APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



TABLE OF CONTENTS

	7.2.4	Regional a 7.2.4.1 7.2.4.2	Introduction	rvices nponent Baseline School Enrolment Advanced Education Health Services Protection Services and Facilities Social Services and Facilities	7.2.4-1 7.2.4-2 7.2.4-2 7.2.4-2 7.2.4-3
			7.2.4.2.6	Past, Present and Future Projects and Activities	
		7.2.4.3	Potential Ef	fects of the Proposed Project and Proposed	
					7.2.4-6
			7.2.4.3.1		
			7.2.4.3.2	Past, Present and Future Projects and	
				Activities	7.2.4-9
			7.2.4.3.3	Mitigation Measures	7.2.4-10
		7.2.4.4		fects and their Significance	
		7.2.4.5		Effects	
		7.2.4.6			
		7.2.4.7	Conclusion		7.2.4-24
			List	of Tables	
Table 7.2.4-1:	Main H	ealth Centre	es by Comm	unity	7.2.4-3
Table 7.2.4-2:				Services in SERSA	
Table 7.2.4-3:				gional and Community Services	
Table 7.2.4-4:				itial Residual Effects for Regional and	
	Commi	unity Service	es		7.2.4-12
Table 7.2.4-5:	Potenti	al Effects or	n Regional a	iveness of Mitigation to Avoid or Reduce nd Local Services during Mine Site	
Table 7.2.4-6:	Signific	ance of Pot	ential Residu	ual Effects for Regional Services	7.2.4-22
			List	of Figures	
Figure 7.2.4-1:	Crimina	al Code Offe	enses in the	SERSA, 2001 to 2010	7.2.4-4

APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



7.2.4 Regional and Local Services

7.2.4.1 Introduction

This subsection describes the approach and applicable regulatory framework for the assessment of the Regional and Local Services Valued Component VC.

The potential effects of the Blackwater Gold Project (the Project) on regional services within the Socioeconomic Regional Study Area (SERSA) are dependent upon Project-related population growth and activities resulting in increasing demands on existing regional services, as well as on the ability of these services to accommodate these additional demands. Regional services include education, health services, protection services and facilities (law enforcement, fire protection and emergency services), and social services and facilities.

The Project site will be regulated under the "Health, Safety and Reclamation Code for Mines in British Columbia" and WorkSafeBC. All off-site services will be provided by various service delivery agencies subject to relevant issue-specific legislation and/or regulation. The service providers will be responsible for addressing any Project-related increased demand within the context of their existing regulatory requirements as a matter of normal business practice.

Potential effects on regional and local services are assessed based on current data and future expansion plans collected from secondary public sources, supplemented by interviews with key informants in the study communities. Relevant community knowledge gathered during the engagement and consultation process for this Project was also incorporated when available. Key sources of information consulted include the British Columbia (BC) Ministry of Education, Northern Health, BC Ministry of Public Safety and Solicitor General, and civic and municipal websites.

7.2.4.2 Valued Component Baseline

This subsection provides a summary of baseline information on the regional and local services in the SERSA and the source of the information; identifies past, present or future projects/activities that may impact the VC; and describes or community knowledge, where available. Traditional knowledge (TK) is not applicable to this VC.

A detail description of regional and local services in the SERSA is available in **Section 5** of the Social Baseline Report (**Appendix 7.1.1A**). Following is a summary of baseline conditions for:

- School enrolment;
- Advanced education;
- Health services;
- Protection services and facilities; and
- Social services and facilities.



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Section 4.3.6.2, discusses the Project Inclusion List (**Table 4.3-11**) and indicates that most of the identified projects either will not overlap temporally with the Project or that there is insufficient information on the demands they will create to include them in a cumulative effects assessment. **Table 4.3-12** describes the rationale for not including two other projects. **Section 6** (**Table 6.2.3-7**) provides a list of other major projects in the region and the related text evaluates their relevance to the economic and social effects assessment.

7.2.4.2.1 School Enrolment

The number of children attending school in the SERSA has been declining in recent years as the population has aged and decreased, resulting in fewer children of school age. Between 2007 to 2008 and 2011 to 2012, enrolment in the public schools decreased by 8% in the Nechako Lakes School District (SD) and by 11% in the Prince George SD. Typically, enrolment rates are higher in elementary schools than in secondary schools (Marks, 2012). As the economy in the region improves, the number of families with school-age children moving into the region is expected to increase (Marks, 2012). Vanderhoof has seven public schools and two private schools with adequate capacity. Current enrolment shows that there is room to accommodate more students.

7.2.4.2.2 Advanced Education

Interviews with CNC representatives indicated that community education programs offered at Vanderhoof, Fort St. James, Fraser Lake, and Burns Lake are driven by the demands of the current local labour market. This means that the academic calendar and curricula vary depending on the needs of local employers and employees. Education programs typically run for 5 to 12 months and are contracted by local employers. CNC representatives noted that the community learning centres have the use of additional physical spaces to accommodate large classes. In addition, a number of courses are offered online and do not require a minimum enrolment to be offered. The Prince George campus has a fixed academic calendar (Wishart, 2013).

7.2.4.2.3 Health Services

Three Local Health Areas (LHAs) within the SERSA—Burns Lake, Nechako, and Prince George—comprise the Northern Interior Health Services Delivery Area.

The Burns Lake LHA operates the Lakes District Hospital and Health Centre and the Pines long-term care facility, which are in the SERSA. The Lakes District Hospital and Health Centre has 13 acute care beds and another six beds for overflow. Hospital services include an emergency room, acute care treatment, palliative care, mental health and addiction services, and medical and x-ray imaging (Hunter, 2012). A new hospital is being constructed, which will double the capacity of the emergency room by 2014. The Health Centre is busy, and at times operates near or at capacity. The Pines long-term care facility is adjacent to the Lakes District Hospital and Health Centre.

Within the Nechako LHA, which includes the SERSA communities of Vanderhoof, Fraser Lake, and Fort St. James, there two hospitals, a community health centre, a long-term care facility, and



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



a health unit offering public health and mental health and addictions services (Note: These services are provided out of the Vanderhoof Health Unit).

Table 7.2.4-1 is a summary of the main health facilities in the SERSA.

Table 7.2.4-1: Main Health Centres by Community

	Name of		Doctors (Total ⁴)	No.	Services	
Community	Health Care Facility	No.	Type of Doctor	of Beds		
Vanderhoof	St. John Hospital	14	Oncology, Obstetrics, General Surgery, Family	25 (excludes 3 maternity beds)	Emergency Room, General Surgery (limited surgical program), Lab, X-ray (Note: Also a health unit offers public health and mental health and addictions services)	
Fort St. James	Stuart Lake Hospital	5	Family	16 (including treatment beds)	Emergency Room, Lab, x-ray, mental health and addiction services	
Fraser Lake ⁽¹⁾	Fraser Lake Community Health Centre	3	Oncology, Cardiology, Dermatology	4 (treatment beds)	Emergency Room, mental health and addiction services, Lab	
Burns Lake	Lakes District Hospital and Health Centre	4	Family	13 beds (surge capacity to 19), new facility ⁽⁵⁾ with 16 beds	Emergency Room, Lab, x-ray, mental health (no beds)	
Prince George	University Hospital of Northern BC	100+(3)	(2)Oncology, Cardiology, Plastics, Gynecology/Obstetrics, Pediatrics, Psychiatry	197	Emergency Room, Intensive Care Unit, Critical Care, Lab, x- ray, surgery, rehab, mental health and addiction services	

Note: (1)Specialists will visit the community regularly. (2)The University Hospital is a full-services hospital. These are only a few of the types of medicine practiced at the hospital. (3)As the University Hospital is a teaching hospital it is prone to fluctuating numbers of Doctors/Instructors. (4)The number of doctors is the number of doctors offering services but does not imply full-time equivalent. (5)The Emergency Department has four treatment areas, of which one is a trauma room. The new facility will have five treatment areas and one trauma area.

Source: Pacheco, 2012; Edge, 2012; Hughes, 2012; Hunter, 2012; Collins, 2013; Oke, 2014.

7.2.4.2.4 Protection Services and Facilities

The range of protection services available in the SERSA includes law enforcement, fire protection, ambulance and 911 emergency services, emergency preparedness planning, search and rescue, and correctional services.



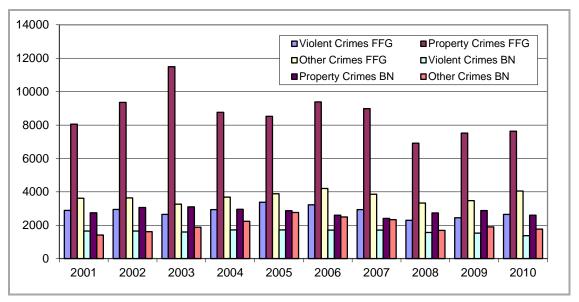
APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



7.2.4.2.4.1 Law Enforcement

The Royal Canadian Mounted Police (RCMP) operates in two regional policing areas within the SERSA, the Bulkley-Nechako Region and the Fraser Fort George Region. The Bulkley-Nechako is served by RCMP detachments in Burns Lake, Fort St. James, Fraser Lake, and Vanderhoof, which collectively have a total of 36 RCMP officers plus another 12 officers based in Prince George who patrol the highways and provide community policing in the First Nation communities (MacDonald, 2012; Foster, 2012; Thalhofer, 2012; Keays, 2012). In the Fraser Fort George Region, 188 RCMP officers are responsible for Prince George and the surrounding area (Stubbs, 2012).

All key informants indicated that the current physical infrastructure was adequate (a new detachment in Prince George was under construction during the time this report was written), but caseloads per officer are high, and the RCMP detachment staff are challenged to meet the demand at current personnel levels (Keays, 2012; Foster, 2012; Thalhofer, 2012). In addition, The Fraser Lake detachment reported experiencing challenges recruiting and retraining staff. Figure 7.2.4-1 provides data on criminal code offenses in the SERSA, 2001 to 2010. Additional information on crime rates for the LHAs that comprise the SERSA is presented in Section 7.2.5.



Source: BC Ministry of Justice, 2011.

Figure 7.2.4-1: Criminal Code Offenses in the SERSA, 2001 to 2010

7.2.4.2.4.2 Fire Protection and Emergency Services

The Bulkley-Nechako Region has a total of 10 fire and emergency rescue departments, four of which are within the SERSA. Costs are shared between the municipalities and the regional district. Located in Burns Lake, Vanderhoof, Fort St. James, and Fraser Lake (**Table 7.2.4-2**), these fire departments/emergency services are volunteer-based and also serve the surrounding rural regions. Most call-outs for the fire departments are for residential and commercial fires,



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



followed by motor vehicle accidents. With the exception of the Vanderhoof fire department, all firefighters in the region are trained as first responders, enabling them to provide basic medical emergency care. The Vanderhoof personnel do not have this training because of the high capability of existing hospital and ambulance staff (Pacheco, 2012).

Table 7.2.4-2: Fire Protection and Emergency Services in SERSA

Community	No. of Firefighters	First Responders?	Average No. of Calls per Year
Burns Lake	30, including 1 Fire Chief	Yes	90*
Fraser Lake	20, including 1 Fire Chief	Yes	200
Fort St. James	40, including 1Fire Chief	Yes	175
Vanderhoof	36, including 1 Fire Chief	No	200
Prince George	75, including 16 Captains, 4 Assistant Chiefs, 2 Deputy Chiefs, 1 Training Officer, 1 Fire Chief	Yes	5,000

Note: * The fire protection boundary for the Burns Lake Fire Hall does not extend beyond the village.

Source: McBride, 2012; Balding, 2012; Pacheco, 2012; Bennett, 2012; Iverson, 2012.

7.2.4.2.5 Social Services and Facilities

The BC government provides child, family, and other social services to protect children, prevent abuse, and respond to the needs of BC residents through the Ministry of Children and Family Development, the Ministry of Health, and the Ministry of Social Development and Social Innovation. These ministries have local offices throughout the SERSA. Additional resources are available through the Prince George and District Elizabeth Fry Society in Prince George and Burns Lake (Prince George and District Elizabeth Fry Society, 2012). The Nechako Valley Community Service Society provides a full range of services to residents of Vanderhoof, Fraser Lake, and Fort St. James. Services include but are not limited to counselling, outreach, and residential programs (NVCSS, 2013). The local RCMP detachments also offer educational programs to prevent substance abuse and violence, often collaborating with community-based health service and non-profit organizations, like the Omineca Safe Home Society in Vanderhoof (Keays, 2012). Although resources are limited, everyone who seeks help receives it (Powers, 2012).

The overall characteristics of regional services in the Local Study Area (LSA) area as follows:

- The LSA appears to have adequate regional services—such as education facilities, health care, and social services—to meet the current local demands, although the RCMP, which patrols the area, has indicated that its resources are tight;
- Key urban centres in the LSA have developed and maintain Emergency Preparedness Plans (EPP) in partnership with the Regional District. The transportation network throughout the LSA is varied and well maintained;
- Vanderhoof has a diversity of educational institutions that offer a full range of educational services; and



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



 Vanderhoof has a full range of modern medical services including a 25-bed hospital (excluding 3 maternity beds), medical clinic with 14 local doctors, and private practitioners.

The overall characteristics of regional services in the Regional Study Area (RSA) area are as follows:

- As in the LSA, the urban centres are regional service hubs, providing services for those living in the communities and in surrounding rural catchment areas;
- The regional services, including education and medical facilities and resources, within
 the RSA appear to be adequate to meet current demands, although the RCMP who
 serve the area have indicated that while current physical infrastructure is adequate (a
 new detachment in Prince George was under construction during the time this report was
 written) more officers are needed to keep up with their caseloads;
- Key urban centres in the RSA have developed and maintain EPPs in partnership with the Regional District;
- Prince George is the regional hub for education. The city has an adequate range of educational facilities that offer a full range of educational services; and
- Prince George has a full range of medical services with 10 health care facilities operating a range of services from acute care to assisted living. The main hospital offers 34 medical services with good capacity, including 197 beds and more than 100 medical specialists.

7.2.4.2.6 Past, Present and Future Projects and Activities

Section 4, Subsection 4.3.6.2, Table 4.3-11 shows the Summary Project Inclusion List developed for Cumulative Effects Assessment (CEA) (**Appendix 4C** contains the comprehensive Project Inclusion List). Activities associated with changes in regional and local services would be driven by population and could include:

- Mining exploration and existing;
- Forestry logging; and
- Pipeline projects.

7.2.4.3 Potential Effects of the Proposed Project and Proposed Mitigation

This subsection:

- Identifies and analyses potential effects resulting from the proposed Project's construction, operations, and closure phases;
- Identifies and describes any potential effects from other known past, present, certain and reasonably foreseeable future project or activities in the proposed Project area; and
- Describes measures to mitigate the potential adverse effects identified above.



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



This section assesses the ability of regional and local services to absorb potential temporary and permanent increased demand resulting from the proposed Project. This includes assessing the potential increased demand for educational, health, social and protective services, and determining what affects a temporary and permanent influx of new residents may have on the study area's services and conditions. The assessment is based on forecasts of population growth (Section 7.2.2) and employment demands (Section 6.2.3), which has been undertaken in the context of potential, reasonable and foreseeable future changes in economic activity in the region.

The types of interactions associated with project activities and project components in relation to the Regional and Local Services VC are classified as: key interactions, moderate interactions, or negligible interactions (**Table 4.3-2** Project Component and Activity Interaction Matrix for Selected VCs, **Section 4**). The interactions are with the Project as a whole and the Mine Site is selected as representative for the whole Project.

7.2.4.3.1 Potential Project Effects

Project effects on regional services will be largely attributable to changes in population. Operations workers who choose to relocate to the SERSA will create a population impact and thus increase the demand for regional public services. In addition, changes in traffic on area roads could result in higher demands for public safety and health services if there is an increase in accidents. The Project needs for qualified workers would also increase the demand for regional educational services. Finally, Project operations could place additional demands on health services if accidents at the worksite occur. **Table 7.2.4-3** describes the potential Project effects and their likelihood.

Changes in demand for regional services are carried forward in this assessment. In general, effects are negative when reflecting increases in demand for a range of services and positive when this demand declines. An increase in demand is predicted to be adverse mainly because of the strain that is expected to be placed on existing services, programs, and government resources. The additional demand has the potential to create congestion in public services. However, this would depend on the current spare capacity of the services and on the ability to expand the supply of those services.

As discussed earlier, Project effects on regional services will be associated with:

- Changes in population -in-migration will increase demands for local and regional public services;
- Changes in traffic on area roads that could result in higher demands for public safety services (RCMP and Health) if there is an increase in accidents;
- Potential accidents at the worksite that could increase demands for regional health services; and
- Changes in demand for skilled workers that could increase incentives for new job market entrants and unemployed to obtain additional training to benefit from Project employment opportunities.



APPLICATION FOR AN ENVIRONMENTAL ASSESSMENT CERTIFICATE / ENVIRONMENTAL IMPACT STATEMENT ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Table 7.2.4-3: Potential Project Effects on Regional and Community Services

Interaction with Project	Project Phase	Potential Project Effect	Likelihood of Occurrence
Education	Tildoo	T Gronital Froject Endot	Occurrence
In-migration of job seekers	С	In-migration affects demands for education services	Low
In-migration of workers and their dependents	0	In-migration creates additional demand for education services	Low
Project demand for semi- skilled and skilled workers	0	Project hiring requirements will increase demands for training programs and apprenticeship programs	High
Out-migration of workers and their dependents	CL	Out-migration decreases demand for education services	Low
n/a	PC	n/a	n/a
Health Services	ı		ı
In-migration of job seekers	С	In-migration affects demands for health services	Low
Transportation of workforce and materials	C, O	Traffic volumes to and from mine site would increase demand for health services if accidents occur	Low
Accidents and malfunctions at the worksite	C, O	Accidents at worksite could increase demand for regional health services	Low
In-migration of workers and their dependents	0	In-migration creates additional demand for health services	Low
Out-migration of workers and their dependents	CL	Out-migration decreases demand for health services	Low
Transportation of workforce and materials	CL	Reduction in traffic volumes to mine site and termination of mine activities decreases demand on regional health services	Low
n/a	PC	n/a	n/a
Protective Services			
In-migration of job seekers	С	In-migration affects demands for protective services	Low
Transportation of workforce and materials	C, O	Traffic volumes to and from mine site create new demands for protective services	Low
Accidents and malfunctions at the worksite	C, O	Accidents at worksite could increase demand for protective and emergency services	Low
In-migration of workers and dependants	0	In-migration creates additional demand for protective services	Low
Out-migration of workers and their dependents	CL	Out-migration decreases demand for protective services	Low
Transportation of workforce and materials	CL	Reduction in traffic volumes to mine site and termination of mine decreases demand on protective services	Low
n/a	PC	n/a	n/a
Social Services			
In-migration of job seekers	С	In-migration affects demands for social services	Low
In-migration of workers and their dependents	0	In-migration creates additional demand for social services	Low
Out-migration of workers and their dependents	CL	Out-migration decreases demand for social services	Low
n/a	PC	n/a	n/a

Note: C = construction; CL = closure; O = operations; PC = post-closure



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



As discussed in **Section 7.2.4.3.1** Demographics, population increases during construction are expected to be immaterial and, therefore, would not cause a noticeable effect on regional services.

During operations, New Gold Inc. (Proponent) intends to hire the majority of the workers from within the SERSA and provide a self-contained camp for workers at the site; however, up to 290 people (100 families) are expected to relocate to the SERSA. This corresponds to approximately 0.3% of the current population, which represents a very small increase over baseline conditions. Further, population increases are predicted to be focused in Prince George and Vanderhoof. If up to 58 people decided to relocate to Vanderhoof, and 232 to Prince George, both communities have adequate capacity to serve the additional demands for community services created by their arrival. Besides, Prince George's population declined by 2% between 2001 and 2006; its population, then recovered between 2006 and 2011, but it remained below 2001 levels. With the exception of RCMP services, it is expected that the city has enough capacity to absorb minor increases in demand.

Some local governments in rural areas of northern BC have experienced a growing number of people living adjacent to their borders. These people are either seeking work or accompanying those working at a site. They create a 'shadow population' that could place additional pressures on services provided by these communities. The Project is remotely located and accessible by either a long drive on a FSR or by flying into the site. Workers will be housed in a self-contained camp and no personal vehicles will be allowed to transport workers to the site. This and the remote Project location do not support workers living at adjacent locations to the camp and therefore no 'shadow population' is anticipated.

During both the construction and operations phase, new traffic volumes will be created between the mine site and the camp. This new demand is expected to result in higher demand for RCMP and health services.

During the closure phase, the out-migration of the workers and their families and the termination of the mine are expected to decrease the demand on regional services and reduce the traffic volumes to and from the mine site.

7.2.4.3.2 Past, Present and Future Projects and Activities

Activities associated with changes in population have the potential to affect the demographics VC, including those listed in **Section 7.2.4.2.6**. These include demographic changes attributable to in and out-migration associated with workforce demands in these industrial sectors. Mining activities, logging activities and pipeline projects are already part of the inherently cumulative project-specific effects assessment because they are incorporated in the assessment of Project employment and population effects, which in turn affect the Regional and Community Services VC.



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



7.2.4.3.3 Mitigation Measures

Discussion of appropriate mitigation measures is a shared responsibility between the Proponent, the government, and the public. As a result, all of these parties must share responsibility for social effects management for it to be effective.

The Proponent will clearly communicate its mine planning schedules and activities for construction, operations, and closure. The Proponent will also work closely on an ongoing basis with Northern Health, local fire departments, RCMP and BC Ambulance to ensure that the appropriate information on the changes in area transportation volumes, mine operations and the change to the local population are considered. The Proponent will provide information to communities in the SERSA on where new residents associated with the mine are locating and what the community may anticipate as the mine moves forward.

In addition, at the mine site, the Proponent will be providing security services that will focus on ensuring a secure and safe work site. The Proponent will implement a no on-site alcohol and drug policy and no hunting and fishing policy, including related activities, for construction and operations staff and contractors while on company business or staying in accommodations provided by the company. There will be policies and guidelines for ensuring a respectful workplace: no harassment, safety and security, multi-cultural workforce considerations, and Aboriginal awareness training. The Proponent will report this progress annually. The mine site will provide full firefighting equipment and trained personnel to meet all onsite fire and rescue needs. The Proponent has an established internal Health and Safety Management System, which will provide guidance for health care and emergency response to the Project as well as outlying areas that are not readily serviced by Vanderhoof.

The mine site will have trained mine rescue personnel and mine rescue equipment that will be part and parcel of regional emergency response planning. As has been shown in other major accidents, these personnel and equipment could assist in public rescue and firefighting response.

The site will also have health and medical equipment and personnel to meet the requirements of the "Health, Safety and Reclamation Code for Mines in British Columbia" and WorkSafeBC. This would include a minimum of two staff with Level 3 medical aid training on site at all times and an onsite ambulance that would be used to transfer workers with injury or illness.

The Proponent is committed to preparing and submitting a Health and Medical Services Plan, informed by the Health and Medical Services Plan Best Management Guide for Industrial Camps provided by NH (November 2014), prior to construction. Until such time the relevant management plan for the Project is the Occupational Health and Safety Management Plan (Section 12.2.1.18.4.15). The Proponent is proposing to use adaptive management to monitor and address any incremental health care service demands directly attributable to the Project. In addition, the Proponent will establish a self-contained construction camp and appropriate worker rotation during the construction phase in order to offset Project demands for regional services.



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



The Proponent will work closely with regional training institutions to implement a training strategy for regional residents. This could include partnering with CNC and BC Aboriginal Mine Training Association to provide training programs; collaborate with local contractors to provide apprenticeship programs; sourcing and training under-represented groups; and offering scholarships to encourage high school graduation. **Table 7.2.4-4** summarizes effects and mitigation measures by phase.



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Table 7.2.4-4: Mitigation Measures and Potential Residual Effects for Regional and Community Services

Project Phase	Potential Project Effect	Mitigation and Management	Type of Residual Effect	Potential Residual Effect
Educati	on Services			
С	In-migration affects demand for education services	The provision of camps during the construction phase will limit inmigration and any related demands for school services. School enrolment has been declining during the last years and there is adequate capacity of education services in the SERSA. Success Rating: Moderate	Neutral	No appreciable increase in demand for education services is expected since no appreciable migration is anticipated during construction
0	In-migration creates additional demand for education services	The Proponent intends to hire the majority of the operations workforce from within the SERSA. The provision of an operations camp for workers and busing will limit inmigration and demands for schools. If 20% of in-migrants are below 15 years of age based on existing SERSA trends, approximately 58 additional children (12 in Vanderhoof and 47 in Prince George) will be requiring primary and secondary education. School enrolment has declined during the last years and there is a variety of public and private schools with adequate capacity in the SERSA. There is adequate capacity for advanced education services in the SERSA Success Rating: Moderate	Adverse	Increase in demands for education services that are within the current SERSA capacity
0	Project hiring requirements will increase demand for training programs and apprenticeship programs	There is adequate capacity for education services in the SERSA. The Proponent will implement a training strategy that may include: • Working with training institutions such as CNC and BC Aboriginal Mine Training Association to provide training programs • Partner with local contractors to provide New Gold apprenticeship programs • Sourcing and training under-represented groups • Offering scholarships to encourage high school graduation	Beneficial	Supply for educational services will be increased and the regional workforce qualifications will be enhanced



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Project Phase	Potential Project Effect	Mitigation and Management	Type of Residual Effect	Potential Residual Effect
CL	Out-migration decreases demand for education services	Work with local service providers to incorporate decline in population in planning. Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine. Success Rating: Moderate	Neutral	Out-migration of workers could slightly reduce demands for education services
PC		n/a	n/a	n/a
Health S	Services		'	
C, O	In-migration affects demand for health services	The provision of a self-contained camp and worker rotation policies during the construction phase will offset Project's demands for health services. The SERSA and specifically the district of Vanderhoof and the city of Prince George have a good variety of health services including hospitals, clinics and practitioners with adequate capacity. A Health and Medical Services Plan, informed by the Health and Medical Services Plan Best Management Guide for Industrial Camps (November 2014), will be prepared prior to construction. Health care service demands will be monitored and actions will be taken to address increases in demand that are directly attributable to the Project. Success Rating: Moderate	Neutral	No substantial increase in demand for health services is expected since no appreciable migration is anticipated during construction
C, O	Traffic volumes to and from mine site would increase demand for health services if accidents occur	 The SERSA and the District of Vanderhoof and City of Prince George have a good variety of health services including hospitals, clinics, and practitioners with adequate capacity. The Proponent will: Provide at the site health and medical equipment and personnel to meet the requirements of the "Health, Safety and Reclamation Code for Mines in British Columbia" and Work Safe BC. Provide arrangements to med-evac workers with life-threatening illnesses or injuries to the nearest appropriate facility within the SERSA. Success Rating: Moderate 	Adverse	Increase in demands for health services that are within the current SERSA capacity



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Project Phase	Potential Project Effect	Mitigation and Management	Type of Residual Effect	Potential Residual Effect
C, O	Accidents at worksite could increase demand for regional health services	 The SERSA and the District of Vanderhoof and City of Prince George have a good variety of health services including hospitals, clinics, and practitioners with adequate capacity. The Proponent will: Provide at the site health and medical equipment and personnel to meet the requirements of the "Health, Safety and Reclamation Code for Mines in British Columbia" and Work Safe BC. Provide arrangements to med-evac workers with life-threatening illnesses or injuries to the nearest appropriate facility within the SERSA. Success Rating: Moderate 	Adverse	Increase in demands for health services that are within the current SERSA capacity
0	In-migration creates additional demand for health services	The provision of an operations camp will offset Project's demands for health services. If up to 232 people choose to relocate to Prince George and 58 people to Vanderhoof, both communities and the overall SERSA have a good variety of health services including hospitals, clinics, and practitioners with adequate capacity. Success Rating: Moderate	Adverse	Increase in demands for health services that are within the current SERSA capacity
CL	Out-migration decreases demand for health services	The Proponent will: Work with local service providers to incorporate decline in population in planning. Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine. Success Rating: Moderate	Neutral	Out-migration of workers could reduce demands for health services
CL	Reduction in traffic volumes to mine site and termination of mine decreases demand on regional health services	The Proponent will work with local service providers to incorporate decline in demands in planning. Success Rating: Moderate	Neutral	n/a
PC		n/a	n/a	n/a



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Project Phase	Potential Project Effect	Mitigation and Management	Type of Residual Effect	Potential Residual Effect
Protecti	ve Services			
С	Changes in- and out-migration affect demand for protective services	The provision of camp during the construction phase will offset Project's demands for protective services.	Neutral	No significant increase in demand is expected since no appreciable migration is anticipated during construction
C, O	Traffic volumes to and from mine site would increase demand for protective services if accidents occur	The Proponent will: Work closely on an ongoing basis with Northern Health, local fire departments, RCMP, and BC Ambulance to ensure that the appropriate information on the changes in area transportation volumes, mine operations, and the change to the local population are considered. Provide full firefighting equipment and trained personnel to meet all onsite fire and rescue needs. Provide at the mine site trained mine rescue personnel and mine rescue equipment as well as onsite security. Success Rating: Moderate	Adverse	Increase in demands for protective services
C, O	Incidents at worksite could increase demand for protective and emergency services	The Proponent will: Provide full firefighting equipment and trained personnel to meet all onsite fire and rescue needs. Provide at the mine site trained mine rescue personnel and mine rescue equipment Provide onsite security. Success Rating: Moderate	Adverse	Increase in demands for protective services



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Project Phase	Potential Project Effect	Mitigation and Management	Type of Residual Effect	Potential Residual Effect
0	In-migration creates additional demand for protective services	The Proponent intends to hire the majority of the operations workforce from within the SERSA. The provision of an operations camp will offset Project's demands for protective services. If up to 232 people choose to relocate to Prince George and 58 people to Vanderhoof, this will represent a minor increase to current population, which is within the normal historical variation. It is anticipated that protective services in both communities would be able to accommodate the additional demands. Success Rating: Moderate	Adverse	Increase in demands for protective services
CL	Out-migration decreases demand for protective services	 The Proponent will: Work with local service providers to incorporate decline in population in planning. Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine. Success Rating: Moderate 	Neutral	Out-migration of workers could reduce demands for protective services
CL	Reduction in traffic volumes to mine site and termination of mine decreases demand for protective and emergency services	The Proponent will work with local service providers to incorporate decline in demands in planning. Success Rating: Moderate	Neutral	n/a
PC		n/a	n/a	n/a



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Project Phase	Potential Project Effect	Mitigation and Management	Type of Residual Effect	Potential Residual Effect
Social S	Services	1		
С	In-migration creates additional demand for social services	The provision of camp during the construction phase will offset Project's demands for social services. The Proponent will: Implement a no on site alcohol and drug policy and no hunting and fishing policy, including related activities, for construction and operations staff and contractors while on company business or staying in accommodations provided by the company. Have a respectful workplace, no harassment, safety and security, multicultural workforce considerations, and Aboriginal awareness training and report on progress annually. Success rating: Moderate	Neutral	No appreciable increase in demand for social services is expected since no appreciable in-migration is anticipated during construction
0	In-migration creates additional demand for social services	The Proponent intends to hire the majority of the operations workforce from within the SERSA. The provision of an operations camp will offset Project's demands for social services If up to 232 people choose to relocate to Prince George and 58 people to Vanderhoof, both communities and the overall SERSA have adequate capacity of social services to cover the additional demands. Success Rating: Moderate	Adverse	Increase in demands for social services that are within the current SERSA capacity
CL	Out-migration decreases demand for social services	 The Proponent will: Work with local service providers to incorporate decline in population in planning. Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine. Success Rating: Moderate 	Neutral	Out-migration of workers could reduce demands for social services
PC		n/a	n/a	n/a

Note: C = construction; CL = closure; O = operations; PC = post-closure; n/a = not applicable; SERSA = Socioeconomic Regional Study Area



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Table 7.2.4-5 provides ratings for effectiveness of mitigation measures to avoid or reduce potential effects on regional and local services during mine site development.

Table 7.2.4-5: Mitigation Measures and Effectiveness of Mitigation to Avoid or Reduce Potential Effects on Regional and Local Services during Mine Site Development

Likely Project Effect	Project Phase	Mitigation/Enhancement Measure	Effectiveness of Mitigation Rating
Educational Services	ı		
In-migration affects demand for education services	Construction, Operations	The provision of camps will limit in-migration and any related demands for school services.	High
Project hiring requirements will increase demand for training programs and apprenticeship programs	Operations	The Proponent will implement a training strategy that may include: • Working with training institutions such as CNC and BC Aboriginal Mine Training Association to provide training programs • Partner with local contractors to provide New Gold apprenticeship programs • Sourcing and training under-represented groups • Offering scholarships to encourage high school graduation	Moderate
Out-migration decreases demand for education	Closure	Work with local service providers to incorporate decline in population in planning	Moderate
services		Work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine	Moderate
Health Services			
In-migration affects demand for health services	Construction, Operation	The provision of a self-contained camp and worker rotation policies during the construction phase will offset Project's demands for health services	High
Health and Medical Services Plan	Construction, Operation	The development of a Health and Medical Services Plan will be prepared prior to construction. Health care service demands will be monitored and actions will be taken to address increases in demand that are directly attributable to the Project.	Moderate
Traffic volumes to and from mine site would increase demand for health services if accidents occur	Construction, Operations	The Proponent will provide at the site health and medical equipment and personnel to meet the requirements of the "Health, Safety and Reclamation Code for Mines in British Columbia" and Work Safe BC	High
		The Proponent will provide arrangements to medevac workers with life-threatening illnesses or injuries to the nearest appropriate facility within the SERSA	High
Accidents at worksite could increase demand for regional health services	Construction, Operations	The Proponent will provide at the site health and medical equipment and personnel to meet the requirements of the "Health, Safety and Reclamation Code for Mines in British Columbia" and Work Safe BC	High



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Likely Project Effect	Project Phase	Mitigation/Enhancement Measure	Effectiveness of Mitigation Rating
		The Proponent will provide arrangements to medevac workers with life-threatening illnesses or injuries to the nearest appropriate facility within the SERSA.	High
In-migration creates additional demand for health services	Operations	The provision of an operations camp will offset Project's demands for health services	High
Out-migration decreases demand for health	Closure	The Proponent will work with local service providers to incorporate decline in population in planning	Moderate
services		The Proponent will work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine	Moderate
Reduction in traffic volumes to mine site and termination of mine decreases demand on regional health services	Closure	The Proponent will work with local service providers to incorporate decline in demands in planning	Moderate
Protective Services			
Changes in-and out- migration affect demand for protective services	Construction	The provision of camp during the construction phase will offset Project's demands for protective services	High
Traffic volumes to and from mine site would increase demand for protective services if accidents occur	Construction, Operations	The Proponent will work closely on an ongoing basis with Northern Health, local fire departments, RCMP, and BC Ambulance to ensure that the appropriate information on the changes in area transportation volumes, mine operations, and the change to the local population are considered	Moderate
		The Proponent will provide full firefighting equipment and trained personnel to meet all onsite fire and rescue needs	High
		The Proponent will provide at the mine site trained mine rescue personnel and mine rescue equipment as well as onsite security	High
Incidents at worksite could increase demand for protective and emergency	Construction, Operations	The Proponent will provide full firefighting equipment and trained personnel to meet all onsite fire and rescue needs	High
services		The Proponent will provide at the mine site trained mine rescue personnel and mine rescue equipment	High
		The Proponent will provide onsite security	High
In-migration creates additional demand for protective services	Operations	The provision of an operations camp will offset Project's demands for protective services	High
Out-migration decreases demand for protective	Closure	The Proponent will work with local service providers to incorporate decline in population in planning	Moderate
services		The Proponent will work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine	Moderate



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Likely Project Effect	Project Phase	Mitigation/Enhancement Measure	Effectiveness of Mitigation Rating
Reduction in traffic volumes to mine site and termination of mine decreases demand for protective and emergency services	Closure	The Proponent will work with local service providers to incorporate decline in demands in planning	Moderate
Social Services			
In-migration creates additional demand for social services	Construction	The provision of camp during the construction phase will offset Project's demands for social services	High
		The Proponent will have a no on-site alcohol and drug policy and no hunting and fishing policy, including related activities, for construction and operations staff and contractors while on company business or staying in accommodations provided by the company.	Moderate
		The Proponent will have a respectful workplace, no harassment, safety and security, multi-cultural workforce considerations, and Aboriginal awareness training and will report on progress annually.	Moderate
In-migration creates additional demand for social services	Operations	The Proponent intends to hire the majority of the operations workforce from within the SERSA.	Moderate
		The provision of an operations camp will offset Project's demands for social services	High
Out-migration decreases demand for social services	Closure	The Proponent will work with local service providers to incorporate decline in population in planning	Moderate
		The Proponent will work with the community to develop a mine closure plan that identifies strategies and actions to help minimize the potential adverse effects of closing the mine.	Moderate

Note: SERSA = Socio-economic Regional Study Area

In summary, low success rating means mitigation has not been proven successful, moderate success rating means mitigation has been proven successful elsewhere, and high success rating means mitigation has been proven effective. The effectiveness of mitigation measures was rated high because the proposed mitigation measures are widely used in mining and proven to be effective. Moderate ratings were assigned to those mitigation measures that require multiple party coordination, and have dependencies on third parties.

7.2.4.4 Residual Effects and their Significance

This subsection:

Identifies and describes any residual effects after mitigation;



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



- Where residual effects have been identified, provide an assessment of the significance of those residual effects considering, magnitude, geographic extent, duration, reversibility, frequency;
- Assesses the likelihood of the effect:
- Assesses the significance of the residual effects; and
- Assesses/discusses the level of confidence and risk in the determination of significance and likelihood of the residual effect.

As for residual effects following mitigation, during both the construction and the operations phases of the Project, there could be some demand placed on local policing resources if criminal code offences occur at the site and/or due to traffic accidents or violations. In addition, some injuries or illnesses will see workers transferred to health care facilities in the LSA. There will also be arrangements made to med-evac workers with life-threatening illnesses or injuries to the nearest appropriate facility within the SERSA. Finally, there will be an enhancement of workforce experience and skills base resulting from additional training.

During the closure phase, most of the local employment associated with the mine will be lost; however, it is unlikely there will be a noticeable decline in population given the very small size of non-resident workers forecast to migrate to the SERSA as a result of mine operations (0.3% of current population). In addition, it is likely that some of the workers at closure will have retired in the region or will choose to remain, which will further reduce any out-migration.

The criteria used for determination of significance are described in **Section 4.3.5.3** and **Table 4.3-9** and have been well-tested in previous SEIAs for resource developments in this and similar regions.

Project construction effects on regional services are characterized as low in magnitude, regional, continuous, reversible, short-term, and neutral for all indicators except Protective Services and Health services. With minimal population impacts, the key impact on regional services is anticipated to be a slightly increased demand for protective services (ambulance services, first responders, and police) and health services, driven by the movement of workers and goods to the mine during construction and construction activities if accidents occur. These effects are expected to be minimized by the implementation of mitigation measures and transportation management plans. Given that the Proponent will provide a self-contained construction camp, there will be limited additional demand on regional services associated with the non-resident workers. These effects are considered Not Significant (negligible) because of the relatively low magnitude and short-term duration of the Project effects. Confidence in this assessment is high.

Project operations effects on regional services are characterized as low in magnitude, regional, long-term, continuous, reversible, and negative for all indicators except education that has a positive effect. Given the relatively small population increase anticipated (290 people or 100 families) and with most of this likely concentrated in the City of Prince George and the District of Vanderhoof, the increased demand on services associated with the population effect is considered Not Significant (minor). In addition, mine operations and transportation associated



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



with mine operations and the mine site are anticipated to have only a minimal impact on regional services over the period of mine operations. Confidence in this assessment is high. New Gold's self-contained camp and worker logistics and behaviour policies and programs for both construction and operations will minimise the demand for local and regional services from rotational personnel.

Closure of the mine and a substantial reduction of truck transportation will reduce demand on regional policing, ambulance, fire rescue services, and health care services. However, the effect will be small (low in magnitude) and reversible, and the demand reduction on these services will be neutral and long term. Overall, given the magnitude and direction of the effects on regional services, they are considered to be Not Significant (minor) (**Table 7.2.4-6**).

Table 7.2.4-6: Significance of Potential Residual Effects for Regional Services

	Stage of Development/Rating				
Parameter	Construction	Operations	Closure	Post- Closure	
Residual Effect on Educa	ntion Services				
Residual Effect	No appreciable increase pressures for education services is expected	Increase in demands for education services that are within the current SERSA capacity. Project will expand education supply and enhance local qualifications	Out-migration of workers could slightly reduce demands for education services	n/a	
Effect Attribute					
Context	Neutral	Neutral	Neutral	n/a	
Magnitude	Low	Low	Low	n/a	
Geographic extent	Regional	Regional	Regional	n/a	
Duration	Short-term	Long-term	Long-term	n/a	
Reversibility	Yes	Yes	Yes	n/a	
Frequency	Continuous	Continuous	Continuous	n/a	
Likelihood Determination	Low	High	Moderate	n/a	
Level of Confidence for Likelihood	High	High	High	n/a	
Significance Determination	Not Significant (negligible)	n/a	Not Significant (negligible)	n/a	
Level of Confidence for Significance	High	n/a	High	n/a	
Residual Effect on Health	Services	'			
Residual Effect	Increase in demands for health services that are within the current SERSA capacity	Increase in demands for health services that are within the current SERSA capacity	Out-migration of workers could reduce demands for health services	n/a	
Effect Attribute					
Context	Neutral	Neutral	Neutral	n/a	
Magnitude	Low	Low	Low	n/a	
Geographic extent	Regional	Regional	Regional	n/a	



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Parameter	Stage of Development/Rating				
	Construction	Operations	Closure	Post- Closure	
Duration	Short-term	Long-term	Long-term	n/a	
Reversibility	Yes	Yes	Yes	n/a	
Frequency	Continuous	Continuous	Continuous	n/a	
Likelihood Determination	Moderate	Moderate	Moderate	n/a	
Level of Confidence for Likelihood	High	High	High	n/a	
Residual Effect Significance	Not Significant (negligible)	Not Significant (minor)	Not Significant (minor)	n/a	
Level of Confidence for Significance	High	High	High	n/a	
Residual Effect on Protec	tive Services				
Residual Effect	Increase in demands for protective services	Traffic volume, mine operations, and in-migration create demand for regional services	Decline in traffic volume and closure of mine operations, and out-migration of population decrease demand for regional services	n/a	
Effect Attribute					
Context	Neutral	Neutral	Neutral	n/a	
Magnitude	Low	Low	Low	n/a	
Geographic extent	Regional	Regional	Regional	n/a	
Duration	Short-term	Long-term	Long-term	n/a	
Reversibility	Yes	Yes	Yes	n/a	
Frequency	Continuous	Continuous	Continuous	n/a	
Likelihood Determination	Moderate	Moderate	Moderate	n/a	
Level of Confidence for Likelihood	High	High	High	n/a	
Residual Determination	Not Significant (negligible)	Not Significant (minor)	Not Significant (minor)	n/a	
Level of Confidence for Significance	High	High	High	n/a	
Residual Effect on Social	Services				
Residual Effect	No appreciable increase in demand for social services is expected	Increase in demands for social services that are within the current SERSA capacity	Out-migration of workers could reduce demands for social services	n/a	
Effect Attribute					
Context	Neutral	Neutral	Neutral	n/a	
Magnitude	Low	Low	Low	n/a	
Geographic extent	Regional	Regional	Regional	n/a	
Duration	Short-term	Long-term	Long-term	n/a	
Reversibility	Yes	Yes	Yes	n/a	
Frequency	Continuous	Continuous	Continuous	n/a	
Likelihood Determination	Low	Moderate	Moderate	n/a	



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



Parameter	Stage of Development/Rating				
	Construction	Operations	Closure	Post- Closure	
Level of Confidence for Likelihood	High	High	High	n/a	
Residual Effect Significance	Not Significant (negligible)	Not Significant (minor)	Not Significant (minor)	n/a	
Level of Confidence for Significance	High	High	High	n/a	

Notes: ¹ Method for the consideration of context is discussed in Section 4, Assessment Methodology. n/a = not applicable

7.2.4.5 Cumulative Effects

This subsection determines the need for assessing cumulative effects.

Effects on services are driven by changes in population, which in turn are driven by employment demands. As described in **Section 7.2.2.5**, during construction and closure phases the residual effects on population and demographics are determined to be negligible. During operations, the adverse residual effects are expected to be minor for demographics, and thus for regional and local services. Other projects and activities including mining (exploration and existing), forestry (logging), and pipeline projects that may interact with the Project have already been considered when assessing potential employment and demographic changes. Because Project employment effects and related population changes were already analysed in the context of these current and foreseeable projects, the assessments are inherently cumulative in nature, and thus the assessment of minor residual effects on services during the operation phase is inherently cumulative.

7.2.4.6 Limitations

This subsection presents assumptions and limitations relative to the assessment of Project effects and the assessment of cumulative effects.

The regional services effects assessment relies in large part on the population effects assessment, which concluded that population change attributable to the Project will be very small and Not Significant (negligible during construction and minor during operations). The primary underlying assumption is that most of the workforce will originate from within the SERSA or will rotate to and from the site and thus will not be seeking to reside regionally or locally, and therefore, will not draw on regional services. The size of workforce that may choose to relocate to the SERSA during operations is relatively small (290 people or 0.3% of baseline population), but has been taken into account in this assessment.

7.2.4.7 Conclusion

This subsection provides a conclusion regarding the significance of residual effects and cumulative effects if applicable.



APPLICATION FOR AN
ENVIRONMENTAL ASSESSMENT CERTIFICATE /
ENVIRONMENTAL IMPACT STATEMENT
ASSESSMENT OF POTENTIAL SOCIAL EFFECTS



The Proponent's plan to recruit the majority of the workforce from within the SERSA and the provision of camps during construction and operations will lead to small population impacts in the SERSA (**Section 7.2.4.3**). If up to 290 people (100 families) choose to move in permanently to the SERSA, this demographic change will result in a Not Significant (minor) residual effect on regional and local services. Implications for regional services will primarily be associated with transportation activities and onsite work accidents and illness and the additional demands for policing and health services during construction and operations. These effects are considered Not Significant because of their relatively low magnitude and proposed mitigation.

