

Community Well-Being Assessment

MUNICIPALITY OF SOUTH BRUCE, ONTARIO



APM-REP-06144-0123 NOVEMBER 2014

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Nuclear Waste Management Organization (NWMO)

Community Well-Being Assessment: Municipality of South Bruce

Report



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1. Introduction

This Community Well-being (CWB) Assessment Report provides a summary of the expected influences that the Adaptive Phased Management (APM) Project will have on the overall community well-being of the Municipality of South Bruce, Ontario. The Report also seeks to answer some fundamental questions to assist the Nuclear Waste Management Organization (NWMO) and the community in understanding the suitability of South Bruce to move forward in the siting process. While each of the communities currently participating in the *Learn More* process will likely benefit in many ways from the APM Project including the economic development and employment opportunities associated with it, there are certain unique uncertainties and priorities to be managed for each community.

Work has been completed to understand the overall community profile of South Bruce and also to understand and summarize the ways in which the APM Project might affect the community and the surrounding areas. In concert with the community, NWMO worked to develop an understanding of the community today and its goals and aspirations for the future. To this end, information has been assembled and studied through a variety of means including: a review of a strategic plan (completed by the municipality), engagement activities, community visits and tours, Community Liaison Committee meetings, open houses and the development of a community profile. All of this research and study, along with professional judgement, is used in this report to understand the potential implications of the project to the community's well-being and gain insights into the unique uncertainties and priorities that need to be managed.

As outlined at the inception of this step in the site selection process, the objective of the social, economic and cultural assessment is to assess both the potential to foster the well-being of the community and surrounding area, and the potential to create the foundation for community and surrounding area confidence and support needed to implement the project. In Phase 1 of this assessment, which is the focus of this report, the intent is to explore the potential to foster the well-being of the community and, for this reason, the subset of factors and considerations related to the community are addressed at this time. Regional considerations are noted where early insight is available, however more detailed work would be conducted in Phase 2 should the community be selected to proceed to this phase of work and choose to do so.

A number of factors were identified as minimum criteria to consider in the site selection process in assessing the potential to foster well-being (NWMO, 2010):

- Potential social, economic and cultural effects during the implementation phase of the project;
- Potential for enhancement of the community and the regional long-term sustainability through implementation of the Project;
- Potential to avoid ecologically sensitive areas and locally significant features;
- Potential for physical and social infrastructure to adapt to changes resulting from the Project; and
- Potential to avoid or minimize effects of the transportation of used nuclear fuel from existing storage facilities to the repository site.

In order to ensure that a broad, inclusive and holistic approach is being taken to assessment in these areas, a 'community well-being' framework was identified to help understand and assess the potential effects of the APM Project. This includes exploring the project, understanding how the community may be affected were the project to be implemented in the area, and identifying opportunities to leverage the Project to achieve other objectives the community considers important. The framework is also used to explore the relative 'fit' of the APM Project for the community, and the potential to create the foundation of confidence and support required for the implementation of the project.

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The framework is designed to encourage exploration of the Project through five different 'lenses':

- People or Human Assets How might the implementation of the project affect people?
- **Economics or Economic Assets –** How might the implementation of the project affect economic activity and financial health of the area?
- **Built Environment or Physical Assets –** How might the implementation of the project affect infrastructure and the physical structures which the community has established?
- Society and Culture or Social Assets How might the implementation of the project affect the sense of belonging within the community, and among residents, and the services and network of activities created to serve the needs of community members?
- Natural Environment or Natural Assets How might the implementation of the project affect the natural environment and the community's relationship with it?

This report begins with an overview of the basic assumptions about the project and potential effects used for the preliminary assessment. The community's priorities/key issues, aspirations, capabilities and capacities are described. Next, the report explores the implications of the APM Project on well-being in the community in terms of the five 'lenses' or asset categories. The preliminary findings are also considered in terms of the 'criteria to assess factors beyond safety' identified by NWMO prior to the initiation of the siting process. A summary of relationship building and engagement activities, and the issues and questions raised to date, is provided. The report concludes by addressing key questions framed by NWMO at the outset of the site selection process.

Ultimately, the potential effect of the project on the well-being of a community needs to be identified and assessed by the community itself. This includes identifying the broad range of factors that need to be considered, the approach to measuring potential effects on well-being and judgements about the magnitude of this effect. It is also recognized that more detailed studies and further investigations of community-specific risks and uncertainties would be required if the community continues in the siting process.

This report reflects the insight from desktop research and professional judgement, as well as reports shared by the community, insight provided by Community Liaison Committee members through their regular meetings, and individual discussions with community leaders and residents and others in the surrounding area. In preparing this report, we have been welcomed into the community and community members have graciously shared their time. We are extremely grateful for their time and participation.



Assumptions of the APM Project – Drivers of Community Well-Being

The APM Project is currently still in the early stages of design, thus there remains flexibility in the nature and scope of its implementation. This provides an opportunity for the Project to be structured and operated in a manner that suits the conditions and aspirations of the host community and surrounding area. However, it is important at this early stage of the preliminary assessment to understand the potential implications of the Project on the community and its surrounds. In doing so, this requires some basic assumptions about the Project and initial effects. The starting assumptions for this assessment include the following:

1. The on-site labour workforce required by the APM Project is in the range of 400 – 1,200 jobs, while further jobs (indirect and induced) and community wealth creation will result from Project spending for goods and services and employee income spending (NWMO, 2012). Table 2.1 below summarizes the estimated number of direct, on-site jobs throughout the life of the APM Project, which spans over 150 years.

APM Phase	Number of Years (approx.)	Direct Jobs per Year (approx.)	Primary Skills Required			
		400-1,200	Mining, engineering, geoscience, safety assessment, manufacturing, construction, trades, Project management, social science, engagement, communication, transportation			
Operation	Operation 30 or more 700-800		Mining, engineering, geoscience, safety assessment, manufacturing, trades support, Project management, social science, engagement, transportation			
Extended Monitoring	50 or more	100-150	Geoscience, safety assessment, mining			
Decommissioning and Closure	30	200-300	Mining, construction trades, geoscience, safety assessment, regulatory affairs			
Long Term Monitoring	100 or more	25-50	Environmental and health and safety monitoring			

Table 2.1 Potential Employment by Phase

Source: NWMO. October 2012. Description of Canada's Repository for Used Nuclear Fuel and Centre of Expertise. p 33.

- 2. Realization of employment benefits within a community will depend on a variety of factors such as:
 - A. Preference for local hiring and sourcing from local businesses,
 - B. Training of local residents for positions in the Project or in supporting services, and
 - C. Planning to prepare for and leverage future opportunities.

This Project will be implemented through a long-term partnership involving the community, neighbouring communities and Aboriginal peoples in the area and the NWMO. Only through engagement, dialogue and collaboration will the NWMO ensure that needs are addressed at each stage of the process, and specifics are identified to determine how a partnership arrangement could work. For illustration purposes only, employment opportunities could be in the order of hundreds of jobs (direct, indirect and induced) within the local area (AECOM, 2010). However, it will be up to the community to determine the nature and scope of how it wishes to grow in discussions with the NWMO.

3. The NWMO is committed to working with communities and the surrounding area to optimize the benefits that will positively contribute to the overall well-being of the area.

The following figure (Figure 2.1) provides a graphical representation of the direct and indirect effects that may result from the siting of the APM Project. The figure illustrates how the Project could be the impetus for growth in population, business activity and municipal finances.



Community vision and aspirations **Introduction of APM Project** Jobs and business growth and creation Heightened Increased demand for, and municipal tax provision of, goods revenue and and services personal spending Population retention and growth Community wellbeing and sustainability

Figure 2.1 Direct and Indirect Effects



3. Values and Aspirations of The Municipality of South Bruce

The Municipality of South Bruce has expressed explicit values, aspirations and desires for its community. These have been expressed to the NWMO through conversations with the community, through Municipal planning documents, and most recently documented in the South Bruce Corporate Strategic Plan (Millier, Dickinson, Blais, 2014) and various other community reports. Key themes relating to their aspirations are summarized in this section. The preliminary assessment, which is the topic of this report, is measured against these values and aspirations.

The Municipality of South Bruce hopes to achieve the following five strategic goals and accompanying objectives (Millier, Dickinson, Blais, 2014):

GOAL #1: Create a Strong Corporate Climate that Supports Local Business Growth and Sustainability

Strategic Objective: Establish a supportive corporate culture that strengthens business retention, expansion and attraction, entrepreneurial activity, and new industry investment

('sele l'es Alest's Blace Messacrast see 'lest'es)

(including Adaptive Phased Management considerations).

GOAL #2: Create and Promote a Culture That Practices Clear Communication, Inclusiveness, Transparency and Accountability

Strategic Objective: Open and transparent communication between and among employees, the

community and taxpayers through regular dissemination of relevant information that is shared in an accessible, timely and inclusive manner

GOAL #3: Secure the Fiscal Capacity Necessary to Develop and Maintain Infrastructure Improvements that Address Bridge Replacements, Road Resurfacing, and Drainage Concerns

Strategic Objective: Develop and lead capital infrastructure initiatives that address community

needs, reflect sustainable planning practices and future demand

considerations, with a commitment to fiscal responsibility.

GOAL #4: Create a Strong Corporate Environment that Supports Retention and Succession Planning for Municipal Staff

Strategic Objective: A Corporate Succession Planning Strategy that includes a comprehensive

market assessment and compensation review, municipal best practices study, and operational assessment for all levels of staff, establishing South Bruce as

an "employer of choice".

GOAL #5: Support Existing and New Opportunities to Attract New Residents and Retain Young Adults and Senior Populations

Strategic Objective: Establish and lead initiatives to position South Bruce as a community of choice

among populations that tend to leave the community to access required

services and opportunities.



Summary of Community Assets- Key Issues, Aspirations, Capabilities and Capacities

As described in the South Bruce Community Profile, the community has identified several priorities and key issues, aspirations, capabilities and capacities that are most vital to the well-being of the community. These are organized to describe the characteristics of the community through five different perspectives or 'lenses':

Human:	Skills, knowledge and essential services supporting the well-being of the
	community;
Economic:	Monetary or financial resources supporting the well-being of the community;
Infrastructure:	Basic physical infrastructure supporting the well-being of the community;
Social:	Social and community activities in which people participate and the resources they draw on to support well-being; and
Natural Environment:	Nature and the natural environment important to well-being.

The characteristics are referred to as "assets" throughout the report. This is intended to highlight their importance and pave the way for a broad and holistic discussion of how each community may be affected by the APM Project, or other large projects which the community may consider.

Tables are included to summarize the priorities and key issues as understood through desktop research to create the community profile, review of municipal documentation and discussions with community leaders and residents. Tables also set out the aspirations of the community that were articulated during community visioning exercises with community leaders and representatives, if applicable. The communities' capability to address key issues and main priorities as well as achieve aspirations is presented as understood through discussions with the community.

The findings in these tables provide the foundation for the preliminary assessment of community well-being and the potential implications of the APM Project.

Table 4.1 Summary of Priorities and Key Issues – South Bruce

Asset Category	Overall Priorities and Key Issues
Human	South Bruce has a population that is both declining and aging. The community is finding it difficult to grow and only two to three residential lots have been developed in the past year. The rural population is declining with many smaller farm operations giving way to larger capital enterprises; however in some parts of the community small dairy farms continue to be a common sight within the rural fabric of the community.
	Education achievement is improving in South Bruce as more residents obtain higher education qualifications. Individuals seeking post-secondary education opportunities must travel outside South Bruce since no post-secondary programs are offered in the community.
	Hospital services are not available within the community. However, facilities are located close-by in Hanover, Walkerton and Wingham.
Economic	A key issue for the economy of South Bruce is the decline of retail and service businesses in the communities of Mildmay, Formosa and Teeswater. The economy of South Bruce is influenced by ongoing diverse activities at the nuclear site located in the Municipality of Kincardine which provides direct and indirect employment opportunities for community residents.
	Agricultural land prices in South Bruce have been rapidly increasing. Higher property values help to bolster the tax base but they also create challenges as offspring of some farming families can no longer afford to take over their parents' operation.
	South Bruce does not have a strong retail base. Residents shop beyond the community for goods and services, particularly in Wingham and Hanover where there is more selection and lower prices. The tax base in South Bruce relies on residential and farm assessments. Commercial and industrial assessment is minimal. As in other municipalities with a strong agricultural base, farm land and associated buildings are taxed at 25% of residential rates which severely limits the amount of property tax revenue available from this sector.



Asset Category	Overall Priorities and Key Issues					
Infrastructure	The new sewer line and treatment facility upgrade that serves Formosa and Teeswater has been the key infrastructure project for the past few years. It is also noteworthy that significant "streetscaping" has occurred in Teeswater.					
	Maintenance and upgrades to roads and bridges continues to be a key activity throughout the community. An impending infrastructure issue involves replacement of the dam in Mildmay.					
Social	Many in the community have direct and indirect ties to the diverse nuclear related activities at the nuclear site in the Municipality of Kincardine. It is recognized that the activities at the nuclear site have a strong positive influence on the economy and community of South Bruce.					
	Some individualism persists between Mildmay and Teeswater following amalgamation, however many residents are interested in moving towards a more cohesive community. The Municipality is making progress in this regard, such as combined sports teams. The declining and aging population has made social events less prevalent and there has been a decline in participation levels.					
	The Municipality faces challenges with respect to the general administration of social housing and a lack of accommodation for seniors.					
Natural Environment	Wise stewardship of agricultural land is important to South Bruce and to this end sustainable agriculture is a key objective. The community is protective of the natural areas and landscapes.					

Table 4.2 Summary of Community Aspirations – South Bruce

Asset Category	Overall Community Aspirations
Human	South Bruce aspires to grow and retain its younger population so that the community can grow. Linkages with other local and regional communities are sought to provide additional opportunities for local people.
Economic	South Bruce aspires to grow, attract investment, and diversify its economy including year-round tourism. Specific mention of the APM project is made in their recent corporate strategy regarding business growth and diversification. The municipality seeks to maintain a strong agricultural sector and vibrant farm culture. It also seeks to revitalize and energize its downtown urban centres.
Infrastructure	South Bruce has taken steps to improve its infrastructure as evidenced by its investment in new sanitary infrastructure in Teeswater and Formosa, in addition to investment in "streetscaping" in Teeswater. The community is anxious to attract industry and knows that investments in business parks and associated infrastructure will be required to enable this. Within the rural areas maintenance of roads, bridges and drainage are important objectives. Additionally, there is need for improved internet connectivity.
Social	South Bruce is making efforts to create a cohesive community that will work together to grow its population and prosperity in a sustainable manner. The Municipality desires to provide more seniors housing and care programs for this demographic. In addition, the community desires to encourage balanced residential development to ensure affordability, variety and choice.
Natural Environment	The community is very mindful of its good agricultural land. Agriculture is a proud part of the municipality's heritage and is expected to be a dominant part of the community's future. Provincial wetlands need to be maintained and monitored in order to ensure the natural environment is maintained.

Table 4.3 Summary of Community Capabilities – South Bruce

Asset Category	Community Capabilities
Human	Many households in South Bruce have direct and indirect connections with the nuclear activities and employers at the nuclear site in the Municipality of Kincardine. To grow, retain youth, and meet the needs of its senior residents, South Bruce requires investment in education, training, and support services.
Economic	The people of South Bruce are generally aware of the strong ties and importance of the nuclear power industry to their economy and community. Income spending from employees directly and indirectly tied to the nuclear sector is a strong economic driver in the community.
Infrastructure	South Bruce aspires to grow and provide facilities and services to meet the needs of its residents. Upgrades to downtown areas and the creation of new infrastructure are proactive steps to improve community well-being.
Social	The community is already "nuclear aware". Many residents understand the risks and benefits it brings to the community. Furthermore, the community has acknowledged the APM project as a platform for economic development and diversification in its recent corporate strategic plan.
Natural Environment	South Bruce values its attractive landscape, and seeks to maintain and improve its natural resources. At the same time, agriculture is a key activity and asset in the municipality. Future developments will need to mindful of these priorities.



5. Community Well-Being Assessment

In this section, based on the foregoing discussion, implementation of the APM Project on the well-being of the community is examined through each of five different perspectives or "lenses". These are referred to as "assets."

5.1 Implications for Human Assets

For the purpose of this analysis, the Human Assets within a community are understood to include the skills and knowledge inherent in it and the ability of a community to provide its residents with access to other skills, knowledge and essential services that are fundamental to maintaining community well-being, quality of life or a desired standard of living. In this analysis, the specific indicators examined included:

- Population Size and Demographics;
- Skills and Labour Supply;
- Education; and
- Health and Safety Facilities and Social Services.

The population of South Bruce was relatively stable between 2001 and 2006, before declining over 4% by the 2011 Census. South Bruce also has an increasingly aging population as the 45 to 65 years of age group has increased by 28% since 2001, while at the same time as other age groups have declined. South Bruce now has 46% of its population over 45 years of age. The declining population mixed with an aging demographic has economic and social implications which are reflected in the community today, creating challenges in areas such as retail and service businesses, seniors' housing, and community programming. Rebalancing the demographic base as well as growing the overall population are aspirations of the community.

South Bruce has a diverse labour force led by the agriculture sector which accounts for 20% of the occupations. The most common occupation type is "sales and service," followed by "trades, transport, and equipment operators and related occupations" and "occupations unique to primary industry", which includes power generation at the nuclear site in the Municipality of Kincardine. The nuclear industry is acknowledged as a key employment driver for many households in South Bruce and the community population level is impacted by activity levels at the site. The importance of the connection to the nuclear industry in the area has been identified as a key driver for the community by community members in discussion with the NWMO and is also explicitly referred to in the community's recent corporate strategy report (Millier, Dickinson, Blais, 2014).

Education in South Bruce is provided by elementary schools in the public and Catholic school systems. Secondary schools are located outside the community in nearby municipalities. Trades, apprenticeships and other post-secondary education require travel outside the community to Owen Sound or larger centres outside the region. This situation is not unusual in smaller rural communities.

There are no hospitals within South Bruce. Residents must travel to facilities located nearby in Walkerton, Hanover and Wingham, while family health teams in these centres also cover residents of South Bruce. The Grey-Bruce Health Unit provides Public Health services regionally, while some nursing and rehabilitation home care is available through area agencies. The Ontario Provincial Police, Bruce County Emergency Medical Service (EMS), and the South Bruce fire department provide emergency services.

The APM Project has the potential to have a positive effect on the Human Assets of South Bruce. The Project will bring direct, indirect and induced jobs which can provide the foundation for desired population growth and effective youth retention in the community. The APM Project is a long term project, which will help to diversify the economic

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base of the community over a sustained period of time. While it is expected that some people involved in the construction and operations of the Project will choose to reside in other nearby communities, it is equally plausible that hundreds of jobs could be held by people residing in South Bruce. With additional community development and support provided by the NWMO it is possible that these job numbers could be further increased to match community aspirations. The increased population will be a boost to South Bruce socially and economically, and will be a catalyst for spin-off population growth and business development - priority aspirations for the Municipality.

Skills and labour supply would likely diversify and expand with the increased population, as well as the on-site and in-community job opportunities. Indirect and induced jobs will also create opportunities for skills diversification further attracting new residents with different levels of expertise while providing incentives for youth to remain in the community. The APM Project will capitalize on the existing labour force skills and expertise and attract other highly educated and skilled workers, further expanding the demographic base of the community. This outcome aligns with the community's aspiration.

The Project will also provide opportunities for ongoing training, as well as provide opportunities for following generations to pursue education paths to take advantage of careers associated with the APM Project. There are strong positive educational benefits from the APM Project, including an increased population driving expanded enrolment and educational programming opportunities and potential partnerships with post-secondary institutions. It is further expected that the APM Project will include an international centre of expertise that can attract attention from around the world to the community.

While the APM Project and the associated increase in population will place heightened demand on existing health and safety facilities and services, there is further potential to expand and improve the existing levels of service by attracting new specialized health care professionals to the area who could provide the resources to better serve and support all age groups in the community. In addition, the Project may act as a catalyst to bring new local health services to the community itself. Proper planning would need to take place to ensure that potential increased social issues, many of which are generally associated with any large Project that substantially increases local populations, are managed and that all age groups in the community are supported.

In summary, it can be expected that the APM Project would bring positive net benefits to the Human Assets of South Bruce if the Project is implemented in the area. It would help the municipality realize its aspirations and goals, and it would drive development and expansion in other aspects of its community well-being.



Legend: Declining-Negative

Neutral-Stable

Increasing-Enhanced-Positive

Uncertain \triangle

Table 5.1 Implications for Human Assets – South Bruce

	HUMAN ASSETS								
Criteria / Measures	Ideal CWB Condition	Current South Bruce Profile		Possible South Bruce Profile with APM Project		Observations			
Population Size and Demographics	Increase population Retention of youth and young families	Overall declining population Aging demographic	←	Growth in population with stronger growth in younger cohorts and opportunities for youth	\Rightarrow	 South Bruce experienced a declining population (-4%) between 2006 and 2011. An aging population with 46% of the population being 45 years old and above. The APM Project offers potential to create new jobs to attract and retain a younger and more balanced population. South Bruce may require some assistance to plan for, and manage growth. 			
Skills and Labour Supply	Presence of a diverse, skilled workforce	Constrained opportunities for youth employment Heavy reliance on one major area employment site		Enhanced job creation for youth as well as opportunities for all other parts of the labour force	→	 South Bruce has an appropriately diverse labour force for its current socio-economic conditions. "Manufacturing and trades related occupations" have fallen since 2001. "Occupations unique to the processing, manufacturing and utilities industries" also fell. APM Project would attract a new skilled and diverse workforce and bring in new families. APM would offer diverse career opportunities for existing local residents in direct and indirect jobs. South Bruce may require some assistance to train and engage local workforce. 			
Education	Access to education and training Increased enrolment and programming	Beyond public elementary school, post-secondary educational opportunities only exist outside of the municipality		Increased opportunities for education and training Broader range of programming and potentially facilities		 Elementary schools are available for public and Catholic education. Secondary schools are located outside of South Bruce in Walkerton. The population attaining no diploma, degree or certificate is the largest category in South Bruce, followed by attainment of a high school level diploma. The proportion attaining trades, apprenticeships and other post-secondary education remains lower than these categories. The APM Project will attract young families to the area and increase educational enrollments. The APM Project will stimulate career aspirations and interest in training and education. South Bruce may require some planning and support to educate and train the current workforce and future generations to take advantage of career opportunities. South Bruce may require some investment for new training facilities in the local region or the community. 			
Health & Safety Facilities and Services	Access to full range of health services 24/7 Fully serviced by emergency responders	Conventional health needs are adequately dealt with through area resources		Increased demand on services and facilities Catalyst to broaden supply of services and facilities within the Municipality	\Rightarrow	 There are no hospitals in South Bruce, but nearby facilities are located in Walkerton, Wingham, Kincardine and Goderich. The Brockton and Area Family Health Team (BAFHT) and North Huron Family Health Team (NHFHT) are located near the community. Emergency services are adequate to meet current needs and are provided on a regional basis by Bruce EMS and the OPP. South Bruce is served by the South Bruce Fire Department. With growth, demand for health and safety services will increase, and this may stimulate planning and expansion of local health and safety facilities and services. 			

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5.2 Implications for Economic Assets

The Economic Assets within a community are understood to include the monetary or financial related resources that people use to achieve their well-being objectives. It includes cash or equivalents to individuals and/or their community, and availability of financial and economic resources that allow the community and residents to manage their finances and wealth. In this analysis, the specific indicators examined included:

- Employment;
- Business Activity;
- Income:
- Recreation/and or Tourism;
- Economic Development Services; and
- Governance and Municipal Finances.

South Bruce has low unemployment of nearly 5% (2012 estimate) which is well below the Ontario average of over 7%, and it has a strong labour force participation level.

The Municipality's business activity is typical of the small communities in rural Ontario where there is a focus on the service, trade and retail sectors. The urban centres of Mildmay and Teeswater are the primary commercial centres in the Municipality, while surrounding areas have a strong agricultural presence. There are a few notable employers within South Bruce. Many residents, however, work beyond the community for public and private sector employers. Activities at the nuclear site in the Municipality of Kincardine are an important source of employment for some South Bruce residents. For this reason, the community has a strong nuclear awareness and appreciation for the risks and benefits of such activities. One of the implications of this nuclear industry employment is income disparity in the community which causes some social friction.

An important focus of South Bruce is to help its retail businesses attract customers traveling through the Municipality to destinations along the shoreline. There are limited accommodation options in South Bruce which include three Bed and Breakfasts and no hotels. South Bruce also desires to increase recreational opportunities for residents and visitors. The community has explicitly acknowledged the APM project as an important driver for economic development in their recent Corporate Strategy (Millier, Dickinson, Blais, 2014). Many believe that a major project, like the APM Project, will become the impetus for desired changes in employment and new business opportunities including accommodations.

The South Bruce Community and Business Association leads economic development and recreation promotion locally, while the Bruce Community Futures Development Corporation and the Saugeen Economic Development Corporation support regional economic development. Both of the regional organizations are located outside of South Bruce.

Municipal finances have seen revenue growth since 2000, led by residential property tax revenues. In 2012, revenue was much higher than in recent years as the community received an additional \$6.4 million in revenue due to Ontario and Federal grants related to wastewater collection and treatment. The community faces fiscal challenges over the longer term, however, as residential and agricultural properties form the bulk of the tax revenues due to the relative absence of large commercial and industrial operations found in other communities. This limits investment capability in infrastructure and services at the current time.

Should the APM Project locate in South Bruce, the net economic effects will be very positive and match the aspirations of the community. A key attribute is the direct and indirect job creation it will bring to the community. Further induced employment will also occur in the community as a result of income spending by direct and indirect



workers. The presence of long term, well-paying job opportunities will change the economic complexion of the community and help to grow and diversify its economic base. Out-migration of youth will decline as younger people will be able to find work locally. In-migration will also occur as South Bruce will become an employment centre with growing opportunities. This outcome will also serve to lessen existing income disparity tension in the community.

An increased number of residents with jobs and money mean that household incomes will climb and subsequently so will household expenditures. More households and greater expenditures open up market opportunities for local businesses to service the expanding needs of a growing and more affluent population. These conditions will in turn help to reverse the decline in existing businesses and also bring new business into the community thereby adding to the vitality and diversity of the local retail/service fabric which addresses community aspirations and goals.

The economic buoyancy created among residents and local businesses will have positive implications for municipal finance. The assessment base will grow and it will be more balanced across industry, residential, farmland and commercial components. This is a key aspiration for the community as it seeks to diversify its tax base which is currently heavily reliant on the residential sector. A more diversified revenue base would enable investments in infrastructure and desired community services.

The APM Project is of a scope, scale and longevity that businesses will be attracted to the community to take advantage of the opportunities for the supply of goods and service to the Project itself and the population it has brought into the community. South Bruce would need to be proactive in looking at where new businesses can locate and the support services they will require for long term operation.

Some have expressed the view that the APM Project may result in perceived effects on the quality of agricultural products, thereby affecting the viability of area agriculture. Although concerns in this regard would need to be addressed, it should be noted that despite decades of nuclear activities at an existing site in the Municipality of Kincardine, there have been no such effects to agriculture documented in the region.

The effect of the APM Project on recreation has the potential to be both positive and negative. In the short term, initial concerns about the facility may make travellers less inclined to stop in the area until a greater understanding of the Project has developed. Conversely, the population that migrates to the community to take advantage of jobs and the people who come to the community to study or visit the facility may present a whole new market for local recreation operations. Irrespective, it is important to note that recreational activities in the community or the wider region have not been negatively affected with the ongoing presence of the nuclear site operations in the Municipality of Kincardine.

The APM Project appears to present South Bruce with the potential for a strong economic benefit through long term economic diversity and increased stability. However, this desired benefit will need to be carefully planned for and managed if the community is to realize its full potential. The community would need support to ensure that it is "Project ready", many years into the future. In order for South Bruce to optimize Project benefits, it would be helpful to support education and training of the labour force, municipality and residents, and provide advice to local businesses on Project opportunities.



Criteria /

Measures

Employment

Ideal CWB Condition

Increasing employment opportunities

Current South Bruce Profile

Limited employment

Table 5.2 Implications for Economic Assets – South Bruce

Possible South Bruce Profile with APM Project Growth in the number and diversity of employment opportunities in the community Low unemployment in recent years in South Bruce and the surrounding area is, in large part, attributable to strong activity at the nuclear site in Kincardine. Many residents are employed at the nuclear site located in the Municipality of Kincardine. Residents also commute to other job opportunities in larger centres within the region. Large farming operations are growing but are not labour intensive.



Legend: Declining-Negative

Neutral-Stable

Increasing-Enhanced-Positive

Uncertain \triangle

Criteria / Measures	Ideal CWB Condition	Current South Bruce Profile	Possible South Bruce Profile with APM Project		Observations
Recreation/and or Tourism	Stability or growth in area tourism	No hotels, limited bed and breakfasts, and limited tourist amenities It is challenging to pull cottagers and tourists to inland areas	Potential negative perception of area for recreation as a result of Project would need to be addressed Potential increase in population and visitors could bolster the need for recreation opportunities		 South Bruce residents and visitors have access to some recreation opportunities. There are limited visitor accommodations in South Bruce. APM may bring a nuclear image to area, but the region has substantial experience with the nuclear industry and the region continues to attract visitors. There has been no evidence of negative effects on tourism or recreation in the area given the long-term nuclear activities at the municipality of Kincardine site. The Project may also provide new market opportunities for local recreation and tourism that accompanies large developments such as the APM Project. South Bruce, as well as recreation and tourism organizations, may require some assistance to manage the presence of APM Project constraints and opportunities.
Economic Development Services	An active, economic development organization that has demonstrated success in attracting businesses to the community	The Municipality has been proactive in business planning but success is hard to come by	Businesses will want to locate in the community to take advantage of the opportunities.	⇒	 Economic development takes place at the regional level through Bruce Community Futures Development Corporation in Kincardine and Owen Sound, as well as the Small Business Enterprise Centre in Owen Sound and Hanover. The South Bruce Community and Business Association is a community group that promotes local businesses and economic development. APM would provide a catalyst for economic development and this has been acknowledged in a recent Corporate Strategy (Millier, Dickinson, Blais, 2014). South Bruce may need some assistance to plan and implement a strategy that will fully realize the economic development opportunities presented by the APM Project.
Governance and Municipal Finances	Community is financially sustainable over short and long term	The Municipality faces fiscal challenges given the nature of its tax base, largely residential and agriculture	A diversified tax base with solid contributions from industrial and commercial properties Additional revenues to cover operating and capital requirements associated with growth		 South Bruce faces some fiscal challenges with respect to its current tax base. It does not have the necessary revenue base to readily support the provision of services and infrastructure needed by its current population. The tax base of South Bruce has a large dependence on residential and farm assessment and lacks the support provided by commercial and industrial operations and high end residences found in some other area municipalities. Farm land values have been increasing dramatically in recent years, putting pressure on local farmers to pay higher taxes or sell their properties. APM, by its presence, would elevate and diversify revenues available to the Municipality and thus provide sufficient long-term financial resources to meet current and future needs of a growing and more diverse population. South Bruce may need some assistance to understand the fiscal implications of the APM Project and to deal with its financial management accordingly.



5.3 Implications for Infrastructure

The Infrastructure or Physical Assets within a community are understood to include the basic infrastructure needed to support well-being and the tools or equipment that people use to function more productively. Infrastructure is a public good and improved access to it increases community well-being and quality of life. In this analysis, the specific indicators examined included:

- Housing;
- Municipal Infrastructure and Services; and
- Transportation Infrastructure.

It should be noted that while these indicators are a subset of those included in the Community Profile, these are the key indicators that are thought to be most important to South Bruce in terms of its Physical well-being.

The community has a stable, but aging housing stock as most homes in the municipality were built before 1986 and there is limited new housing growth. This situation is to be expected in a community with a declining and aging population anywhere in the Province. However, this has implications for infrastructure services like water, wastewater and roads, which cannot be easily updated without growth and its associated tax revenue base to maintain such services.

Municipal services vary between rural and urban areas. Municipal water and sewer service is available in Mildmay and Teeswater, while Formosa has sewer service only. Electricity is provided by either Hydro One or Westario Power, while some urban residents only have access to natural gas connections for home heating. The community offers waste collection and bi-weekly recycling for homes near built up areas using private operators. All together these services meet the needs of the existing population, but financing of future upgrades and maintenance is problematic.

South Bruce has reliable transportation infrastructure, including Highway 9 which passes through the Municipality. There are no local airports offering commercially scheduled passenger or cargo flights, while the closest commercial port is located in Goderich.

The APM Project will stimulate growth of the community (increasing population and a diverse economic base) and create the impetus for increased housing developments to accommodate ownership and rental needs. The development and absorption of new and existing homes will increase municipal tax revenues needed to maintain and upgrade current and future infrastructure.

Although there is a strong upside for housing with the APM Project, there is also a potential downside that must be managed. If demand strongly outstrips supply, price escalation will occur and the complement of affordable housing may be less. A further note of caution with respect to housing is that supply limitations particularly during the construction phase may see significant demand for rental units and visitor accommodations which will force most workers to look elsewhere due to the lack of availability in South Bruce. Additionally, these demands could displace tourists and travellers at a regional level. Over the course of the undertaking, attention will need to be carefully focused on maintaining an equitable housing supply/demand balance, as well as protecting regional tourist/traveler accommodations and other related services to prevent unwanted consequences in that industry.

The APM Project may stimulate the upgrading and expansion of infrastructure and services to accommodate new growth in the community. South Bruce has reliable and extensive transportation infrastructure and is well connected by road to nearby urban areas. It is also serviced by air and marine transportation in nearby communities. The APM Project may provide impetus for further development and upgrading of local and regional roads as well as other nearby transportation infrastructure. This investment would help to diversify the economic base of the community by attracting transportation-sensitive business.

The community and the NWMO would need to work cooperatively to effectively plan, build, operate and manage each of the physical asset components were the Project to be implemented in the area.



Table 5.3 Implications for Physical (Infrastructure) Assets – South Bruce

INFRASTRUCTURE OR PHYSICAL ASSETS

Criteria / Measures	Ideal CWB Condition	Current South Bruce Profile	Possible South Bruce Profile with APM Project		Observations
Housing	Sufficient housing stock to accommodate growth and meet all needs and incomes Average house values increase over time in line with household incomes	Limited residential growth. Declining real estate sales activity. Trend to large farming has resulted in a loss of housing in the agricultural areas.	Growth in a diversified stock Strong market and support for real estate prices		 Recent housing sales data indicates a general slowdown in the South Bruce housing market. The municipal tax base is dominated by residential and farm properties which constrains tax revenues and ability to invest in infrastructure upgrades and maintenance. In general, residential growth in the Municipality is hampered by the limited supply of available serviced lots. APM would create a demand for a mix of housing types and tenure arrangements that will in turn increase tax revenues. A supply/demand balance of housing would need to be maintained to prevent excessive price escalation and ensure there is a strong supply of affordable housing. South Bruce may need some assistance to plan, develop and maintain a sustainable housing portfolio.
Municipal Infrastructure and Services	Infrastructure assets are in good condition, well maintained and adequately sized to meet the short and long term needs of the community	Infrastructure and services adequately meet current needs of the community	Increased demand for infrastructure and services and increased revenue to offset costs Enhanced opportunities for new and renewed infrastructure	-	 South Bruce has a strong complement of well-maintained physical infrastructure to meet current needs APM and associated growth may place increased demands on existing infrastructure, and thereby necessitate the need for upgrades and expansions, however, APM would generate greater municipal revenues from a higher and more diversified tax base that can be applied to infrastructure capital and operating requirements that will meet current and future needs. South Bruce may need some assistance to plan, operate, maintain, and build new infrastructure as required to meet service demands associated with APM.
Transportation Infrastructure and Services	A strong network of roads within the Municipality with air and marine facilities nearby	Situated on Highway 9 with reliable connections to nearby major urban areas Some marine and air facilities located in surrounding communities	Potential upgrades of road network in municipality and other transportation facilities in surrounding communities		 South Bruce has reliable transportation linkages through area highways that connect it to area centres such as Kincardine, Owen Sound, Hanover, Walkerton and larger cities such as Kitchener-Waterloo and Guelph. There are no airports in South Bruce, although there are municipal airports in Kincardine, Wingham and the Brockton/Hanover area. APM would increase road, rail and airport usage and this may necessitate upgrading and expansions. NWMO would work with South Bruce and relevant authorities to ensure transportation infrastructure and operational needs created by the APM Project are put in place.

Legend: Declining-Negative ← Increasing-Enhanced-Positive → Neutral-Stable Uncertain △



5.4 Implications for Social Assets

For the purpose of this analysis, the Social Assets within a community are understood to include the social and community activities in which people participate and the resources that they draw upon in pursuit of their well-being. These activities and resources create networks within and between communities, enhance cohesion and generate trusting relationships and community pride. In this analysis, the specific indicators examined included:

- Community Recreational Facilities and Programs;
- Social Services and Organizations; and
- · Community Character.

It should be noted that while these indicators are a subset of those included in the Community Profile, these are the key indicators that are thought to be most important to South Bruce in terms of its Social well-being.

South Bruce is predominantly an agricultural community with rich agricultural lands interspersed with small towns and hamlets. There is also a small retirement population and a small Mennonite population.

South Bruce has a strong tradition of building culture through local festivals, service clubs, sports organizations and volunteer opportunities. The many clubs and organizations identified in the Municipality are indicative of a community that is interested in celebrating its past and nurturing social vitality for going forward. Amalgamation of lower tier communities into the Municipality of South Bruce has resulted in some frictions as old rivalries persisted but more recently these are fading and the municipality is becoming more cohesive. The equitable distribution of services, facilities and programs across the municipality presents some challenges but the municipal administration is proactive in trying to ensure balance. The Corporate Strategy (Millier, Dickinson, Blais, 2014) addresses the whole municipality and sets out a common path forward that most community members support.

The APM Project will positively affect the Social Assets of the community if it is implemented in the area by stimulating community growth and providing revenue to pay for growth. The increased population associated with the APM Project would be expected to increase demand on community recreational facilities and programs, as well as social services and organizations. In addition, this increased population would also be expected to heighten participation rates, and create a larger volunteer base to ensure the culture and history of the community thrives. Increased funding, volunteerism and participation would allow South Bruce to upgrade and expand its recreational and social programs that would help to bond residents from different urban centres in a more cohesive community. This chain of events is what the community desires. It is cohesive in its vision and aspirations, which includes leveraging the opportunities offered by the APM project. This was explicit in it is recent Corporate Strategy (Millier, Dickinson, Blais, 2014).

There are many social benefits that could be created by the APM project. Based on engagement activities to date the majority of residents support continuing to learn about the project and build their understanding and confidence in the safety case. Some individuals have personally indicated that they are opposed to the project in South Bruce, but the widely held view strongly supports the community leadership in learning more.



Increasing-Enhanced-Positive

Uncertain \triangle

Legend: Declining-Negative

Neutral-Stable

Table 5.4 Implications for Social Assets – South Bruce

	SOCIAL ASSETS							
Criteria / Measures	Ideal CWB Condition	Current South Bruce Profile		Possible South Bruce Profile with APM Project		Observations		
Community Recreational Facilities and Programs	A strong complement of recreational facilities and programs to meet the needs of the residents	Recreational/ cultural needs are met by a combination of facilities and programs within the Municipality and neighboring municipalities (principally Walkerton and Hanover)		The APM project would stimulate growth and provide revenue to pay for growth. Population growth will create demand for programs and facilities, and potentially create the need for new and upgraded programs and facilities in the Municipality		 Recreation/ cultural activities in the community are rooted in volunteer organizations, service clubs, churches, sports clubs, and community events. The municipal administration is proactive in trying to ensure that there is balanced distribution of service, facilities and programs across the municipality. Population associated with the APM Project will place demands on existing facilities and programs and will create the need for new and upgraded facilities and programs. At the same time, the APM Project will also provide increased resources to further evolve facilities and programs. South Bruce may need assistance to plan, develop and operate the recreational facilities and services needed in light of the APM Project. 		
Social Services and Organizations	A wide range of services, organizations and media outlets present to support the social fabric and needs of the community	Many organizations and services present within the community and in the immediate surrounding communities		The APM Project would increase demands on services and organizations and provide revenue to accommodate these demands Strengthen service delivery through additional programs		 Population associated with the APM Project would place increased demand on existing and new services. South Bruce and the immediate surrounding communities have a large number of organizations that supply social services to the community. South Bruce may need some assistance to plan, develop and resource the services and organizations needed in light of the APM. The project would also provide resources to further evolve and expand existing services and programs. 		
Community Character and Cohesion	Strong sense of community identity Cohesive community Stability of population	A community with strong identity, but some constituent groups have different perspectives on well-being		Project has potential to increase community well-being through wealth creation, population and business growth. Project can reinforce community identity and cohesion. Notwithstanding the above, some residents may not be supportive of the Project.		 South Bruce residents have a strong sense of pride of place. South Bruce residents also have a rich history and diverse cultural heritage. Population changes have created the need to rationalize Municipal facilities and programs There is evidence that interaction between communities and social groups in the Municipality are limited in some cases. Amalgamation created some social and fiscal frictions among populations within the Municipality but these old rivalries are fading and the Municipality is becoming more cohesive. The recently crafted Corporate Strategy prescribes a common path forward for the Municipality and its residents. The APM Project could also increase frictions or divisions if not aligned with the priorities of different community groups within the Municipality. South Bruce may need assistance to create alignment between the APM Project and its resident communities. 		



5.5 Implications for Natural Environment

For the purpose of this analysis, the Natural Environment within a community is understood to include a wide range of natural assets from intangible public goods (e.g. air quality and biodiversity) to resources that are "used" by people (e.g. water, trees, land and wildlife). In this analysis, the specific indicators examined included:

- Natural Areas/Features of Significance; and
- Parks and Protected Areas

Community well-being is enhanced when the natural environment is available to all residents for their enjoyment, and to support community goals for the sustainable use of resources. Initial studies on the potential environmental effects associated with the Project suggest that with mitigation the APM Project is unlikely to have any significant negative effect on the natural environment within the Municipality.

During engagement activities a number of people also expressed the view that when considering the environment on a broader scale (i.e. Bruce County and beyond) the project would enhance the natural environment by moving used fuel to a safer long-term place.

There are no provincial or national parks within South Bruce. There are however, four provincially designated protected areas that take up about 6% of the Municipality. The southern part of the Greenock Swamp occupies the northwest corner of the Municipality and in the vicinity of Formosa running northward there is a major groundwater recharge area. These environmentally sensitive areas within the community will need to be protected should the APM Project proceed in this community.

As would be the case with any large Project, natural areas, might be affected during the construction and operation phase of the Project. Effective mitigation and environmental protection measures will ensure that the overall environmental integrity of the area is maintained, as has been the case for other nuclear activities in the region.

Population growth associated with the APM project may increase user demands on conservation lands. Off-setting this potential increase in usage however is the fact that the Project may provide the community with increased resources and funding to manage and improve environmental attributes through proactive conservation initiatives such as reforestation, control of agricultural run-off and support for agricultural sustainability. Effective mitigation and environmental protection measures coupled with enabled investment will ensure that the overall environmental integrity of the area is maintained and where desired enhanced. South Bruce is seeking to ensure that desired economic and population growth is done in a balanced way to ensure sustainability of the environment, agriculture and the social values.



Neutral-Stable

Uncertain \triangle

Environment-Integrity Maintained

Table 5.5 Implications for Natural Environment Assets – South Bruce

	NATURAL ASSETS								
Criteria / Measures	Ideal CWB Condition	Current South Bruce Profile		Possible South Bruce Profile with APM Project		Observations and Implications			
Natural Areas / Features of Significance	Areas and features are protected and contribute to pride of place	Residents are proud of natural areas and use features for passive and active recreation	-	Potential for increased use	-	 The Southern portion of the Greenock Swamp is located in South Bruce. The APM Project may disturb some of the area's natural areas and features of significance. Any potential effects on natural areas/features of significance will be mitigated and the Project will also create opportunities for investment in environmental initiatives such as reforestation, sustainable agriculture and agricultural run-off control. 			
Parks and Protected Areas	Conservation reserves and parks are supported, maintained and also remain available for use	Reserves are available for passive and active recreational use		Potential for increased demand Increased resources and abilities to address ongoing environmental issues		 The Saugeen Valley Conservation Authority and Maitland Valley Conservation Authority have jurisdiction over parts of South Bruce. There are no provincial or national parks in the community. There are four provincially designated protected areas constituting 6% of the total Municipality. The southern part of the Greenock Swamp Wetland Complex occupies the northwest corner of the Municipality There is a major groundwater recharge area in the Municipality. Potential for increased demand on conservation reserves and protected areas. Proper planning and dialogue between NWMO, the Municipality and area agencies, would ensure that resources remain protected and that increased demand as a result of Project related population growth is properly managed. Additionally, the Project will generate revenues for the Municipality and thereby create opportunities for investment in environmental conservation initiatives such as reforestation, sustainable agriculture and agricultural run-off control. 			



5.6 Community Well-Being Summary

Based on the foregoing discussion and assessment, the APM Project has potential to be a good fit for the community of South Bruce. The APM Project has potential to enable the aspirations of the community, and through this, foster well-being, as South Bruce defines it.

The APM project is in line with the values and objectives of the community as we have come to understand them through working with the community, including review of its recent Corporate Strategic Plan (Millier, Dickinson, Blais, 2014) and has the ability to enable many of the goals set out in the Plan. Based on discussions with community officials and residents, it is felt that the APM Project would generate population and economic growth and provide the Municipality with the human and fiscal resources to shape its future and well-being in keeping with its plan.

South Bruce has a strong desire to realize business diversification and growth and to secure the fiscal resources necessary to develop, maintain and improve infrastructure and services. South Bruce already has strong economic ties to the nuclear site in the Municipality of Kincardine and as such many of its households are familiar with the nuclear industry. Moreover components of the labour force in the Municipality already have some of the skills that would be required for the implementation and operation of the APM Project while providing opportunity for others to aspire to. With respect to infrastructure, the existing transportation networks are suitable for the APM Project, with direct access to highway resources and access to air resources within the broader region.

The project can be developed in a manner that would not compromise the environment. Effective mitigation would ensure the quality of the natural environment is maintained and where desired enhanced and as appropriate, municipal revenues derived from the project could be directed to fund environmental initiatives such as reforestation and sustainable agriculture.

Based on engagement to date, some individuals have expressed opposition to the project. More often residents indicated they see positive implications for the community as a result of project implementation and a few expressed a broader view and endorsed the project as a means of safeguarding the environment and the interests of society, as well as the local community, through the proper long term management of used nuclear fuel. For many, the project fits well with their aspirations and plans.



Neutral-Stable

Uncertain /

Environment-Integrity Maintained

Table 5.6 Overall Community Well-Being Implications – South Bruce

OVERALL CWB IMPLICATIONS Possible South Criteria / **Current South** CWB is Enhanced When ... **Bruce Profile with Observations and Implications Bruce Profile** Measures **APM Project** Human Assets Population growth occurs and youth are Declining Enhanced APM would enable population growth and the retention of youth. retained in the community Educational resources would be enhanced and new facilities could be developed. Employment opportunities are available and tax • There will be increased employment opportunities and a more diverse range of jobs would be available. **Economic** Declining Enhanced • Increased funding through a wider tax base would provide the financial resources to fund infrastructure projects, educational Assets base increases to fund community services and developments, community and recreational facilities and programs and social services and organizations desired by the community. facilities • The increased jobs from the APM Project would be the catalyst to enhance community well-being. Infrastructure Enhanced Infrastructure is maintained or improved to meet Neutral • The APM Project, while placing increased demands on some of the infrastructure and services, would overall provide increased the needs of the community funding to improve and enhance existing services. **Social Assets** Opportunities exist for recreation and social • The community would see an overall benefit to its Social Assets through increased participation and funding to its recreational Neutral Enhanced networking. Community is cohesive, and facilities and programs as well as its social services and organizations. community character is enhanced • The community is cohesive in its desire to continue to learn about APM and how it benefits the community in a balanced and sustainable manner. Natural Natural areas, parks and conservation reserves Maintained Maintained Some natural areas might be affected by the APM Project. • Effective mitigation and environmental protection measures will ensure that the overall environmental integrity of the area is **Environment** are preserved and maintained for use and enjoyment maintained. • It is understood at this juncture that no note environmental effects are likely during the construction, operation and decommissioning phases of the used fuel repository itself. Municipal revenues created by the project would enable investment in environmental initiatives such as reforestation and sustainable agriculture. Legend: Declining-Negative Increasing-Enhanced-Positive



6. Criteria to Assess Factors Beyond Safety Summary

The previous chapter has taken a holistic approach to the assessment, taking into account the aspirations of the Municipality of South Bruce and the implications of the Project for community well-being. The NWMO has acknowledged that the process of assessment of community well-being needs to be collaborative and reflective of the community. Before initiating the siting process, and beginning to engage interested communities in the assessment process to understand their aspirations, the NWMO identified five evaluation factors, which, at a minimum would need to be addressed (NWMO, 2010).

The table which follows draws on information outlined in the previous discussion to understand the potential to foster well-being in the Municipality of South Bruce against these original factors. The table summarizes preliminary findings about the implications of the APM Project on various factors of well-being if it is implemented in the community. Four measures are used: maintained, enhanced, diminished or uncertain. For other evaluation factors, two measures are used: yes or no. The overall conclusion using these evaluation factors and the understanding that has emerged to date is consistent with that outlined in the previous sections.

Over the course of discussions and conversations, the community identified a number of other important areas for consideration. The community expressed a strong desire to better understand how to engage neighbouring communities, communities on transportation routes and in particular First Nation and Métis communities in the area. South Bruce realizes that it would be essential to develop relationships with all of the foregoing to support the implementation of the Project. Noteworthy at this early stage is that four South Bruce community neighbours also expressed interest in learning more about the APM Project and have participated in the site selection process. The community also expressed a desire to better understand how to maintain small town quality of life, while attracting desired growth.



Table 6.1 Summary Table of Criteria to Address Factors Beyond Safety – South Bruce

Factors Beyond Safety	Evaluation Factors to be Considered	Indication	Discussion Based on Preliminary Assessment
Potential social, economic and cultural effects during the implementation phase of the Project, including factors identified by Aboriginal Traditional Knowledge	Health and safety of residents and the community	Maintained	 There is a strong safety case, however, the community is eager to learn more about safety and health considerations to enhance their confidence in the safety of the Project. Given the community's proximity to an operating nuclear facility, some local residents are well aware of safety measures related to nuclear facilities.
	Sustainable built environments	Enhanced	Community infrastructure and built environment will be further enhanced through Project activities and investments in the community.
	Sustainable natural environments	Maintained	 Effective mitigation and environmental protection measures will ensure that the overall environmental integrity of the area is maintained. It is understood at this point in time that no significant negative environmental effects are likely during the construction and operation phase of the used fuel repository. Municipal revenues created by the Project would enable investment in environmental initiatives such as reforestation and sustainable agriculture.
	Local and regional economy and employment	Enhanced	 Significant employment and population growth will occur in South Bruce and surrounding communities – hundreds of new jobs might be created in the area. With these jobs comes the potential to increase population and retain youth. Opportunities would be created for current and new local businesses to serve the Project and growing population.
	Community administration decision-making processes	Enhanced	 Local leadership, with community support, has demonstrated interest in the Project and going forward it is expected that local leadership will ensure residents have opportunities to learn more and engage in community decision making
	Balanced growth and healthy, livable communities	Enhanced	 South Bruce has aspirations to improve its local businesses and grow its population and diversify its economy. APM Project appears to be a strong fit with community objectives and aspirations in this regard. Although concerns were expressed by some about the potential loss of agricultural land and nuclear stigma on outputs, agricultural land loss will be minimized and potential negative effects on outputs will be mitigated. To date no such effects have been documented with current nuclear industry activities in the region.
Potential for enhancement of the community's and region's long term sustainability through implementation of the Project, including factors identified by Aboriginal Traditional Knowledge	Health and safety of residents and the community	Maintained	There is a strong safety case. Engagement of surrounding communities is required and further dialogue will be needed to understand and address questions and concerns about safety and health considerations related to the repository and transportation of used nuclear fuel.
	Sustainable built environments	Enhanced	■ Infrastructure and built fabric will be enhanced through Project activities and investments in the community and surrounding areas.
	Sustainable natural environments	Maintained	 Some natural areas may be negatively influenced during the construction phase of the Project. Effective mitigation and environmental protection measures will be required to ensure that the overall environmental integrity of the area is maintained.
	Local and regional economy and employment	Enhanced	Substantial employment and economic development opportunities would extend to the surrounding region.
	Community administration and local and regional decision-making processes	Enhanced	 Engagement of surrounding communities is being initiated. Some surrounding community leaders have demonstrated interest in the project and going forward it is expected they will be able to make informed and effective decisions.
	Balanced growth and healthy, livable communities	Enhanced	 Surrounding area communities are collectively seeking economic development and growth in the region. The APM Project appears to be in alignment with these aspirations, provided it does not compromise existing economic activities (i.e., agriculture and recreation).



Factors Beyond Safety	Evaluation Factors to be Considered	Indication	Discussion Based on Preliminary Assessment
Potential to avoid ecologically sensitive areas and locally significant features, including factors identified by Aboriginal Traditional Knowledge	Ability to avoid ecologically sensitive areas and locally significant features	Yes	The area appears to contain many suitable sites for the Project, thus providing flexibility in selecting specific sites that can avoid ecologically sensitive areas and local significant features.
Potential for physical and social infrastructure to adapt to changes resulting from the Project	Potential for physical infrastructure to be adapted to implement the Project	Yes	 There are no major infrastructure limitations in South Bruce or the surrounding region to impede Project implementation. South Bruce is located in-land which may limit the available modes of transportation. Social and economic support services and capacity to absorb the anticipated growth in population and economic activity may increase. Some infrastructure investments may be required to accommodate growth and special Project needs.
	Potential for social infrastructure to be adapted to implement the Project	Yes	 The community of South Bruce appears to have the necessary core of social infrastructure in place to plan and adapt to changes resulting from the Project. More investment may be required in recreation infrastructure such as hotels or amenities to increase visitor time within South Bruce.
	The NWMO resources required to put in place physical and social infrastructure needed to support the Project	To be determined	 In all likelihood, South Bruce would require assistance in terms of planning, human and financial resources. Further studies would be required to explore the specifics of these requirements.
Potential to avoid or minimize effects of the transportation of used nuclear fuel from existing storage facilities to the repository site	The availability of transportation routes (road and rail) and the adequacy of associated infrastructure and potential to put such routes in place from a social perspective	To be determined	 South Bruce is well situated and connected to major urban areas to the South. Project transportation will need to address community, logistical and regulatory matters across multiple provinces and multiple jurisdictions including; Ontario, Quebec and New Brunswick. Engagement of surrounding communities is at a preliminary stage and further dialogue will be required to understand and address questions and concerns.
	The availability of suitable safe connections and intermodal transfer points, if required, and potential to put them in place from a social perspective	To be determined	Engagement of surrounding communities and those on potential transportation routes is at a preliminary stage and further dialogue would be required to understand and address questions and concerns.
	The NWMO resources (fuel, people) and associated carbon footprint required to transport used fuel to the site	315 – 420 tonnes of equivalent carbon dioxide emissions expected to be produced per year.	 In a scenario of all road transport of 4.6 million fuel bundles from the interim storage sites to an APM facility near South Bruce, approximately 420 tonnes of equivalent carbon dioxide emissions is expected to be produced per year. In a scenario of transport mostly by rail mode approximately 310 tonnes of equivalent carbon dioxide emissions is expected to be produced per year.
	The potential for effects on communities along the transportation routes and at intermodal transfer points	To be determined	 There is a robust technical safety case for the safe and secure transport of used nuclear fuel. Engagement of surrounding communities and those on potential transportation routes is at a preliminary stage and further dialogue would be required to understand and address questions and concerns.



7. Relationship Building and Engagement Summary

7.1 Overview of Engagement

NWMO has engaged and supported learning with South Bruce leadership and community members and has begun to engage surrounding communities through a variety of means, including:

- Several community open houses;
- Regular attendance at the Community Liaison Committee meetings;
- Both informal and structured interviews with community members;
- Facilitating the Community Liaison Committee web page and newsletters;
- Preparation of written materials;
- Informal tours and visits with local residents;
- 'Ask the NWMO' columns in regional newspapers;
- Attendance at local meetings and events;;
- Storefront community office;
- NWMO Mobile Transportation Exhibit; and
- Nuclear waste management facility tours.

Initial discussions with a cross-section of community leaders, briefings and conversations with community groups, and conversations with residents during open houses suggest there is interest in the community to continue to learn about the Project and consider hosting the Project. To this end, opportunities for preliminary discussions were sought with:

- Local political leaders (e.g., Mayor and Councillors);
- Members of the Community Liaison Committee;
- Local farm operators and farming associations;
- Local business owners/operators;
- Local service providers (e.g. emergency services, social services, education);
- Community groups (e.g. clubs, associations);
- · Residents; and
- Surrounding community leaders.

Based on discussions with the above, there appears to be potential to sustain interest in the local community. There also appears to be high interest in continuing to move forward with the siting process.

The community has taken initial steps to engage its neighbours to establish a foundation for broader area consideration of the Project. Several neighbouring communities to South Bruce have expressed interest in learning and participating in the siting process.

7.2 Summary of Issues and Questions Raised

This section summarizes the key challenges, issues and comments as heard from the community and other persons engaged.

7.2.1 Key Challenges, Issues and Opportunities

The community has a diverse labour force. Agriculture is the dominant economic activity within the municipality, while there is also retail and commercial activity in Mildmay, Teeswater and Formosa. Within the towns, business attrition is noticeable, particularly in Teeswater and Formosa. Municipal revenues are limited and budgeting is a challenge.



A key priority for South Bruce, as identified through community planning exercises and various engagement activities, is to create sustainable economic growth. Growth potential is impeded, however, as youth out-migrate for school or work, and the population ages and declines. These circumstances limit the labour force and consumer base. Local retail and commercial activity has been waning in recent years in the face of rural population decline and changing shopping behaviours. Conversations in the community identified that many businesses are struggling and must compete with outlets in larger centres. Real estate sales activity has also been declining for over a decade.

Municipal infrastructure is adequate and improving, providing village residents with access to natural gas, municipal water, and sewage systems, while rural residents rely on individual wells and septic systems. The absence of post-secondary institutions within the Municipality leads to youth and young-adult out-migration for education and eventually employment. A lack of social and health services within the Municipality also requires residents to travel a short distance outside the immediate community.

Attracting visitors and retail patrons from flow-through traffic remains a priority of South Bruce, although in the former case there is limited infrastructure to accommodate stay over visitors. Notwithstanding the preceding South Bruce seeks to promote its outdoor recreation and cultural opportunities to visitors.

The APM Project is recognized as a potential means to ensure the long term viability of the community. This will be accomplished by helping the community in its efforts to diversify economic opportunities, and improve options for existing and potential new residents.

7.2.2 Summary of Key Interests/Questions

In South Bruce, the majority of people engaged in discussion were interested in learning more, were supportive of their community being involved in the siting process, and look forward to the next steps. Several interests were recurring and identify matters which the community is most interested in learning more about. The *core* key interests expressed included:

- Health, safety and environmental risk in and around the site and along the transportation route; and
- Economic benefit and opportunities for growth
 - Municipal Transparency and Confusion with the DGR Project;
 - Community Cohesiveness; and
 - Project Description Details

Health, Safety and Environmental Risk in and around the Site and along the Transportation Route

At this stage, there is a strong and growing confidence in the community that the Project will be safely implemented. Interviews demonstrated that many in South Bruce are aware of the potential risks and opportunities associated with nuclear power. Interviews identified that many understand that safety is integrated into everything having to do with nuclear energy generation, and there is a belief that the APM Project will be similar in that respect. Questions were raised in an effort to understand more about the health and safety risks in and around the site.

Many of the questions focused on concerns about the suitability of the site geology, as well as site proximity to the Great Lakes watershed. Questions about environmental risks included source water protection, waste generation, and site location issues.

Economic Benefit and Opportunities for Growth

The Project is viewed as a positive means to provide long term economic stability for the community. Questions focused on the type of employment opportunities that would be available and the types of economic spin offs that



might be associated with the Project. Interviews identified that South Bruce at the moment has few prospects for attracting sizeable commercial or industrial employers to the community.

There was strong indication that the nuclear site in the Municipality of Kincardine is a very important employment hub in the region. There was consensus that the reactor refurbishment initiatives of recent years had noticeable positive impacts on the local economy. Some interviewees identified however that there is a need for other major area employers.

Housing affordability and income inequality were identified as concerns in the community in the face of limited employment opportunities rising costs of living, increasing real estate prices and high taxes. There is some hope that a large project such as the APM Project could ease these issues in the community.

There is interest in the centre of expertise and how it might help train a local skilled workforce, and integrate with local agricultural and commercial opportunities.

Representatives from other communities also see the APM Project as a potential means to stimulate economic development in the wider area, including their communities. Questions from surrounding communities focused on the scale and timing of the Project and available economic opportunities. There is a sense that APM Project benefits will be widespread given the large size of the undertaking.

In addition to these core key interests, a number of secondary key interests were also expressed and included:

- The potential for concerns about nuclear image;
- APM Project process and APM Project description details; and
- Preservation of community character and environmental quality.

Recurring comments or questions include:

The Potential for Concerns about Nuclear Image

- Property and agricultural output protection plans;
- Community brand and image both for residents and visitors.

APM Process and Project Description Details

- More detailed understanding of the employment and business opportunities;
- Clarification on the APM Project process and how the community will be involved in the siting process;
- More details regarding the location and nature of the Project site and its operation; and
- Uses that might be permitted on the balance of site not devoted to buildings.

Preservation of Community Character and Environmental Quality

- Level of growth generated by the APM Project and changes in character to towns and rural areas;
- APM Project compatibility with the environment especially ground and surface waters, flora and fauna;
- Potential APM project effects on the Great Lakes;
- The potential implications for agriculture; and
- Spills prevention and response plans.

7.2.3 Ongoing Engagement

Going forward, engagement with surrounding communities will continue to develop. South Bruce is looking forward to ongoing engagement with the NWMO to learn more about the Project and to potentially working with the NWMO in a long term partnership that will optimize well-being in the community and surrounding area.



8. Community Well-Being Summary Findings

At the outset of the site selection process, the NWMO framed four key questions respectively addressing safety, the well-being of the community, the well-being of surrounding area communities and the potential to foster sustained interest in exploring this Project through subsequent steps in the site selection process (NWMO, 2011). This section addresses and elaborates on a subset of these questions related to community well-being in the context of South Bruce.

The preceding chapters have looked at implementation of the APM Project in South Bruce and the implications this might have on community well-being. Additionally, key issues and concerns identified through engagement activities have been highlighted and discussed. Through desktop research, dialogue with community members and leaders, as well as on-going analysis, it is understood that South Bruce has an interest in learning about what it might meant to host the APM Project, but also understands that benefits can be realized if the Project were to locate in a neighbouring municipality.

The community of South Bruce understands that this siting process, in partnership with the NWMO, will assist their community over time to get the information they require to reflect upon their willingness to continue in the site selection process and to decide whether or not they are interested in continuing to the next phase of studies.

There is high potential for sustained interest in the local community. This is evidenced through the strong, proactive commitment community leaders and residents have shown towards their continued participation in the site selection process. At this point in time, there is no indication that South Bruce will not remain interested in learning throughout the subsequent steps.

There is high potential for sustained interest in the surrounding communities. South Bruce has been in contact with its neighbours. The surrounding communities have experience with nuclear projects in the region, contributing to the foundation of knowledge for further constructive consideration of the APM Project and its opportunities. Several neighbouring municipalities also entered the siting process.

There appears to be high potential for the APM Project to foster well-being in South Bruce. The Project is understood to enable community priorities and aspirations, and is seen by leaders and many residents to be a potential catalyst for the socio-economic growth and development they desire.

There is also potential for the APM Project to foster well-being in surrounding communities. Preliminary discussions have revealed interest in the economic development potential offered by the Project. Ongoing discussions will be required to further assess the implications of the Project on the well-being of surrounding area communities.

It is noteworthy that the municipalities which entered the site selection process in the area function as a region. They are politically autonomous but they are also tied to one another through their political, cultural and administrative constituency as fellow neighbouring communities. Beyond their shared interest in learning about the APM Project, these communities are connected through government ties and shared planning. As well, there are a variety of other linkages that further speak to the broader connections between the municipalities. In many cases, family ties criss-cross community borders. Communities share facilities and services and share a common experience in proximity to a nuclear facility in the area. They come together for community events. They have a willingness to share common opportunities to benefit from the APM project which has encouraged cohesion across the Bruce communities. Engagement of these communities would need to continue.



There are some uncertainties associated with the preceding analysis due to the preliminary nature of the work at this stage. These uncertainties and challenges include:

- 1. Specific land areas that are socially acceptable would need to be identified:
 - a) Community input is required to identify areas which should be reserved for other uses or preservation. The remaining areas must overlap with potentially suitable siting areas identified through scientific and technical studies and potentially affected private land owners must be supportive.
 - b) Further engagement with potentially affected Aboriginal communities is required, including Aboriginal Traditional Knowledge holders in the area. The NWMO acknowledges, respects and honours that Aboriginal peoples Indian, Inuit and Métis peoples of Canada have unique status and rights as recognized and affirmed in s.35 of the *Constitution Act*, 1982. The NWMO is committed to respecting the Aboriginal rights and treaties of Aboriginal peoples (NWMO, 2010b).
- 2. Project implementation (including engineering, logistics and/or community well-being) must align with specific community aspirations:
 - a) An acceptable area and regional project implementation plan must be identified which aligns the ultimate project configuration with area expectations.
 - b) Effective implementation of project planning at a broader level, involving the surrounding communities and potentially affected Aboriginal peoples, will be important for successful implementation of the project.
- 3. Interest in further learning about the project needs to be sustained:
 - a) The site selection process spans several years and interest and conversation in the interested community needs to be sustained throughout this process, including multiple election cycles.
 - b) The potential effects of the project on the interested community, First Nation and Métis communities and surrounding municipalities would be substantial and the community and area will need support to further explore their interest and take an active role in discussions of how the project should be implemented.
 - c) Opposition groups may actively seek to influence community decision-making and community leaders will need to respond to these pressures. South Bruce will require support to prepare for the next phases of the siting process if they are to proceed.
- 4. Transportation routes and mode(s) need to be designed and configured taking into account social values:
 - Transportation considerations will need to be determined. Regulatory matters along routes in several Provinces including, New Brunswick, Quebec and Ontario, would need to be addressed. Social questions and concerns would also need to be heard and taken into account.
- 5. Environment and Safety evaluations need to be aligned with interested community input:
 - a) This requires regard for input from the interested community and surrounding communities.
 - b) This requires engagement by the NWMO and may require capacity building to enable community input, which would include Aboriginal Traditional Knowledge.
 - c) Input from transportation route communities will also need to be incorporated.



9. References

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