

⁶ We define the Bala Community as being equivalent to Dissemination Area number 440221 within the Census Sub-Division of Muskoka Lakes (CSD number 3444053, all in Statistics Canada parlance). A map of the 11 Dissemination Areas that make up the Township of Muskoka Lakes can be obtained by contacting tmccormack@c4se.com.

- The experienced labour force in the Community in 2006 – the number who had held a job at any time over the year and a half prior to the Census date of mid-May 2006 – totalled 184 persons.
- Three occupational groups – those in sales and services (45 jobs); trades, transport and equipment operators (41 jobs); business and finance (25 jobs); management occupations (24 jobs); and occupations in social science, education, etc. (16 jobs) – accounted for 82 percent of all the jobs held by Bala Community residents.
- The average household income of Bala Community residents was \$74,865 in 2005, only 4 percent lower than the province-wide average of \$78,009 that year despite the higher portion of likely retired residents.
- The 200 permanent households in the Community in 2006 and the average household income of \$74,865 when combined reveal that the total annual household income of Bala’s permanent residents in 2005 was \$14.9 million.

The number of jobs provided by employers in the Bala Community – either in total or by industry – is not a number to which we have ready access. In that regard we can say the following:

- It is a fact that most urbanized communities have higher activity rates – jobs by place-of-work per 1,000 residents – than less densely populated communities such as Bala.
- By way of example the activity rate for all of Muskoka Lakes was 354 per 1,000 in 2006 compared to a much higher rate of 453 for the District and 458 for the province.
- It is likely that the rate in Bala is even lower than the Township’s rate of 354, especially considering the fact that schools, medical facilities and major shopping destinations are not found in Bala.

In other words the Bala Community is not a major employment base within the Township or within the District. The responses to the survey of businesses described in Section 2 suggest that employers in Bala are weighted toward food and beverages, professional services and construction (see Figure 4 on page 3).

A growth strategy report⁷ prepared for the District in 2009 estimates that the seasonal population of Muskoka Lakes was 25,100 people in 2006 compared to the Township’s permanent population of 6,467, or a seasonal-to-permanent population ratio of 3.9 to 1.0. If such a ratio prevails in the Bala Community its seasonal population in 2006 would have been about 1,755 resulting in a total population – permanent and seasonal – of about 2,210 that year. That many seasonal residents would suggest there must be about 770 cottages in the Bala Community over and above the 200 dwellings occupied by permanent residents. In carrying out research for this assignment we were unable to find any published information about the number of cottages and/or seasonal residents of the Bala Community. This estimate is offered here for discussion purposes only. At least some of the needs of these cottagers would be provided by businesses situated in Bala.

⁷ See *The District Municipality of Muskoka: Growth Strategy Phase 2 Report*, Watson & Associates (May 2009).

Finally, there is no information available for the Bala Community to indicate how many tourists visit each year, how long they stay on average, and how much they spend on average. Again it can be safely assumed that Bala attracts a portion of Muskoka Lakes and Muskoka District tourists each year, we just don't know how many.

THE POTENTIAL ECONOMIC IMPACT OF THE CONSTRUCTION PHASE OF THE PROJECT ON THE BALA COMMUNITY

In the absence of information regarding the number of people employed in Bala by place-of-work, and in the absence of information regarding the number of cottages, cottagers and tourists in Bala, we are unable to quantify the size of the Bala Community economy in either employment or dollar terms. That means, in turn, we are unable to quantify the negative impacts of the construction phase of the project on economic activity in the Bala Community.

At best we can say the construction phase of the project is likely to impact tourism-related business more than cottager-related and local-resident-related business since tourists can choose to avoid Bala altogether whereas cottagers and local residents cannot because of their ties to the Community. Nevertheless it might be expected that more-than-normal outside-of-Bala cottager and local-resident shopping will occur during the construction phase simply because, no matter how much the negative impacts of construction are mitigated, construction activities by their nature from time to time interrupt nearby activities resulting in people choosing different routes and or different destinations to meet their shopping and recreation needs.

That having been said it should also be noted that construction projects such as the one to be carried out in Bala themselves can generate considerable traffic and visitation among those fascinated by major construction activity. This project has attracted considerable local media attention. Once construction begins there is an opportunity to turn the construction project itself into a short-term tourism attractor, one that, in turn, could create opportunities for local businesses to capture some tourism spending. Furthermore, those working on the project can be expected to spend money locally on food, accommodation, gasoline, attractions, etc. while they are in the area working at the site.

The survey results reveal, however, that many local businesses are in a position to provide products or services that SREL will need during the construction phase of the project. This is an important revelation. Each construction dollar spent on a local business is a dollar that would not have been spent on that business had the project been located elsewhere. New dollars received by local businesses have a good chance of being spent, in turn, by local business owners on locally-provided goods and services. This cascading effect has the potential to boost the local business not only of those selling to SREL but the business of all local commercial activities.

In other words the active participation of local businesses in supplying SREL with products and services needs to be encouraged and supported. Increased local business will go a long way to offsetting the negative impact on local business arising from the existence of the construction activity in the area.

THE POTENTIAL ECONOMIC IMPACT OF THE OPERATIONAL PHASE OF THE PROJECT ON THE BALA COMMUNITY

This topic will be addressed in Section 5 of this report (the section addressing Observations and Recommendations).

Section 4

IMPACTS ON MUSKOKA DISTRICT AND THE PROVINCE OF ONTARIO

A large portion of the Bala Community's business is generated by tourists and cottagers who frequent the area to view and recreate at the falls. The construction and operation of a 4.5 MW hydroelectric generator adjacent to the North Bala Falls represents a net new source of income and jobs for the Community and, at the same time, it will provide a clean source of electricity for the province for decades to come. While the project could have a negative impact on businesses in close proximity to the falls serving visitors the impacts cannot be quantified. What is clear is that a high rate of local participation in supplying goods and services to SREL during both the construction and operational phases of the project would impact the Community in a very positive way for years to come.

METHODOLOGY

The economic impacts from both construction of the hydroelectric facility and from its ongoing operations were generated using the TREIM model that explicitly models the economy of the Muskoka District Census Division and the province of Ontario as a whole. The box at the end of this section describes the TREIM Model. The Muskoka District Census Division includes the Township of Muskoka Lakes and captures the economic activity in North Bala Falls. The model is unable, however, to generate economic impacts for any sub-area within the District.

IMPACTS OF THE CONSTRUCTION PHASE

The construction phase impacts include the direct impacts from labour and materials associated with the project. As noted, the associated indirect impacts to local business from anticipated disruptions due to road closures, reduced access to the Falls adjacent to the site, and general construction interruptions have not been estimated. Beyond the construction phase, the project will continue to generate direct economic activity from operating outlays for the project and indirect impacts from the proposed changes to the landscape and flows over the Falls. The estimated economic impacts include the induced economic impacts arising from the re-spending of income generated by the project and also include a complete set of government revenue estimates by revenue source for each level of government.

The \$19 million cost of constructing the 4.3 MW hydroelectric facility was provided by Hatch and has been adjusted to reflect prices and costs in 2010. This, however, is not the total cost of the project. A further \$7.7 million has been or will be spent on a variety of services and activities that include: pre-development costs, the environmental assessment, engineering fees, project management, finance and legal costs, interest costs and the cost of connecting to the power grid. Construction is expected to take between 12 and 18 months to complete. The amount spent on construction over that period will benefit the province as a whole and Muskoka District for sure, and could significantly impact the economies of Muskoka Lakes and the Bala Community if a high rate of local servicing can be achieved.

The direct employment impact from construction in Muskoka District is 45 jobs and the total employment impact for Ontario is 81 jobs with 65 of those in Muskoka District. Local spending in Muskoka District is estimated to be \$10.8 million generating an additional \$5.5 million in GDP in the region and \$7.0 million in Ontario.

Total tax revenue from construction is estimated to be \$3.8 million in Ontario with \$1.9 going to the Federal government, \$1.7 to the provincial government and \$155 thousand to Muskoka District (less \$51 thousand in education taxes).

These results are summarized in Figure 25.

Figure 25
Economic Impacts of the Construction Phase of the Project
Muskoka District and Ontario

Economic Impact from Construction (thousands of 2010 dollars)				
	Muskoka District		Ontario	
	Total Impact	Direct Impact	Total Impact	Direct Impact
Capital Spending	19,000		19,000	
Gross Domestic Product	5,491	3,998	6,968	4,319
Labour Income	3,561	2,550	4,485	2,750
Employment (number of jobs)	65	45	81	48
Government Tax Revenue	3,154	2,393	3,788	2,507
<i>Federal</i>	<i>1,545</i>	<i>1,078</i>	<i>1,853</i>	<i>1,145</i>
<i>Provincial</i>	<i>1,454</i>	<i>1,169</i>	<i>1,685</i>	<i>1,216</i>
<i>Municipal</i>	<i>155</i>	<i>146</i>	<i>250</i>	<i>147</i>

IMPACTS OF THE OPERATIONAL PHASE

The operating revenues and expenses for the hydroelectric facility were also provided by Hatch and are stated in terms of 2010 prices and costs. These revenues, costs and economic benefits will accrue each year that the facility is in operation. In 2010 dollars, the facility will generate revenues of \$2.7 million, operating expenses estimated at \$380,000 per year and principal and interest payments estimated at \$1.4 million per year. The project anticipates a 10-year holiday on municipal taxes. In year 11 these taxes will be in the order of \$120,000 per year representing a Gross Revenue Charge to account for municipal taxes, water rental fees and land rental from the province. Furthermore the project will be leasing land from the District at a yet-to-be determined annual rate or lump-sum payment.

The direct employment impact from ongoing operations in Muskoka District is 3 jobs and the total employment impact for Ontario is 6 with 5 of those in Muskoka District. The facility will generate an additional \$2.3 million in GDP in the region with \$2.1 million of that arising from the hydroelectric facility. The impact on total GDP in Ontario is estimated to be \$2.4 million a year.

Total annual tax revenue from ongoing operations over the first ten years is estimated to be \$736 thousand a year with \$387 thousand going to the Federal government, \$328 thousand to the provincial government and \$18 thousand to Muskoka District. After the first ten years, tax revenue to Muskoka District rises to \$138 thousand and total tax revenue collected in Ontario to \$856 thousand a year.

It should also be noted that local electric power generation should help to stabilize and provide more flexibility to the local electrical distribution grid.

Figure 26 summarizes the economic impacts of the operational phase of the project on the District and the Province.

Figure 26
Economic Impacts of the Operational Phase of the Project
Muskoka District and Ontario

Annual Economic Impact from Ongoing Operations (thousands of 2010 dollars)				
	Muskoka District		Ontario	
	Total Impact	Direct Impact	Total Impact	Direct Impact
Total Revenue (plus HST)	3,082		3,082	
Gross Domestic Product	2,316	2,057	2,373	2,057
Labour Income	396	221	434	221
Employment (number of jobs)	6	3	7	3
Government Tax Revenue for Years 1-10				
<i>Federal</i>	712	585	736	585
<i>Provincial</i>	374	313	387	313
<i>Municipal</i>	319	271	328	271
Government Tax Revenue for Years 11+	18	0	22	0
<i>Federal</i>	832	705	856	705
<i>Provincial</i>	374	313	387	313
<i>Municipal</i>	319	271	328	271
	138	120	142	120

TREIM Economic Impact Model

The Ontario Ministry of Tourism's TREIM (Tourism Research Economic Impact Model) model was used to assess the economic impact of the hydroelectric generating facility on the community. The TREIM model was developed for the Ministry by the Centre for Spatial Economics to provide detailed tourism-related economic impact analysis for various user-selected geographies in Ontario. At its core, TREIM is a multi-region input-output model. However, the TREIM differs from a standard input-output model in several respects.

The first is in its treatment of time. Input-output models are static – that is their results are independent of the date of the shock. TREIM, however, explicitly adjusts the model for changes in prices and labour productivity for the year chosen for the simulation. The model can produce analysis for events in the past, present or future with the impact results reported in the nominal dollars of the year in which the event takes place.

The second difference between TREIM and standard input-output models is its treatment of income earned by households and businesses. Direct and indirect activity by businesses provides income for workers and generates profits. The re-spending of this income yields what is referred to as the induced impact. The model can either include or exclude the impact from household spending of their income or from business spending on new capital (as a result of higher profits). TREIM includes an econometric model to estimate these induced impacts that takes into account the state of the economy at the time of the shock in terms of interest rates, the exchange rate, inflation and economic growth.

The third major difference is TREIM's estimates of government tax revenue. Standard input-output models only provide information on indirect tax revenues arising from sales and excise taxes. TREIM includes an econometric model that estimates the impact, by level of government, of all major taxes.

The TREIM model produces estimates of the following impacts in the region and for the province:

- Direct, indirect and induced impacts on Gross Domestic Product (GDP).
- Direct, indirect and induced impacts on Labour Income and Employment.
- Direct, indirect and induced impacts on Federal, Provincial and Municipal Tax Revenues.

More information on the TREIM model can be found at <http://www.tourism.gov.on.ca/english/research/treim/index.html>

Section 5

OBSERVATIONS AND RECOMMENDATIONS

Drawing on the quantitative assessment presented in Sections 2, 3 and 4 of this report, on Tom McCormack's visit to the Bala Community on September 21, 2010 and on our collective experience in dealing with other community development issues throughout the province this final section of our report contains a number of observations and recommendations related to the North Bala Falls Small Hydro Project.

OBSERVATIONS

The Project in Context

The Province of Ontario's Green Energy Act of September 2009 seeks to facilitate the development of renewable energy projects so that the province can ultimately eliminate its current significant dependence on coal-fired generated electricity. Coal-fired electricity represents 18 percent of Ontario's current generating capacity (compared to 32 percent for nuclear, 24 percent for gas, 22 percent for hydro and 3 percent for wind). The Province aims to eliminate coal-fired power by 2014 and describes this goal as "the single largest climate change initiative in North America".⁸

The North Bala Falls facility will produce 4.5 MW of electricity each year, enough to power more than 4,000 homes.⁹ The Ontario Waterpower Association notes there are currently about 200 hydroelectric projects in Ontario with a combined capacity of 8,000 MW representing one-fifth to one-quarter of the province's electricity generating capacity. A study commissioned by OWA in 2005 showed that the practical potential for hydropower development across Ontario is 5,000 MW.

Thus projects like the one proposed for North Bala Falls represent a significant part of the Province of Ontario's solution to the elimination of coal-fired power generation and the reduction of greenhouse gas emissions.

The Economic Benefits of the North Bala Falls Project

Section 4 of this report reveals that this project's economic impact will be positive both over the construction phase – \$7 million in GDP province-wide – and over the operational phase – \$2.6 million of GDP annually province-wide.

Over the construction phase Muskoka District stands to benefit from \$3.6 million of additional labour income, 65 person years of work and \$155,000 in municipal revenues.

Over the operation phase the District benefits from an annual increase in labour income of \$373,000, the creation of 5 new jobs and annual municipal tax gains of \$75,000.

In other words the economic benefits of the project are significant.

⁸ According to the Ministry of Energy and Infrastructure.

⁹ As a point of reference there were 2,675 permanent resident households in Muskoka Lakes in 2006.

Furthermore, there is the potential for the Bala Community to share in these economic benefits both directly – through the participation of local businesses in supplying goods and services to SREL in both the construction and operational phases of this project – and indirectly through the cascading effects this increased construction-induced business would have on other business activities in the area.

The Economic Costs of the Project

While the environmental and economic benefits of the project cannot be challenged it is equally true that the construction phase of the project could have negative impacts on the Bala Community's economy even if the construction impacts are minimized. It is the nature of construction activity that it interrupts daily routines and traffic patterns and that these interruptions often lead to alternative shopping patterns and spending destinations.

It will be the businesses located in the Bala Community, especially those serving tourists and, to a lesser extent, those serving cottagers and local residents that will be impacted most from the existence of the construction activity. It must be recognized therefore that, notwithstanding the positive impacts of construction on local business activities, the mere existence of this construction activity could reduce the amount of business in the community so long as construction is underway. All local residents, businesses and cottagers could face inconvenience from the construction phase.

Despite the above, it is important to recognize that it is next to impossible to assign a financial value either to the potential local business losses or to the potential local inconvenience costs imposed on residents and cottagers stemming from the construction. And because this is so, it is impossible to draw up any kind of a fair direct payment compensation scheme.

A final word on costs: It is our collective judgment that the operation of the project over the long-term will not negatively impact local business activity. Indeed, in the next sub-section we note that the existence of the project in the area could actually promote future business in the Bala Community.

Some Personal Observations

Our assessment shows that there are significant environmental and economic benefits from this project. The benefits will accrue to the province and the District and they could possibly accrue as well to the Township and the Bala Community if local business participates.

Our assessment also points out that the costs of the project – the loss of business and the inconvenience costs – will all be borne by the Bala Community.

This inequality of benefits and costs could be a reason behind local opposition to the project.

My personal visit to the area on September 21, 2010 left me with three strong impressions:

- The Bala Community is an attractive destination for tourists, cottagers and local residents. It has a long and rich history as a tourism and cottager destination.

- It does not at this time look as prosperous as other nearby Muskoka destinations nor as prosperous as it once was years ago.
- Finding a spot to view the falls is a difficult and dangerous task. The highway and rail bridges largely obscure the best views of the falls. Observing the falls at water level means climbing down a pebble-strewn incline.

RECOMMENDATIONS

We recommend that SREL should continue to work with local businesses in establishing a construction schedule that minimizes its negative impacts and that maximizes local business participation in the provision of goods and services to the construction phase of the project. Our survey reveals that well over half the local businesses responding to the survey are in a position to do so. SREL assistance in posting signs throughout the area indicating that the Community is still in business would be helpful (and welcomed according to the survey).

SREL's proposal to include two observation decks (one of which will be wheel chair accessible) and park improvements as part of the North Bala Falls project in our opinion presents the community with an enormous opportunity to rectify the current inaccessibility of the falls. An observation deck and the creation of community-wide signage about the deck and park could generate a significant increase in tourism traffic in the future.

Our experience in working with other communities in Ontario suggests there is not likely a consensus in the Bala Community regarding its future. We would expect, for example, that local businesses and residents likely want tourism development but that local cottagers likely oppose it.

We suggest that the Community ought to be using this issue as a catalyst for debate on its future. The District through the Township should spearhead a local debate that engages Bala representatives on District and Township councils, citizens (permanent and cottager) and businesses alike in what the Bala Community of say 2021 ought to be. This community engagement could be an update to, or revalidation of, the discussions that took place almost a decade ago and culminated in the area's Economic Development Strategic Plan of May 2002. That plan made a number of recommendations that we understand have yet to be implemented.

The North Bala Falls project through its leasing of land from the District of Muskoka will result in a yet-to-be negotiated lump sum or future revenue stream payable by SREL to the District. Once that lease agreement has been signed by both parties the District ought to earmark a significant portion of those funds to the funding of Bala Community projects that its businesses and residents feel will benefit them in achieving whatever future they choose for themselves for the decades ahead.

APPENDIX
BALA BUSINESS COMMUNITY SURVEY QUESTIONNAIRE



15 Martin Street, Suite 203, Milton, Ontario, Canada L9T 2R1

September 13, 2010

Invitation to Participate in Bala Falls Small Hydro Project Survey

To All Bala Falls Business Owners:

The Centre for Spatial Economics (C4SE) has been retained by Swift River Energy Limited (SREL) to provide an independent assessment of the economic impact of the North Bala Falls small hydro project on Bala Falls and the District of Muskoka.

In order to determine the project's impact on business in Bala Falls we need to obtain information from all business owners in the immediate area. In order to obtain that information we are asking you to complete a survey that asks a number of questions about your own business and about the project itself. The survey will take you about 10-15 minutes to complete.

Please be assured that your individual answers and your identity are protected. The survey results in our report to SREL will be presented in a summarized form only. Our report will not identify specific individuals or businesses.

Your opinions and suggestions are very important to our assessment. We would like to thank you in advance for your time and participation.

We would greatly appreciate your completing the survey no later than September 27. Your completed survey can be returned in the enclosed envelope.

Sincerely

Tom McCormack
Partner
Centre for Spatial Economics
1-888-774-9009
tmccormack@c4se.com

Gerald Bierling
Research Associate
Centre for Spatial Economics
1-888-774-9009
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INTRODUCTION

Thank you for agreeing to participate in this survey. It will take you around 15 minutes to complete the survey. There are three sections to the survey:

- Section 1: Your Business
- Section 2: Project Construction Phase
- Section 3: Project Operations Phase

Please be assured that your responses are completely secure.

Individual responses to the survey will be deleted two months after we submit our final report to SREL.

SECTION 1: YOUR BUSINESS

Business Name: _____

Contact Name: _____

Location of Business (Physical Address): _____

Position: _____

Contact Phone #: _____

Contact Email: _____

The following questions are about your business. Information in this section is being gathered to assess what services and products are currently being provided, when they are available, and to whom.

1. Description of business (eg. sale of children's clothing, medical services, grocery store, restaurant etc.):

2. What days of the week are you open on for each month? (Please circle days on which you are open for each month)

- January:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- February:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- March:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- April:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- May:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- June:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- July:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- August:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- September:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- October:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- November:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.
- December:** Mon., Tues., Wed., Thurs., Fri., Sat., Sun.

For any months in which you are only open for a portion of the month, please provide details of the dates when you are open or closed. (eg. open for May 15 to 31 only, and October 1st to 17th only):

3. Are you open on statutory or civic holidays (New Years, Family Day, Good Friday, Easter, Victoria Day, Canada Day, August Civic Holiday, Labour Day, Thanksgiving, Remembrance Day, Boxing Day, Christmas)? If so, which ones?

4. What are your hours of operation for each day of the week:

- a. Monday _____
- b. Tuesday _____
- c. Wednesday _____
- d. Thursday _____
- e. Friday _____
- f. Saturdays _____
- g. Sundays _____
- h. Holidays _____

Please provide any clarifications here:

5. How many staff do you have on shift at one time (Select one)?

- a. Less than 5
- b. 5 to 9
- c. 10 to 19
- d. 20 or more
- e. Fluctuates (please explain):

6. What key demographic are your products geared to? (Please provide approximate % for each group, totalling 100%)

a. Age range:

- i. Children (less than 12 years old) _____
- ii. Teens (13-18 years old) _____
- iii. Adults (19 years and over) _____
- Total (100%)

b. Gender:

- i. Male _____
- ii. Female _____
- Total (100%)

c. Source of Business:

- i. Other businesses _____
- ii. Local residents _____
- iii. Cottagers _____
- iv. Tourists _____
- v. Other _____
- Total (100%)

7. This question is optional: What are your gross annual sales (**not** including sales tax)? (Select one)

- a. Less than \$50,000
- b. \$50,000 to \$99,999
- c. \$100,000 to \$250,000
- d. \$250,000 to \$500,000
- e. Over \$500,000

8. What percentage of business do you get from “in-person” sales versus phone/internet/other? (Select one)

- a. Less than 25%
- b. 25 to 74%
- c. 75 to 99%
- d. 100%

9. How do customers arrive at your business? Please provide approximate percentages if possible?

- a. Automobile _____
- b. Boat _____
- c. Walk _____
- d. Other _____

10. Does your business provide customer parking at your facility?

Yes _____
No _____

11. Does your business provide customer docking at your facility?

Yes _____
No _____

12. If you are open year round:

What do you consider to be your peak sales period?

a. Seasonally - Please rank 1 (highest) through 4 (lowest) (enter 0 if closed for period)

i. Winter _____
ii. Fall _____
iii. Spring _____
iv. Summer _____

b. Day of week - Please rank 1 (highest) through 4 (lowest)

i. M-F _____
ii. Saturday _____
iii. Sunday _____
iv. Holidays _____

c. Other - Please rank 1 (highest) to 2 (lowest)

i. Holidays, festivals, events _____
ii. Non-holidays/festivals/events _____

SECTION 2: PROJECT CONSTRUCTION PHASE

Please refer to Figure 1 and Figure 2 (found on the last pages of survey) for the following questions:

Swift River proposes to construct all elements of the North Bala Falls Small Hydro Project on the Bala Falls Island in these 3 locations:

- Land Parcel 1. Burgess Island: West of highway 169 between the north and south channels (for the powerhouse)
- Land Parcel 2. Burgess Island: East of highway 169: land between highway 169 and Purk's Place (for the intake)
- Land Parcel 3. Burgess Island: Lands under Highway 169

Construction is currently expected to start in late October 2011. To minimize traffic disruptions to highway 169 during the peak summer season, it is proposed to complete all work on Land Parcel 3 during the period between Cranberry Festival (October 2011) and Victoria Day (May 2012). It is hoped that this work will be done well before Victoria Day, however, we are planning for a worst case scenario. After May 2012, no road closures are expected.

The following lane reductions and closures are anticipated during this period:

- a. Road to be reduced to one lane for 2, two-week periods in November 2011
- b. Road to be totally close for 1 night during the winter (for example 8 pm to 6 am) in either late November or early December, 2011
- c. Road to be reduced to one lane for 2, two-week periods in April or early May 2012
- d. Road to be totally closed for 1 night in April or early May 2012 (for example 8 pm to 6 am)

The above lane reductions and road closures will be advertised well in advance of occurrence, and flagman and/or traffic lights will be utilized to control traffic during these times.

13. Answer only if open in the off-peak season between November 1 and May 15th:

Based on the above information, do you think these lane reductions and road closures will have any effect on your business?

Yes _____

No _____

Please provide more information:

Do you have any suggestions to help to ease these effects?

As described above, it is proposed that no road construction will be required from Victoria Day weekend (May) through Cranberry Festival (October), 2012. So no major traffic disruption is expected during the peak summer season. All work during the 2012 peak summer season will be take place on the land beside the highway (Land Parcels 1 and 2).

14. Based on the description, do you think that the work on Land Parcels 1 and 2 (Shown on Figure 1) during the peak summer season will have any effect on your business?

Yes _____

No _____

Please provide more information:

Do you have any suggestions to help to ease these effects?

15. Does your business provide any of the following services that could be required for the purposes of this project?

- a. Building materials
- b. Tradesman (please provide details: _____)
- c. Gas/diesel
- d. Lodging
- e. Food services
- f. Sundries
- g. Equipment rental
- h. Other (please provide details below:)

16. If you answered YES to any of the above, AND your business is only open seasonally, would you be willing or interested in staying open year round to provide services to the project?

17. If you answered YES to Question 15, would you be willing or interested in entering into a supply agreement with SREL or its contractor?

18. SREL is willing to consider limiting construction days/hours to reduce impacts on businesses in town. Are there any specific days/times when this would be beneficial to your business?

Yes _____
No _____

Which of the following days would it be beneficial? (Check all that apply)

- i. Mondays _____
- ii. Tuesdays _____
- iii. Wednesdays _____
- iv. Thursdays _____
- v. Fridays _____
- vi. Saturday _____
- vii. Sunday _____
- viii. Specific Holidays or events: please list _____

SECTION 3: PROJECT OPERATIONS PHASE

Please refer to Figure 1 and Figure 3 (found at the end of the survey) for this section. *It is proposed that the west portion of Bala’s Burgess Island (Parcel 1 shown on Figure 1, encircled by Moon River, Highway 169, north channel and south channel) will incorporate a public park/lookout atop of the buried powerhouse. This park will include:*

- a. Sunset view lookout over Moon River
- b. Wheel chair accessible lookout near highway 169
- c. Landscaped walking paths from highway down to river with indigenous plantings
- d. Interpretive signage describing waterpower and the history of Bala Falls
- e. Facilitated access down to the water’s edge adjacent to the Bala Falls

The proposed operation plan for the project will ensure that water flow typically experienced through the north dam in the summer months will be retained throughout the year, so the aesthetics of the Bala Falls will remain unchanged during the peak summer period. Recreational uses at the existing park north of the Falls and on the rocks below the falls should not be affected by the project. Access will be provided on the north side of the powerhouse down to the water’s edge. Please refer to Figure 3 to indicate what areas will be restricted during the long-term operation phase for the project.

The town docks will be unaffected by the project. Water velocities upstream of the CP Rail bridge will remain within navigable allowances as determined by Transport Canada.

19. Do you foresee any impacts on your business from this project?

Yes _____
No _____

20. If you answered yes to question 19, please provide details about the impact the project operations will have and explain why.

SREL and the Township of Muskoka Lakes have discussed the possibility of SREL providing mitigation measures in addition to the construction of a Moon River Lookout and public park atop of the powerhouse, to reduce perceived negative impacts to the existing economy in Bala. The Township of Muskoka Lakes has directed SREL to the West Muskoka Chamber of Commerce's "Economic Development Strategic Plan and Urban Design Guidelines for Town of Bala and West Muskoka, Master Plan and Urban Design, Background Report # 6" completed in May 2002 for possible mitigation ideas. Possible initiatives recommended in this report include:

- 1. A multi-use link between Divers' Point to the government dock area for pedestrians and snowmobilers. This bridge would provide an alternative, safer and more scenic passage between these areas both during the summer and winter. Currently the only link is via the highway 169 road bridge. This bridge could provide a key link between the businesses on Bala Falls Road and the central commercial area.***
- 2. Additional docks at the municipal wharf. Additional docks could reduce current congestion and encourage people to arrive in Bala by boat instead of by car, thereby reducing road and parking congestion in town as well.***

21. Do you think either of these measures could positively or negatively affect your business?

a) New all-year pedestrian / snowmobile bridge:

Positively _____
Negatively _____
Not Sure _____

Please provide more information:

b) New docks at municipal wharf:

Positively _____

Negatively _____

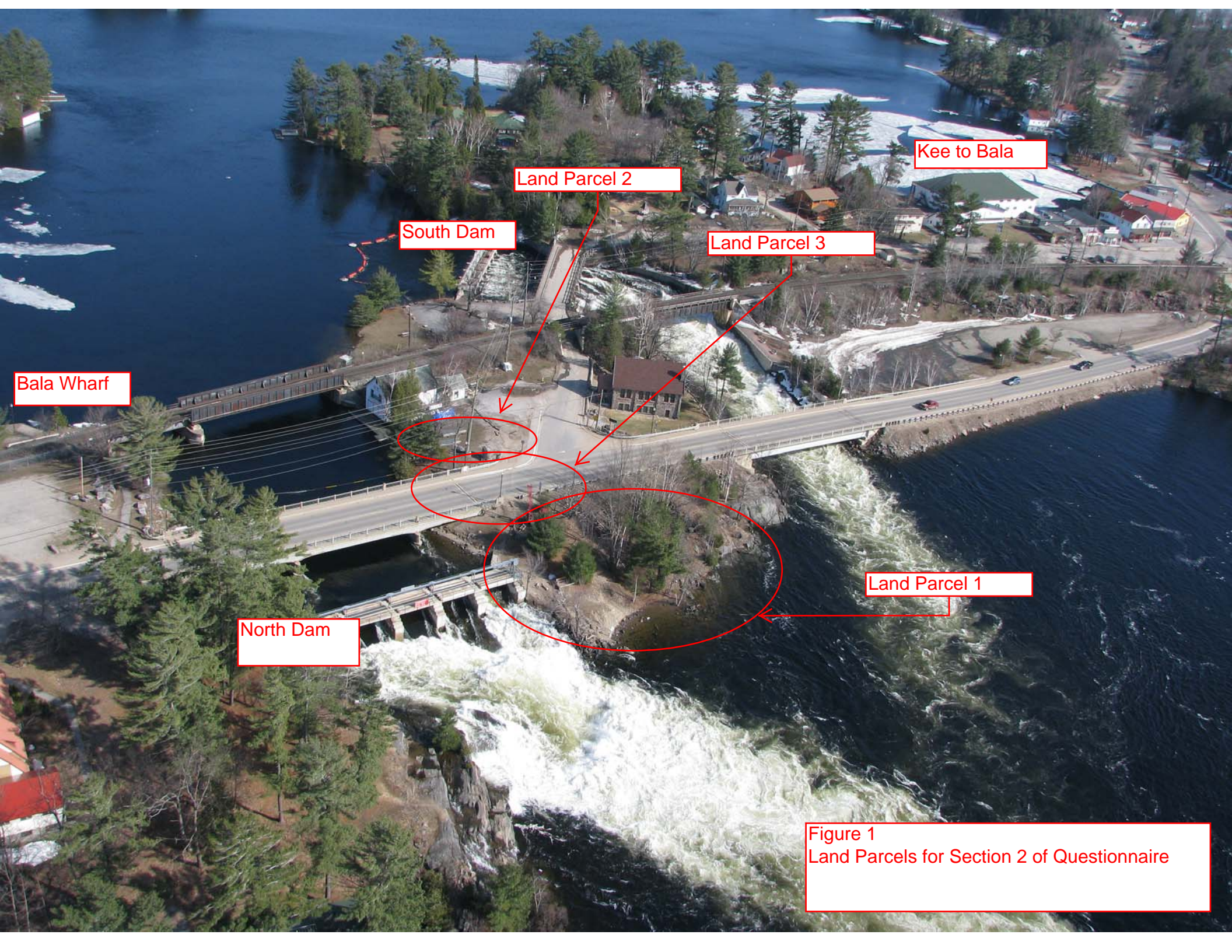
Not Sure _____

Please provide more information:

22. Do you have any other ideas for initiatives that would better benefit your business that SREL may be able to assist with? Please provide more information:

23. Do you have any other comments or ideas?

THANK YOU FOR YOUR COOPERATION



Kee to Bala

Land Parcel 2

South Dam

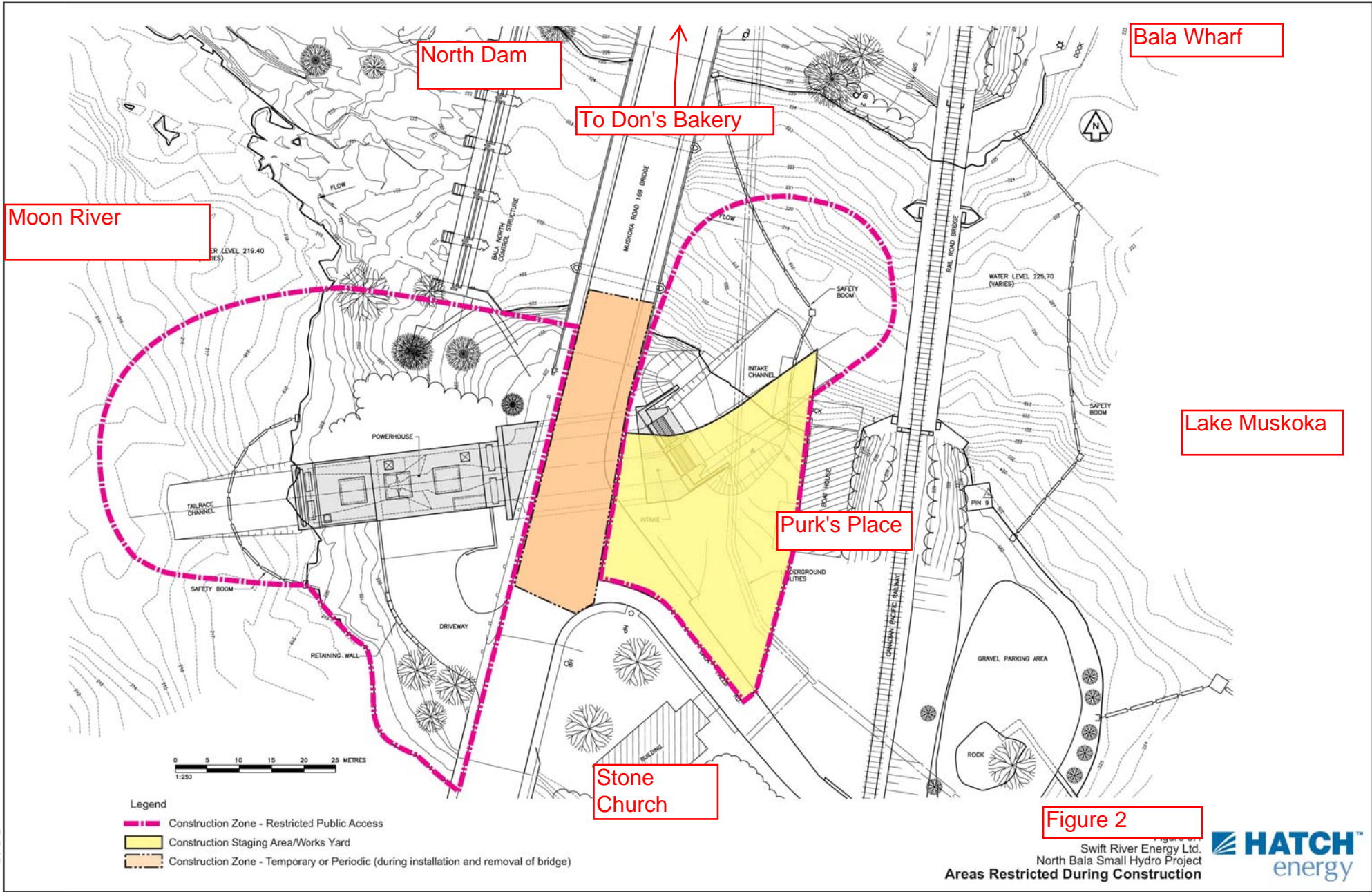
Land Parcel 3

Bala Wharf

Land Parcel 1

North Dam

Figure 1
Land Parcels for Section 2 of Questionnaire



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Moon River

North Dam

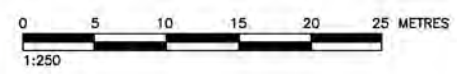
To Don's Bakery

Bala Wharf

Lake Muskoka

Purk's Place

Stone Church



Legend
Areas to which access will remain restricted (by signage and floating safety booms) following construction.

Figure 3

Swift River Energy Ltd.
North Bala Small Hydro Project
Areas Restricted During Operation



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