



NUCLEAR WASTE SOCIÉTÉ DE GESTION
MANAGEMENT DES DÉCHETS
ORGANIZATION NUCLÉAIRES

Phase 1 Preliminary Community Well-Being Assessment

TOWNSHIP OF IGNACE, ONTARIO



APM-REP-06144-0016

OCTOBER 2013

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PRELIMINARY COMMUNITY WELL-BEING ASSESSMENT: **IGNACE**

October 2013



Prepared For:

Nuclear Waste Management Organization (NWMO)

Prepared By:

SENES Consultants



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NWMO Report: APM-REP-06144-0016

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1.0 INTRODUCTION

This Community Well-being (CWB) Assessment Report aims to provide a summary of the expected influences that the Adaptive Phased Management (APM) Project will have on the overall community well-being of Ignace, 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 Ignace 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 and 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 Ignace, 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 visioning exercise, 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 agree 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-being¹:

- Potential social, economic and cultural effects during the implementation phase of the project;

¹ NWMO 2010a.

- Potential for enhancement of the community's and the region's 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.

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 effect 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 over the course of more than a year, 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.

2.0 ASSUMPTIONS OF THE APM PROJECT – DRIVERS OF COMMUNITY WELL-BEING

The APM Project is currently still in 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 and further jobs (indirect and induced) and community wealth creation will result from project spending for goods and services and employee income spending². 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.

Table 2.1 Potential Employment by Phase

APM Phase	Number of Years (approx.)	Direct Jobs per Year (approx.)	Primary Skills Required
Construction	10	400-1,200	Mining, engineering, geoscience, safety assessment, manufacturing, construction, trades, project management, social science, engagement, communication, transportation
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

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

² NWMO 2012.

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.

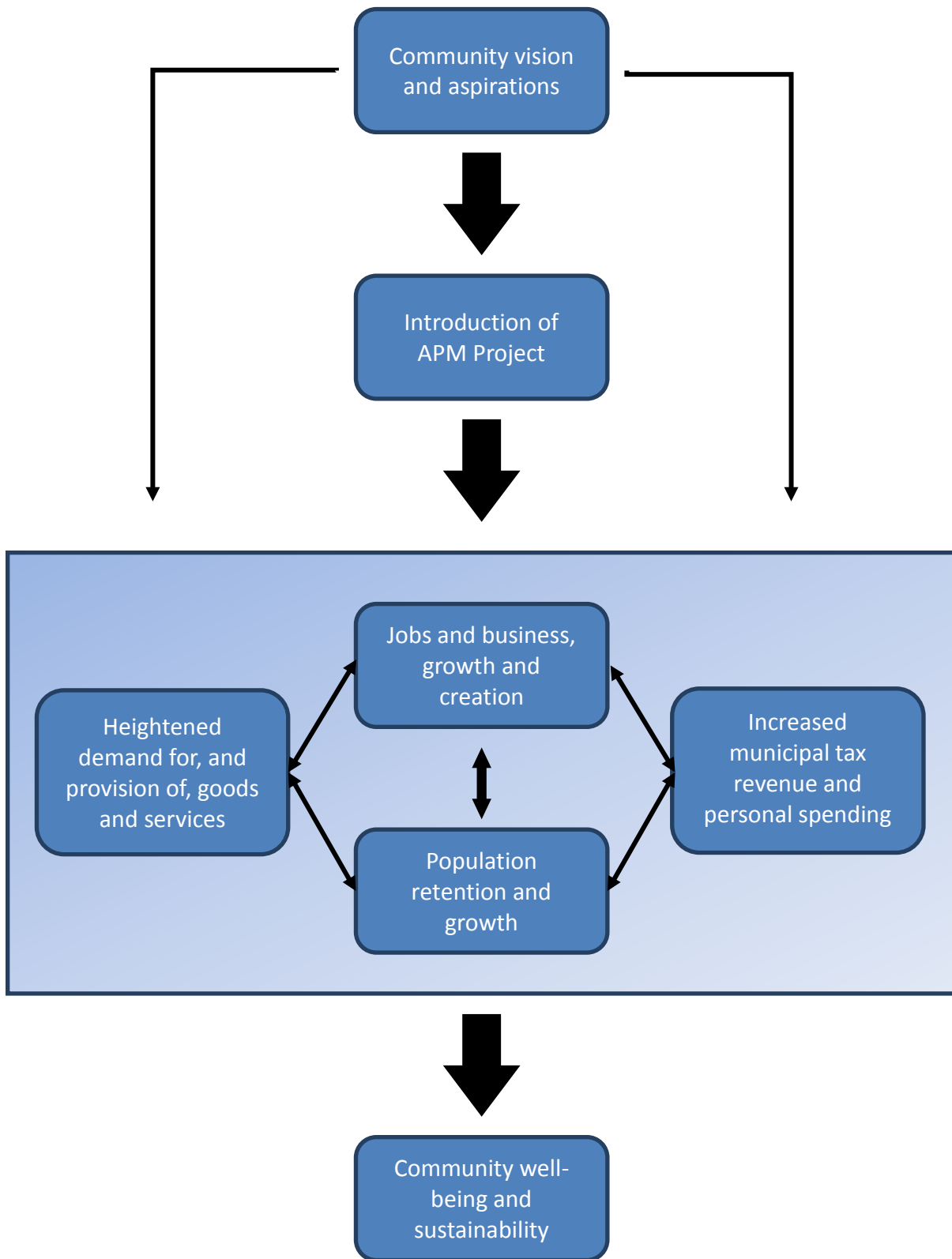
This project will be implemented through a long-term partnership involving the community, neighbouring communities and Aboriginal peoples in the area and the NWMO. Only through engagement, dialogue and collaboration will the NWMO ensure that needs are addressed at each stage of the process, and identify the specifics of how a partnership arrangement could work. For illustration purposes only, employment opportunities could be in the order of hundreds of new jobs (direct, indirect and induced) within the local area³. 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 surrounding area to optimize the benefits that will positively contribute to the overall well-being of area.

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.

³ AECOM 2010.

Figure 2.1 Direct and Indirect Effects



3.0 VALUES AND ASPIRATIONS OF IGNACE

The Township of Ignace has expressed explicit values, aspirations and desires for its community. These have been documented in the Ignace Community Profile and various other community reports including a community visioning exercise. Key themes are summarized in this section. The preliminary assessment, which is the topic of this report, is measured against these values and aspirations:

1. The community has expressed an overriding desire to grow in terms of population, business activity, and employment and career opportunities. Discussions with community leaders and residents suggest a desire to at least regain its former peak population of over 2,200 residents.
2. The community aspires to reverse the out-migration of youth and skilled labour. It is recognized by the community that this can only be achieved if employment and career opportunities are present. A key aspiration is to retain its youth.
3. The community desires a diversified economic development strategy that leverages the natural resources of the region and safeguards the environment.

These values and aspirations are aligned with the Township of Ignace's⁴ four strategic objectives:

- A. **Capital Investment** – *Ignace will ensure that infrastructure are identified and priorities established on an ongoing basis so that assessments and planning steps are in place to guarantee flexibility and responsiveness to government funding programs and to support economic development initiatives.*
- B. **Business Investment Readiness** – *Ignace will encourage a diversified approach to business development, support entrepreneurship and promote the notion that local associations and the private sector must drive the development process with the assistance of municipal staff.*
- C. **Tourism and Community Development** – *Ignace will offer tourism-industry support, and pursue community development initiatives such as beautification, recreational and cultural programming and events, and youth-focused initiatives.*
- D. **Adopt Sustainable Development Principles** – *Municipal sustainability planning is an opportunity to proactively address challenges of participative governance that protects ecological integrity, and moves the community towards cultural and social cohesion.*

In conversations, community leaders and representatives emphasized that stable and reliable employment creation is much sought after and they recognize that tourism, while important, cannot be the sole driver of community well-being in this regard.

⁴ Township of Ignace 2009.

4.0 SUMMARY OF COMMUNITY ASSETS – KEY ISSUES, ASPIRATIONS, CAPABILITIES AND CAPACITIES

As described in the Ignace Community Profile, the community of Ignace has 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 drawn upon to support well-being; and
- **Natural environment:** Nature and the natural environment important to well-being.

The characteristics of the community 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 the community may be affected by the APM Project, or other large projects which the community may consider.

Table 4.1 summarizes the priorities and key issues as understood through desktop research, review of municipal documentation and discussions with community leaders and residents. Table 4.2 sets out the aspirations of the community that were articulated during a Community Visioning exercise⁵ with community leaders and representatives. Table 4.3 describes some of Ignace’s capabilities to overcome key issues, address main priorities and achieve aspirations 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.

⁵ gck Consulting 2012.

Table 4.1 Summary of Priorities and Key Issues

Asset Category	Overall Priorities and Key Issues
Human	Ignace is faced with a decreasing and aging population. Its youth, while well educated, are out-migrating to other areas to find employment opportunities. Declining enrolment in public schools has resulted in decreased funding for the educational resources that exist. The decreasing population has also had a ripple effect causing other services and businesses to close or downsize.
Economic	There is a strong need and desire within the community to diversify its economy. The community has historically been dependent on mining, forestry and the railroad. There is strong hope that new opportunities in these sectors will help restore their economic prominence. At the same time, it is recognized that there is a need to diversify the economic base to include other industries such as tourism and transportation. Financial leakage in the service and retail sectors is also a key economic issue as community members look to neighbouring communities for many of their household needs.
Infrastructure	<p>The Town’s water and solid waste facilities are modern and large enough to handle at least the doubling of the population size. However, other infrastructure is in need of funding. For example, it was identified that the sewage treatment plant requires upgrading. There is a perception that the Town cannot sustain its existing level of municipal services should the economy and population not grow. Both are priorities for the community.</p> <p>At the present time the municipal tax assessment base of the community is heavily skewed to residential uses and further growth in this area is not in itself sufficient to give the community long term fiscal stability. Commercial, and most importantly industrial development, are required to balance the future financial needs of the community.</p> <p>Approximately 10% of the municipality’s housing stock is listed for sale. Annual sales are approximately one third of the homes on the market and the vast majority of those sold are at prices below \$100,000. These circumstances underscore a situation where resident households are leaving or at least trying to leave the community. Where houses are sold the new occupants are most likely in-migrants who are attracted to the community because of the availability of low cost housing. As jobs are scarce most of these new residents will not be employed.</p>
Social	Decreased social programming and recreational opportunities resulting from funding constraints are key issues for the community. The residents of Ignace depend on the availability of community facilities and social and recreational programs to support the needs of its population across all age groups. For young families the availability of day care is a much appreciated service; for youth, hockey and figure skating are key programs; and for adults services like library, continuing education and the seniors programs are important. Community services and programs provide a social hub and cultivate well-being across the population. Continued development and provision of social services and programs are key priorities for Ignace to make it a desirable place to live with an attractive and stimulating environment for young families, youth, and middle-aged and senior residents.
Natural Environment	The abundance of wilderness and natural assets in the surrounding areas are important as they provide economic opportunities for local and regional businesses. One of Ignace’s priorities is to leverage the wilderness tourism opportunities of its surrounds.

Table 4.2 Summary of Community Aspirations

Asset Category	Overall Community Aspirations
Human	There is a strong optimism and hope for the future of Ignace; community leaders and residents have expressed a desire to grow the population back to its peak of approximately 2,200 residents, or more. There is also an aspiration to retain Ignace’s younger population and attract new residents to the area.
Economic	Ignace has a strong desire to support local businesses and diversify its economic base. New and evolving relationships with mining and forest based industries are being actively sought and efforts are also being made to attract new industries in other sectors to the area. The community seeks to increase its tax base through growth in its economy which in turn will help grow the population and enable the provision of more social assets and infrastructure. One of Ignace’s short term goals as set out through its Community Visioning exercise is to prepare an Economic Development Strategy to provide a roadmap on how to achieve these goals.
Infrastructure	The community aspires to maintain and where necessary improve its existing infrastructure (for example the sewage treatment plant). There is also a desire to expand real estate development for residential, commercial and industrial purposes. Associated with this desire for growth is also an aspiration to improve and upgrade the existing housing stock. Ignace has also identified aesthetic improvements to the highway corridor, such as lamp posts, flags, benches and landscaping as a community goal to generate pride and create brand.
Social	There is a strong desire to generate funding to provide more recreational and social services to Ignace. Ice time at the Recreation Complex and more recreational opportunities for youth are important goals for the community. Ignace has also identified the need to develop a Recreation and Leisure Plan to assist in achieving the social objectives of the community.
Natural Environment	The surrounding areas of Ignace are located in a natural wilderness environment and this spawns economic opportunities associated with tourism and resource development. Ignace has expressed a need to both capitalize on its natural resources but to also balance this with environmental stewardship.

Table 4.3 Summary of Community Capabilities

Asset Category	Community Capabilities
Human	The residents of Ignace are extremely proud of their community. They live in Ignace because they choose to do so. The community is cohesive, closely knit and supportive of one another and of their municipal leadership. The community has pride in its health and safety services. The people of Ignace have shown themselves to be resilient to the economic hardships that have occurred in the past.
Economic	The community of Ignace has a range of economic development services (such as the municipal Economic Development Strategy, EDO, BIA) and the regional support initiatives to support a variety of economic initiatives. The present Council is actively seeking economic opportunities for the area.
Infrastructure	<p>Many of the existing infrastructure and services are available to support population growth (including the water treatment plant, the landfill and serviced lands for residential development). There is also a CPR yard with underutilized bunkhouse capacity. The town is located on the TransCanada Highway. Ignace also has an existing airport that is underutilized but can be upgraded. Housing is available and lands are subdivided to enable further development.</p> <p>Should significant future growth occur, there will be a need to upgrade the sewage treatment plant.</p>
Social	<p>The community has a rich portfolio of programs and services to meet the needs of its population across the demographic spectrum from youth to seniors, however many of these confront funding challenges as well as falling participation rates given a general decline in community population. The latter is particularly true for youth programs.</p> <p>Volunteerism and social networking are strong in the community, most noticeably among the senior population. The community also has a positive relationship with surrounding area communities and this creates opportunities for collaboration with them on a variety of inter-community initiatives.</p>
Natural Environment	Ignace and its surrounding areas have a range of opportunities to capitalize on natural resources. There is strong local expertise in the community to further develop the tourism industry.

5.0 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, Safety Facilities and Social Services.

Since 1981, Ignace has experienced a major decline in its population. This has also been the trend in most small communities in Northern Ontario. Many of these towns have historically been dependent on resource-based industries and have all been susceptible to “boom-bust” cycles. Mass migration has occurred from northern communities to other centres with growing workforce needs as a result of populations in search of more diverse and reliable employment.

Ignace is no exception to this trend. Since 1981 the population has declined by 50%, mostly due to youth and young families seeking other employment opportunities. In addition, in-migration has been on the part of retirees looking to enjoy the peaceful nature of the community and its beautiful natural environment. The loss of youth and increased proportion of retirees have contributed to an aging population and loss of work force. This decline is driven by a lack of economic and employment opportunities. Information gained from discussions with community leaders and residents indicate that if job opportunities did exist in the area, many of the youth and other residents might be willing to return to or remain in Ignace. However, with few job opportunities, the population has and will continue to experience attrition.

Population decline is the primary issue of concern for the community. Ignace has expressed a desire to at least double its current population by attracting former residents back to the community, retaining its current population and attracting new residents to the area. This will be primarily driven by economic opportunities. Without the jobs to attract residents, the population will continue to decline.

Residents in Ignace appear to possess a range of skills that are directly transferrable between industries. The workforce is very adaptable as shown in past and recent times and they have the ability to quickly learn new skills and move within industry sectors or cross into new sectors. Additionally many individuals are self-employed, and this in itself demonstrates the strong entrepreneurial nature of the population. They are trained, educated and have experience in trades and resource-based industries. However, in parallel with population trends, the overall labour force has been in decline as well and there is a desire to reverse this trend.

Education levels have increased over time, indicating that despite a decreasing population, more people are attaining a higher level of education. While there are no post-secondary institutions in the town itself, there are opportunities nearby as well as the availability of a large range of distance education options for residents. However, elementary secondary school and French school enrolments have been declining in step with the fall in population. Accompanying the enrollment decline there has been significant, concomitant attrition in staff numbers. The population is simply not there to sustain enrolment and staff levels and to enable the educational programming desired by the current community.

With respect to health and safety facilities and services, the needs of the community are being adequately met at the present time. A range of primary health care is immediately available in the community, with other needs being met elsewhere. There are rotating medical staff to service primary health care needs, while more specialized care must be sought in neighbouring communities, typically in Dryden or Thunder Bay. Emergency response services (fire, policing) currently meet the needs of the community and residents generally feel safe and secure in their community.

The APM Project has the potential to have a positive effect on the Human Assets of Ignace. The project will bring direct, indirect and induced jobs. Jobs are the backbone of population growth. The APM Project is a long term project, with a much longer lifespan than other resource-based developments, typical of Northern Ontario. It has the potential to be a driver for population retention and growth. While it is expected that some people involved in the construction and operations of the project will chose to reside in other (larger) communities such as Dryden, preliminary economic modeling suggests that hundreds of jobs could be held by people residing in Ignace⁶. With additional community development and support provided by the NWMO it is possible that these job numbers could be increased. These new jobs will bring spouses, partners and families, and so it can be expected that the population in Ignace could increase significantly, which is a community aspiration. The increased population will be a boost to Ignace and will be

⁶ AECOM 2010.

a catalyst for spin-off growth and development, which is the priority aspiration for the Township at the present time.

Skills and labour supply would likely diversify and expand with the increased population and as a result of the on-site and in-community job opportunities. Indirect and induced jobs will also create opportunities for skills diversification and attract new residents with different levels of expertise. The APM Project will capitalize on the existing labour force skills and expertise and attract other highly educated and skilled workers. The project will provide opportunities for skilled workers and ongoing training, as well as opportunities for the next generations to pursue education paths to take advantage of careers associated with the project. There are major and positive educational benefits from the APM Project, including an increased population driving expanding 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 and attract attention from around the world.

While the APM Project and the associated increase in population will place heightened demand on existing health and safety facilities and services, there is a 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. Proper planning would need to take place to ensure that potential increased social issues (generally associated with any large project that substantially increases local populations) are mitigated 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 Ignace were the project to be implemented in the area. It would help the community realize its aspirations and goals, and it would drive development and expansion in other aspects of its community well-being.

Table 5.1 Implications for Human Assets

Criteria / Measures	Ideal CWB Condition	Current Ignace Profile		Possible Ignace Profile with APM Project		Observations
HUMAN ASSETS:						
Population Size and Demographics	Increase population to 2,500-5,000 Retention of youth and young families	Declining (loss of ~50% over past 30 years)	←	Growth in population and diversity	→	<ul style="list-style-type: none"> Ignace has experienced out-migration with loss of key employers. Aging population with limited opportunity to attract working population. Community has expressed a strong desire to grow – at least double its current population as return to former days of prosperity. APM Project offers potential to create jobs and attract and retain population. Ignace would require assistance to plan for and manage growth.
Skills and Labour Supply	Presence of a diverse, skilled workforce	Constrained opportunities for employment Decline in experienced labour force	←	Job creation and growth of a diverse, skilled workforce	→	<ul style="list-style-type: none"> Majority of past and current out-migration has been workforce seeking employment elsewhere. Limited local employment opportunities. APM Project would likely attract new skilled and diverse workforce and bring in new families. Offers diverse career opportunities for local residents in direct and indirect jobs. Ignace would require assistance to train and engage local workforce.
Education	Access to education and training Increased enrolment and programming	Declining enrolment Constrained programming	←	Increased enrolment and opportunities for education and training Broader range of programming	→	<ul style="list-style-type: none"> Ignace has experienced declining enrolment and declining staff and a contraction in programming over the past 25 years. Wide range of new local employment/career opportunities with the APM Project will attract young families to the area, increasing enrolment. The APM Project will stimulate career aspirations and interest in training and education. Ignace would require planning and support to educate and train current workforce and future generations to take advantage of career opportunities. Ignace may require 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	Available to meet some needs Special care not available within the community Emergency response needs adequately met	→	Increased demand on services and facilities Catalyst to broaden supply of services and facilities, particularly healthcare	→	<ul style="list-style-type: none"> Basic healthcare is available; specialty healthcare requires travel outside the community. Emergency services are adequate for community at this time. With growth, demand for health and safety services will increase. Potential for increased social risks associated with population growth and project activity. Conversely, growth may also stimulate planning and expansion of health and safety facilities and services.
Declining-Negative		←				
Neutral-Stable		→				
Increasing-Enhanced-Positive		→				
Uncertain		△				

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;
- Tourism;
- Economic Development Services; and
- Governance and Municipal Finances.

Over the last decade Ignace has experienced a number of business closures and downsizings and as a result there has been a major loss of jobs. A 2009⁷ report estimated that unemployment in the community was running at 27%. These circumstances have triggered an out-migration of population and households as people look for jobs elsewhere. It has also precipitated a situation among a number of remaining households where key wage earners outwork in other communities across Northern Ontario and further afield including Alberta.

The loss of employment opportunities is acutely felt by young people looking to enter the workforce and as a result out-migration is high within this demographic as they look to start their careers in other locations. The prospect of their return to the community is slim unless there is local and sustained job growth.

Household incomes have been rising for some particularly for those with a member able to find high paying outsource work beyond the community. For others with the loss of local jobs and a dependency on these jobs there has been a corresponding diminishment of household income. This further dampens local expenditures for household goods and services and results in a decline in activity for community retail and service businesses. Store closures are evident in the community and for a number of those businesses that remain the prospect of shutting down or selling out looms large given the current economic and social climate.

Declining economic circumstances in the private sector ripple into the public sector and at the present time the municipality faces a number of fiscal challenges. The tax base is heavily

⁷ Lederer 2009.

dependent on residential assessment as there are few industries and a weak commercial fabric. The municipality has been forced to make strong budget cuts for services, facilities and staff. The tax arrears situation, a problem in the past, is improving, giving the municipality better ability to handle reduced operating expenditures and long term capital debt. A potential pressure on the municipality's finances is the near-term need to rehabilitate or perhaps replace the community's sewage treatment facility.

The community is well aware of the difficult economic circumstances it faces and it has an economic development committee that is actively looking to attract new businesses to the area and help retain those businesses that are present. The major near term opportunity is the reopening of the Resolute forest mill in 2013/2014. It is estimated that this could generate over 100 local jobs.

Tourism has long been a part of the local economy but at present the industry is in a period of adaptation rather than growth as it seeks to restructure in light of changing market circumstances. The weak US economy has reduced their market and further shrinkage has occurred as the traditional demographic within this market has aged to the point where long time patrons are no longer able to travel. Further pressures face the industry as younger age groups want a different tourist product and they are willing to look further afield to acquire it. Although the project would have to have a very strong safety case, preconceived ideas among tourists could diminish the attractiveness of the area in their eyes potentially affecting tourist activity in the area. This is the concern of some tourist camp operators. However, other operators see the potential for the creation of new tourism business opportunities with the influx of population and increased visitation to the area. From an economic development perspective tourism is seen as an important industry sector going forward but there is a realization that tourism by itself is not sufficient to stabilize and grow the economic fortunes of the community.

Should the APM Project locate in Ignace, the net economic effects will be positive. A key attribute is the direct and indirect job creation and career opportunities 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. Out-migration will slow as residents will be able to find work locally. In-migration will occur as Ignace will become an employment centre. Residents with jobs and money means household incomes will climb and concomitantly 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. This helps to address a key plank of the community's aspirations.

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 equitably spread across industry, residential and commercial components. Although operating costs and capital requirements will rise given growth in the community and the associated increase in demand for services, careful financial management should ensure that short and long term costs can be better covered by a stronger municipal revenue (tax) base.

Economic Development in an expanding community is a much easier task than it is in one that is declining. 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. Ignace will need to be proactive in looking at where new businesses can locate and the support services that they will require for long term operation.

The effect of the APM Project on tourism has the potential to be both positive and negative. In the short term, initial concerns about safety of the facility and potential impact on the environment may make the area less attractive to clientele which have historically frequented the area, until a greater understanding of the project has developed among them. Conversely, the population that migrates to the community to take advantage of jobs and the visitors who come to the community to study the facility may present a whole new market for local tourist operators. Given concerns in the tourism sector around negative perceptions due to the project there is a need for collaboration between community and industry representatives and government officials to alleviate concerns and explore opportunities for project-related business.

Relative to current circumstances the APM Project appears to present Ignace with the potential for a strong economic uplift. However, this uplift would 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*”. In order for Ignace to optimize project benefits, it would be helpful to support education and training of the labour force, municipality and residents, and provide advice to businesses on project opportunities.

Table 5.2 Implications for Economic Assets

Criteria / Measures	Ideal CWB Condition	Current Ignace Profile	Possible Ignace Profile with APM Project	Observations
ECONOMIC ASSETS:				
Employment	Increasing employment opportunities for residents	Decline in employment opportunities as a result of business closures and downsizing A high unemployment rate	← Growth in the number of and diversity of employment opportunities in the community →	<ul style="list-style-type: none"> Business closures and downsizing have resulted in a decline in local job opportunities for residents. Many residents have left the community to seek employment elsewhere; some residents seek to remain in the community but work in other locations across northern Ontario and further afield. Out-migration of youth in search of job and career opportunities is prevalent. APM Project would offer a diverse range of employment opportunities and careers for both community and regional residents. Ignace may require assistance to ensure local residents are able to realize project direct and indirect employment opportunities.
Income	Household income growth and diminished need for social assistance	Decline in employment opportunities is constricting growth in household incomes	← Growth in employment and as a result growth in household incomes and wealth creation →	<ul style="list-style-type: none"> The decline in employment has had a dampening effect on household income. APM Project would create local jobs and as a result this will stimulate growth in household income and wealth creation. Some residents may benefit from assistance and counseling regarding wealth and debt management. Ignace may require assistance to help residents realize employment opportunities and manage their finances.
Business Activity	Business growth and increasing business diversity	Many businesses in decline Downsizing and closures are have been commonplace	← Growth in business activity leading to growth in the number and diversity of businesses →	<ul style="list-style-type: none"> Decline in business activity has had a ripple affect across the community causing job loss and population decline. APM Project would create local direct and indirect jobs and stimulate business activity across the community. By reversing the population decline and raising incomes local market opportunities would present themselves and these in turn will stimulate business growth and diversity. Ignace may require assistance to plan, implement and manage economic development.
Tourism	Stability or growth in area tourism	An industry facing change Demographic, social and economic circumstances have affected the market	↔ Potential deterioration in tourism as a result of negative perceptions and project concerns ↔ Potential increase in tourism with niche market	<ul style="list-style-type: none"> Area tourism is strongly dependent on American market base which is being negatively impacted by wider economic circumstances. Traditional market segment is aging and their pursuit of conventional tourist product is waning; younger population seeking a different tourist product and willing to look further abroad to find it. APM Project may result in some negative perceptions of the area, but may also provide new markets for local tourist industry through population in-migrating to realize employment opportunities and visitors coming to area to learn about and see project. Ignace and tourism organizations may require assistance to manage the presence of APM constraints and opportunities.
Economic Development Services	An active, economic development organization that has demonstrated success in attracting businesses to the community	The Township has an economic development committee but tangible success has been hard to come by	↔ Businesses will want to locate in the community to take advantage of the business opportunities directly and indirectly created by the APM Project →	<ul style="list-style-type: none"> Economic development has been difficult given the overall economy and the ongoing local attrition in businesses and jobs. A new lumber mill is scheduled to open in 2013/2014 but the community is still seeking to increase economic diversification. APM would provide a catalyst for economic development through its own presence and creation of associated business opportunities. Ignace may need assistance to plan and implement a strategy that will fully realize the economic development opportunities presented by the APM.
Governance and Municipal Finances	Community is financially sustainable over short and long term	Able to cover annual operating costs Fiscal prudence required to cover long term capital debt Diminishing tax arrears	← An enhanced tax base with solid contributions from industrial and commercial properties → Additional revenues to cover operating and capital requirements	<ul style="list-style-type: none"> Business attrition, vacant properties and tax arrears have left the community with a weak revenue base. Hard and soft services need to be operated and maintained and in some cases upgraded or replaced (i.e. sewage treatment plant). The community is fiscally challenged to cover long term capital needs. APM by its presence would elevate revenues available to the municipality. Ignace may need assistance to understand the fiscal implications of the APM and to how best to manage its finances to ensure upside potentials are fully realized and downside risks are minimized.
Declining-Negative		←		
Neutral-Stable		↔		
Increasing-Enhanced-Positive		→		
Uncertain		△		

5.3 IMPLICATIONS FOR INFRASTRUCTURE

The Infrastructure or Physical Assets within a community is 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 Ignace in terms of its Physical well-being.

The ebb and flow of economic conditions in Ignace over the last few decades have had a profound effect on the attributes of the Physical Assets. During the time of economic prosperity in the late 1980s and early 1990s the housing stock in the community grew to accommodate an influx of workers and new households. As economic fortunes declined however, people left the community and their houses were put up for sale. Some of these were purchased but many fell vacant and when the prospect of a sale became unlikely many of these fell into tax arrears and were eventually taken over by the municipality. With a growing portfolio of vacant properties on its hands the municipality was anxious to quickly move these properties out of its ownership into the hands of purchasers who would pay taxes. Accordingly, the properties were put on the market at heavily discounted prices and over time most were absorbed. A few were purchased by residents but many were purchased by outsiders in search of low cost housing. Retirees from across the region were particularly attracted to the community by the prospect of acquiring a low cost home in an attractive natural location. There are also a number of serviced lots available for residential development.

The decline in economic fortune in the community has persisted for many years and ongoing business closures and downsizing have resulted in continued population decline and a steady stream of properties being put on the market. Discussions in the community indicated that there are over 70 listed properties which is in excess of 10 percent of the total housing stock. The matter of tax arrears persists but has improved from the year previous according to the 2011 (most recently available) Financial Information Return.

In terms of environmental services Ignace has strong capacity with its water treatment plant and landfill. The water treatment plant built in 2009 is in excellent condition and has capacity to handle a population of 5,000 residents. The landfill at current rates of usage has an anticipated

lifespan of 80 years. The one issue on the horizon with respect to environmental services is the sewage treatment plant which is outdated and is in need of near term refurbishment, possibly replacement.

Ignace is served by three modes of transportation. Road and rail transportation is afforded to the community by it respectively sitting astride the TransCanada Highway and the CPR mainline. Moreover in conjunction with the rail line the community also has a rail yard within its borders. Air transportation is afforded by an unstaffed 1,080 metre asphalt air strip and a float plane base. Regional bus service for the community is provided by Greyhound and a local taxi service caters to in-community transportation needs.

The APM Project has the potential to create net positive benefits on the physical assets of Ignace. In terms of housing, the APM Project will bring an influx of individuals and families to the community who will quickly absorb the available or vacant housing stock. At the same time a variety of new housing can be expected to be developed to further accommodate the rental and ownership needs of individuals and families. The absorption of new and existing homes will reinforce property prices, increase tax rolls and remove properties from tax arrears.

Although there is a strong upside for housing with the APM Project there is also a potential downside that needs to be carefully managed. If demand strongly outstrips supply price escalation will occur and the complement of affordable housing may be very low. A further note of caution with respect to housing is that supply limitations particularly during the construction phase may see a strong uptake of motel rooms by workers with the consequence that tourists and travelers might be displaced. Over the course of the undertaking attention will need to be carefully focused on maintaining an equitable housing supply/demand balance as well as protection of tourist/traveler accommodations and other related services to prevent unwanted consequences in that industry.

The community has water treatment and landfill capacities to handle growth. The wastewater treatment plant on the other hand, will need to be upgraded / replaced to accommodate community growth spawned by the project.

Ignace has strong transportation infrastructure given the presence of the TransCanada Highway and the CPR mainline and yard. Air traffic generated by the APM could provide impetus to upgrade the airstrip possibly to the point of handling scheduled commercial flights. The float plane base may also see expanded use.

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 Infrastructure

Criteria / Measures	Ideal CWB Condition	Current Ignace Profile	Possible Ignace Profile with APM Project	Observations
INFRASTRUCTURE OR PHYSICAL ASSETS:				
Housing	Sufficient housing stock to meet all needs and incomes Average house values increase over time in line with household incomes	A large number of properties are on the market House prices have been declining given the out-migration of population and the discounted selling of properties in tax arrears	Strong absorption of available housing and stimulus to housing prices New housing development Potential shortage of supply if development does not keep pace with demand	<ul style="list-style-type: none"> A large number of homes are on the market. Housing prices have been in decline for quite some time with the trend fueled by out migration of households and the availability of very low cost housing as a result of the sale of properties taken over by the municipality for tax arrears. APM would see the in migration of individuals and families who will absorb the available housing stock. As vacancy rates fall and housing supply becomes constricted housing prices might increase. APM would create a demand for a mix of housing types and tenure arrangements. 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. Those seeking accommodation may occupy motel rooms thereby reducing the supply of rooms available for tourists and general travelling public. Ignace may need 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	The water system and landfill are in good condition and have surplus capacity The sewage treatment plant is in need of upgrading or replacement	Increased demand for infrastructure and services Enhanced opportunities for new and renewed infrastructure	<ul style="list-style-type: none"> Ignace has water treatment/pumping capacity to handle a population of 5,000. The landfill has many decades of capacity remaining. The sewage treatment plant is in need of near term upgrading and rehabilitation. APM may place increased demands on existing infrastructure and may necessitate facility replacement in the case of the sewage treatment facility. APM would generate municipal revenues directly and indirectly that can be applied to facility operation and maintenance, upgrading and replacement. Ignace may need assistance to plan, operate, maintain, and build new as required to meet service demands associated with APM.
Transportation Infrastructure and Services	A strong complement of transportation facilities and services to meet the needs of the residents and businesses within the community	Situated on the TransCanada Highway and main east west CPR line Has rail yard affiliated with latter; also has unmanned airport	Upgrading / rehabilitation of rail yard and airport	<ul style="list-style-type: none"> Ignace has strong transportation linkages particularly for road (TransCanada Highway) and rail (CPR mainline and yard). Airport is currently unmanned but appears to only require modest maintenance and possibly upgrading. APM would increase road, rail and airport usage and this may necessitate upgrading and expansions. Ignace and relevant authorities may require assistance to create a multimodal transportation plan to design, build, operate and manage transportation facilities and services needed by APM.
Declining-Negative				
Neutral-Stable				
Increasing-Enhanced-Positive				
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 Ignace in terms of its Social well-being.

Recreational facilities and programs are generally a major source of pride for communities in Northern Ontario and serve as a social hub and focal point. They also provide opportunities to foster young talent in sports and recreation and have other benefits for the social, physical and emotional well-being of the population. Ignace is no exception as the recreational facilities and programs are very important to all age groups in the community. Of note is the community's ice rink, as hockey and figure skating are integral to the social fabric of Ignace. Silver Tops, the community's senior citizens social club, is also very active and provides a major service to the retired population. The rink, however, has recently experienced a reduction in its ice time due in part to decreased participation and also insufficient funding for extended hours of operation. The facilities and programs in the area face potential challenges linked directly to Ignace's declining population. As out-migration and attrition continue to occur, participation rates will decrease as will the tax base to support these facilities and programs. Based on community discussions, sustaining these facilities and programs is increasingly challenging.

The social services and organizations in the community also have a similar profile. They are a source of pride and provide a range of services to Ignace. They involve a number of volunteers and serve to bolster the well-being of the community. As with the recreational facilities and programs, community discussions indicate that with declining participation, sustaining the human resources needed to operate the social services and organizations is difficult.

Ignace is characterized by a strong sense of community pride. It is close-knit with strong support for its municipal leadership. The community is hopeful about its future in the face of a declining population and decreasing employment opportunities. It is actively pursuing economic ventures to help boost its economy and grow its population. The reopening of the Resolute Mill is a case

in point. The population has become less stable over time; however, with the out-migration of youth and in-migration of retirees. It is a community with strong identity and cohesion, but is also one that is in flux.

The APM Project would have a net positive benefit on the Social Assets of the community were it to be implemented in the area. With respect to the community recreational facilities and programs and also the social services and organizations, the increased population associated with the APM Project would be expected to increase demand on these resources. However, this increased population would also be expected to heighten participation rates, and create a larger base of human resources for volunteers. Increased funding and participation would allow Ignace to upgrade and expand its recreational and social programs. Based on discussions with the community, the project would be expected to have a positive influence on the dynamics of the community by providing a more stable population base through the retention of younger families and youth and by providing the ability to support its middle aged and seniors populations. This speaks to the character of Ignace as a tight knit and proud community.

Table 5.4 Implications for Social Assets

Criteria / Measures	Ideal CWB Condition	Current Ignace Profile	Possible Ignace Profile with APM Project	Observations
SOCIAL ASSETS:				
Community Recreational Facilities and Programs	A strong complement of recreational facilities and programs to meet the needs of the residents	Has a good complement of facilities but with population decline it is becoming less viable to operate some facilities and programs	<p>Increased demand for and patronage of recreation programs</p> <p>Enhanced opportunities for new and renewed facilities</p>	<ul style="list-style-type: none"> The decline in population has caused some attrition in recreational programming as the required complements of participants and volunteers are not available. It may not be cost effective for the community to try and continue with these services. The financial circumstances of the municipality do not permit continued investments in some services and associated infrastructure. Therefore, facilities are not maintained and upgraded to the degree they might be if more funds were readily available. For the most part, the community contains good infrastructure for the current population and has capacity to serve a larger population. APM would bring population into the community and this population may place demands on existing facilities and services and may create need for new facilities and services as well as increased funding and participation to allow upgrades and expansions to recreational facilities and programs. Ignace may need assistance to plan, develop and operate the recreational facilities and services needed in light of the APM.
Social Services and Organizations	A wide range of services, organizations and media outlets present to support the social fabric and needs of the community	Has some organizations and services present, with some media outlets (local paper) available	<p>Increased demand for and use of social services and organizations</p> <p>Enhanced opportunities for new services and organizations</p> <p>Enhanced opportunities for existing and new media outlets</p>	<ul style="list-style-type: none"> Ignace has a number of organizations, driven in large part by a strong cohort of volunteers, that supply social services to the community. The volunteers are often stretched thin, by participating in many events and organizations over the course of the year. With a growing population, the volunteer base will expand. APM would bring population in to the community and this population may place demands on existing services and organizations and may create a need for new services and organizations as well. Ignace would need assistance to plan, develop and resource the services and organizations needed in light of the APM.
Community Character	<p>Strong sense of community identity</p> <p>Cohesive community</p> <p>Stability of population</p>	<p>Strong sense of pride in history, community and natural environment</p> <p>A community with strong identity and cohesion</p> <p>Changing migration patterns</p>	<p>Increased youth retention and resources to strengthen pride in place</p>	<ul style="list-style-type: none"> Ignace has a strong sense of pride in place and is a cohesive community. Population dynamics in flux due to increased in-migration of retirees and out-migration of youth seeking employment opportunities. The APM Project would bring growth and stability.
Declining-Negative				
Neutral-Stable				
Increasing-Enhanced-Positive				
Uncertain				

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:

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

The Natural Environment is a source of pride for the community of Ignace. There are a number of provincial parks and conservation reserves in the area. Sandbar Lake Provincial Park is the only park that has user facilities and that monitors visitation. Visitation to this park has been increasing in recent years, and the park attracts visitors from the local area, elsewhere in Ontario, within Canada and even internationally. A number of natural areas and features of significance are also present in the area, and all provide active and passive recreational opportunities for locals and visitors. In the heart of Ontario’s ‘sunset country’, Ignace is surrounded by wilderness and natural features that create a strong sense of place for its residents.

Initial studies on the potential environmental effects associated with the project suggest that the APM Project is unlikely to have any significant negative effect on the natural environment which makes up the parks and protected areas near the community. In principle, there is the potential that visitation to the Provincial Park may experience some decline with the presence of the facility and any negative perceptions associated with the project. However, there are many examples of Provincial Parks that are situated close to or nearby to nuclear facilities (e.g., Darlington, MacGregor and Inverhuron Provincial Parks) where visitation has not been affected. It is expected that through working with park managers and clearly communicating with the public, any negative perception can be mitigated, if not even leveraged to take advantage of increased population growth and visitation associated with the project. Further study is required to better understand and predict the potential effects of the project on visitor perception and use of the area.

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. It is understood at this point in time that no net negative environmental effects are likely during the construction and operation phase of the used fuel repository itself.

The Project contains some flexibility with respect to on-site building designs and energy use to be consistent with environmental and social values. For example, the ability to use renewable sources of electric power, where feasible, coupled with energy-efficient building designs might limit the overall carbon footprint of the project.

Table 5.5 Implications for Natural Environment

Criteria / Measures	Ideal CWB Condition	Current Ignace Profile	Possible Ignace Profile with APM Project	Observations and Implications
NATURAL ENVIRONMENT:				
Parks and Protected Areas	Conservation reserves and parks are supported and maintained and also remain available for use	Reserves and parks are available for passive and active recreational use Park use has been increasing over time	➡ Potential for increased demand Potential for negative effects on usage and visitation	■ Provincial parks have been attracting an increasing number of visitors and are a sense of pride for the community. ■ Potential for increased demand on conservation reserves and provincial parks. ■ With proper planning and dialogue, resources would remain protected and increased demand managed.
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 demand and degradation of features	■ As with any large scale project, the APM Project has the potential to have a negative effect on the area's natural areas and features of significance. ■ 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 net negative environmental effects are likely during the construction and operation phase of the used fuel repository itself
Declining-Negative		←		
Neutral-Stable		■		
Environment-Integrity Maintained		■		
Increasing-Enhanced-Positive		➡		
Uncertain		△		

5.6 COMMUNITY WELL-BEING SUMMARY

Based on the foregoing discussion and preliminary assessment, the APM Project has the potential to be a very good fit for the community of Ignace. The APM Project has the potential to enable the aspirations of the community and through this, foster well-being, as Ignace defines it. Based on discussions within the community, it is understood that the APM Project would provide economic growth, stabilize and grow the population.

Ignace is well suited to take on additional growth. It has a desire to grow and it has some surplus housing stock, and a basic complement of municipal and transportation infrastructure and educational facilities. Its residents are familiar with large resource-development projects and possess some of the skills that would be required for the implementation and operation of the APM Project. The transportation networks are a large benefit for the APM Project, with direct access to highway, rail, and air resources.

It is recognized that some tourist operators are sensitive to the APM Project. However, others can see positive implications for the tourist industry as a result of increased population and tourism visitation to the area. Some natural areas may be negatively influenced during the construction phase of the project. Further dialogue and effective mitigation and environmental protection measures would ensure that the overall environmental integrity of the area is maintained.

Table 5.6 Overall CWB Implications

Criteria / Measures	CWB is Enhanced When ...	Current Ignace Profile	Possible Ignace Profile with APM Project	Observations and Implications
OVERALL CWB IMPLICATIONS:				
Human Assets	Population growth occurs and youth are retained in the community	Declining	Enhanced	<ul style="list-style-type: none"> APM would bring population growth, which is the key priority and aspiration for the community. Youth would be retained through increased employment opportunities and new residents would be attracted to the area. Educational and healthcare resources would be enhanced and new facilities could be developed.
Economic Assets	Employment opportunities are available and tax base increases to fund community services and facilities	Declining	Enhanced	<ul style="list-style-type: none"> There will be increased employment opportunities and a more diverse range of jobs would be available. Increased funding through a wider tax base would provide the financial resources for Ignace to fund its infrastructure projects, educational developments, community and recreational facilities and programs and social services and organizations. The increased jobs from the APM Project would be the catalyst for Ignace to enhance its community well-being.
Infrastructure	Infrastructure is maintained or improved to meet the needs of the community	Declining	Enhanced	<ul style="list-style-type: none"> The APM Project, while placing increased demands on some of the infrastructure and services, would overall provide increased funding to improve and enhance existing services.
Social Assets	Opportunities exist for recreation and social networking. Community is cohesive, and community character is enhanced.	Declining	Enhanced	<ul style="list-style-type: none"> The community would see an overall benefit to its Social Assets through increased participation and funding to its recreational facilities and programs as well as its social services and organizations. With proper planning and communication, no serious social divisions would be expected to occur in the community. Interest in the project appears to be very positive and the community is largely cohesive on this issue.
Natural Environment	Natural areas, parks and conservation reserves are preserved and maintained for use and enjoyment	Positive / Enhanced	Environment – Integrity Maintained	<ul style="list-style-type: none"> 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 maintained. It is understood at this point in time that no net negative environmental effects are likely during the construction and operation phase of the used fuel repository itself
Declining-Negative				
Neutral-Stable				
Environment-Integrity Maintained				
Increasing-Enhanced -Positive				
Uncertain				

6.0 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 community 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 addressed⁸. The table which follows draws on information outlined in the previous discussion to understand the potential to foster well-being in Ignace against these original factors. The table summarizes preliminary findings about the implications of the APM Project, were it to be implemented in the community, on various factors of well-being. 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 area Aboriginal communities. Ignace realizes that it would be essential to develop relationships with all of the foregoing to support the implementation of the project.

⁸ NWMO 2010a.

Table 6.1 Summary Table of Criteria to Address Factors Beyond Safety

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	<ul style="list-style-type: none"> 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.
	Sustainable built environments	Enhanced	<ul style="list-style-type: none"> Community infrastructure and built environment will be enhanced through project activities and investments in the community.
	Sustainable natural environments	Maintained	<ul style="list-style-type: none"> 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 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
	Local and regional economy and employment	Enhanced	<ul style="list-style-type: none"> Significant employment and population growth will occur in Ignace and surrounding communities – – hundreds of new jobs might be created in Ignace. With these jobs comes the potential to double the current population of Ignace. New opportunities would be created for local businesses to serve the project and growing population.
	Community administration decision-making processes	Enhanced	<ul style="list-style-type: none"> Local leadership 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	<ul style="list-style-type: none"> Ignace has aspirations to grow its population and economy as platforms for its sustainability plan. The APM Project appears to be a fit with community objectives and aspirations in this regard.
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	<ul style="list-style-type: none"> There is a strong safety case. Engagement of surrounding communities is beginning and further dialogue will be required 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	<ul style="list-style-type: none"> Infrastructure and built fabric will be enhanced through project activities and investments in the community and surrounding areas.
	Sustainable natural environments	Maintained	<ul style="list-style-type: none"> Some natural areas may be affected by 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	<ul style="list-style-type: none"> Substantial employment and economic development opportunities would extend to the surrounding region.
	Community administration and decision-making processes	Enhanced	<ul style="list-style-type: none"> Engagement of surrounding communities has been initiated and is ongoing. Some surrounding community leadership 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	<ul style="list-style-type: none"> Engagement of surrounding communities has been initiated and is ongoing. Surrounding area communities are collectively seeking economic development and growth in the region. The APM project generally appears to be in alignment with these aspirations.
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	<ul style="list-style-type: none"> The area contains 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	<ul style="list-style-type: none"> There are no major infrastructure limitations in Ignace or the surrounding region to impede project implementation. Ignace and the surrounding areas have multiple modes of transportation, social and economic support services, and capacity to absorb the anticipated growth in population and economic activity. Some investments would be required to accommodate specific deficiencies in certain infrastructure such as: wastewater, schools, recreational facilities, housing, etc.
	Potential for social infrastructure to be adapted to implement the project	Yes	<ul style="list-style-type: none"> The community of Ignace appears to have the necessary core of social infrastructure in place to plan and adapt to changes resulting from the project.
	The NWMO resources required to put in place physical and social infrastructure needed to support the project	To be determined	<ul style="list-style-type: none"> In all likelihood, Ignace would require assistance in terms of planning, human and financial resources. Further studies would be required to explore the specifics of these requirements.

Table 6.1 Summary Table of Criteria to Address Factors Beyond Safety (Cont'd)

Factors Beyond Safety	Evaluation Factors to be Considered	Indication	Discussion Based on Preliminary Assessment
<p>Potential to avoid or minimize effects of the transportation of used nuclear fuel from existing storage facilities to the repository site</p>	<p>The availability of transportation routes (road, rail, water) and the adequacy of associated infrastructure and potential to put such routes in place from a social perspective</p>	<p>To be determined</p>	<ul style="list-style-type: none"> ▪ Ignace is located on the TransCanada Highway between Thunder Bay and Dryden, and the CPR mainline also dissects the community with an adjacent yard. ▪ It also contains a small airport and a floatplane base. ▪ The community and region have access to multiple modes of transportation which appear to have adequate capacity for this project. ▪ 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.
	<p>The availability of suitable safe connections and intermodal transfer points, if required, and potential to put them in place from a social perspective</p>	<p>To be determined</p>	<ul style="list-style-type: none"> ▪ 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.
	<p>The NWMO resources (fuel, people) and associated carbon footprint required to transport used fuel to the site</p>	<p>1,350-2,630 tonnes of equivalent carbon dioxide emission is expected to be produced per year</p>	<ul style="list-style-type: none"> ▪ In a scenario of all road transport of 4.6 million fuel bundles from the interim storage sites to an APM facility near Ignace, approximately 2630 tonnes of equivalent carbon dioxide emissions are expected to be produced per year. ▪ In a scenario of transport by mostly rail mode approximately 1350 tonnes of equivalent carbon dioxide emissions is expected to be produced per year.
	<p>The potential for effects on communities along the transportation routes and at intermodal transfer points</p>	<p>To be determined</p>	<ul style="list-style-type: none"> ▪ There is a robust technical safety case for the safe and secure transport of used nuclear fuel. However, 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.

7.0 RELATIONSHIP BUILDING AND ENGAGEMENT SUMMARY

7.1 OVERVIEW OF ENGAGEMENT

NWMO has engaged with Ignace leadership and community members and has begun to engage surrounding communities and First Nations/Aboriginal organizations⁹ 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;
- Meetings with nearby First Nations;
- Attendance at regional meetings, conferences [e.g. Northwestern Ontario Municipal Association (NOMA)];
- 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:

1. Local political leaders (e.g., Mayor and Councilors);
2. Members of the Community Liaison Committee;
3. Local business owners/operators;
4. Local service providers (e.g. emergency services, social services, education);
5. Community groups (e.g. clubs, associations);
6. Surrounding community leaders; and
7. Residents.

Based on discussions with the above, there appears to be strong and growing potential to sustain interest in the local community. There also appears to be a very strong and growing interest to continue and move forward with the siting process.

⁹ NWMO 2010b.

The community has taken initial steps to engage its neighbours, including Aboriginal peoples and has begun to set the foundation for further constructive consideration of the project and opportunity to work collaboratively to explore the project and interest in the broader area. These initial steps have elicited positive interest from some surrounding communities and discussions are ongoing.

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 key priority for Ignace, as identified through the various engagement activities, is to create economic growth. Growth is necessary to address its most important challenges: a declining and aging population; a lack of employment opportunities; decreasing household incomes; a tax base dependent on residential assessments; lack of retail and commercial services; and decreasing social and recreational programming. The tourism industry is also experiencing a decline for a variety of reasons; the most notable is its dependency on the American clientele who are themselves experiencing difficult economic times that are curtailing travel expenditures. Although tourism plays a role in the local economy, it is understood that it is not the answer to long term community sustainability. The APM Project, however, 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, thereby decreasing its dependency on resource-based industries (e.g. mining and forestry), which are often associated with a cyclical economy.

7.2.2 Summary of Key Interests/Questions

In Ignace the majority of the people engaged in discussion were interested in learning more, were supportive of their community being involved in the siting process and look forward to next steps. Several key interests were recurring and identify the areas 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.

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. 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 the potential for accidents and malfunctions during transportation and the ability of emergency services to respond should incidents occur. Questions about environmental risks include potential for long term (100 years plus) contamination of lakes and groundwater, and the potential for degradation of wildlife and fish either as a direct result of the project or indirectly due to an increased demand on hunting fishing resources.

Economic Benefit and Opportunities for Growth

The project is seen as a positive means to provide long term economic stability for the community. Questions focused on what type of employment opportunities would be available and how many workers are required for each phase.

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.

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

- The potential for negative effects due to perceptions of the project; and
- APM process and project description details.

The Potential for Negative Perception

The potential for the APM Project to create negative perceptions of the area was a concern expressed by some community members, predominately those associated with tourism businesses. Although the project is predicated on a very strong safety case, preconceived ideas among tourists could diminish the attractiveness of the area in their eyes potentially affecting tourist activity and related facility property values. This is the concern of some tourist camp operators. However, other operators see the potential for the creation of new tourism business opportunities with the influx of population and increased visitation to the area.

APM Process and Project Description Details

Residents are interested in, and actively learning more about the APM process and project. Recurring comments or questions include:

- More detailed understanding of the indirect and induced employment and business opportunities;
- Clarification on the APM process and specifically the Feasibility Study;
- More details regarding how and where the specific site might be located; and
- Ability to retrieve the waste if technological advancements in the future enables reprocessing or recycling of waste.

7.2.3 Ongoing Engagement

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

8.0 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 Ignace.

The preceding chapters have looked at implementation of the APM Project in Ignace 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, dialogues with community members and leaders and on-going analysis, it is understood that Ignace has a strong interest in hosting the APM Project to realize growth and development opportunities within the community and surrounding areas.

The community of Ignace 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 a 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 Ignace will not remain committed throughout the subsequent steps.

There is high potential for sustained interest in the surrounding communities. Ignace has taken initial steps to engage its neighbours, and has begun to set the foundation for further constructive consideration of the project and its opportunities. These initial steps have elicited positive interest from some surrounding communities and discussions are ongoing. Further discussions will be required to gain an understanding of the potential interest in surrounding communities.

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

There is also a high potential for the APM Project to foster well-being in the surrounding communities. Preliminary discussions have revealed a strong interest in the economic development potential offered by the project. Ongoing discussions will be required to further assess the implications of the project for surrounding area communities. 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 identify the specifics of how a partnership arrangement could work.

There are some uncertainties associated with the proceeding 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.
 - 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 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 in successful implementation of the project.
3. Interest in the community for further learning about the project needs to be sustained:
 - a. The site selection process spans several years and interest and conversation in the community and area needs to be sustained throughout this process, including multiple election cycles.
 - b. The potential effects of the project on the community and area 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, largely from outside of the area, may actively seek to influence community decision-making and community leaders will need to respond to these pressures. Ignace 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:
 - a. Transportation will be spatially extensive from current interim storage sites to repository. 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 community input:
 - a. This requires regard for input from the community and surrounding communities.
 - b. This requires engagement by the NWMO and input from the community and surrounding communities. This may require capacity building to enable this input, which would include Aboriginal Traditional Knowledge.
 - c. Input from transportation route communities will also need to be incorporated.

9.0 REFERENCES

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