

**CUMBERLAND**  
RESOURCES LTD.

**MEADOWBANK GOLD PROJECT**

**SOCIOECONOMIC IMPACT MANAGEMENT PLAN**

**JANUARY 2005**

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## **DESCRIPTION OF SUPPORTING DOCUMENTATION**

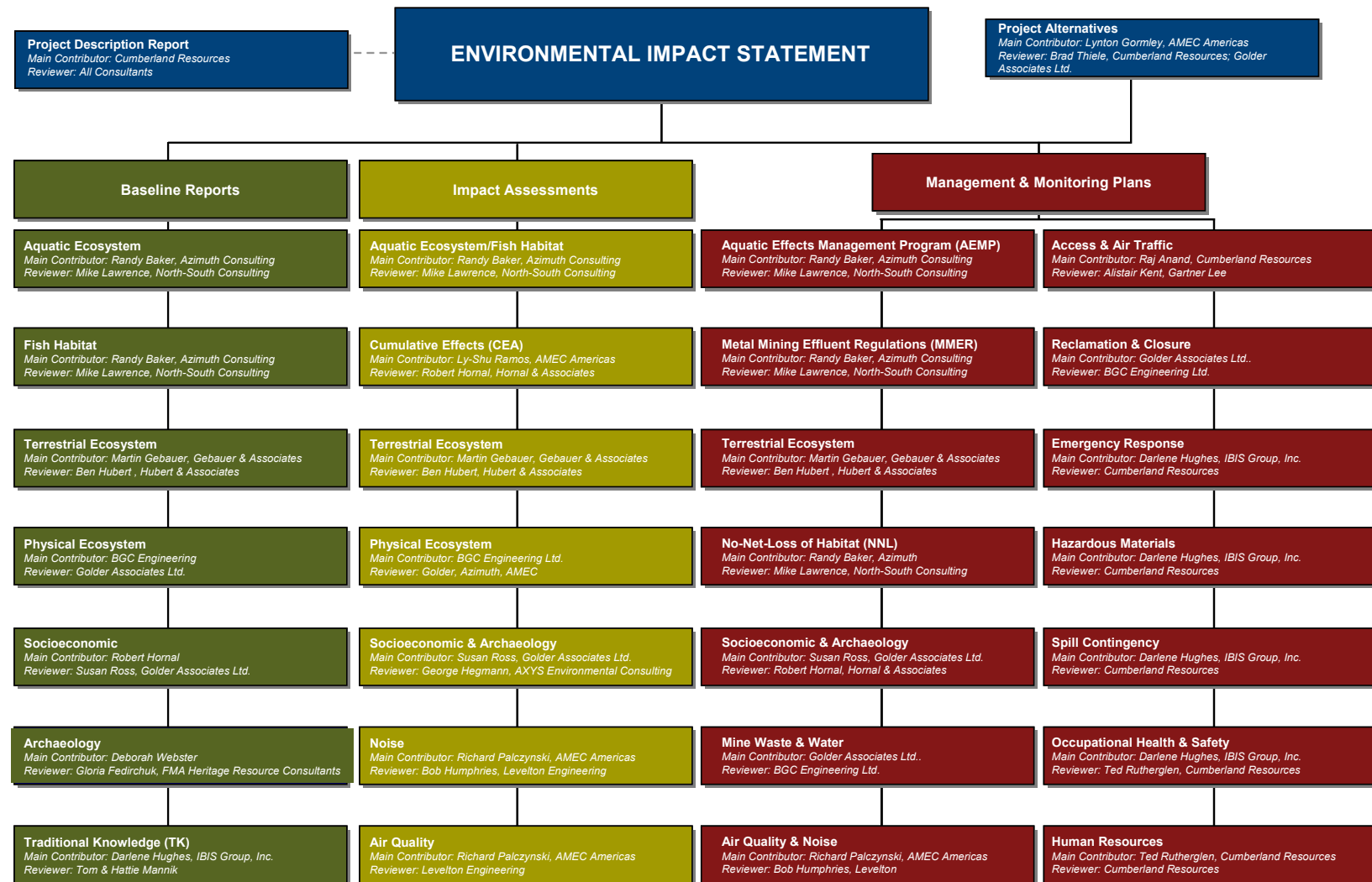
Cumberland Resources Ltd. (Cumberland) is proposing to develop a mine on the Meadowbank property. The property is located in the Kivalliq region approximately 70 km north of the Hamlet of Baker Lake on Inuit-owned surface lands. Cumberland has been actively exploring the Meadowbank area since 1995. Engineering, environmental baseline studies, and community consultations have paralleled these exploration programs and have been integrated to form the basis of current project design.

The Meadowbank project is subject to the environmental review and related licensing and permitting processes established by Part 5 of the Nunavut Land Claims Agreement. To complete an environmental impact assessment (EIA) for the Meadowbank Gold project, Cumberland followed the steps listed below:

1. Determined the VECs (air quality, noise, water quality, surface water quantity and distribution, permafrost, fish populations, fish habitat, ungulates, predatory mammals, small mammals, raptors, waterbirds, and other breeding birds) and VSECs (employment, training and business opportunities; traditional ways of life; individual and community wellness; infrastructure and social services; and sites of heritage significance ) based on discussions with stakeholders, public meetings, traditional knowledge, and the experience of other mines in the north.
2. Conducted baseline studies for each VEC and compared / contrasted the results with the information gained through traditional knowledge studies (see Column 1 on the following page for a list of baseline reports).
3. Used the baseline and traditional knowledge studies to determine the key potential project interactions and impacts for each VEC (see Column 2 for a list of EIA reports).
4. Developed preliminary mitigation strategies for key potential interactions and proposed contingency plans to mitigate unforeseen impacts by applying the precautionary principle (see Column 3 for a list of management plans).
5. Developed long-term monitoring programs to identify residual effects and areas in which mitigation measures are non-compliant and require further refinement. These mitigation and monitoring procedures will be integrated into all stages of project development and will assist in identifying how natural changes in the environment can be distinguished from project-related impacts (monitoring plans are also included in Column 3).
6. Produce and submit an EIS report to NIRB.

As shown on the following page, this report is part of the documentation series that has been produced during this six-stage EIA process.

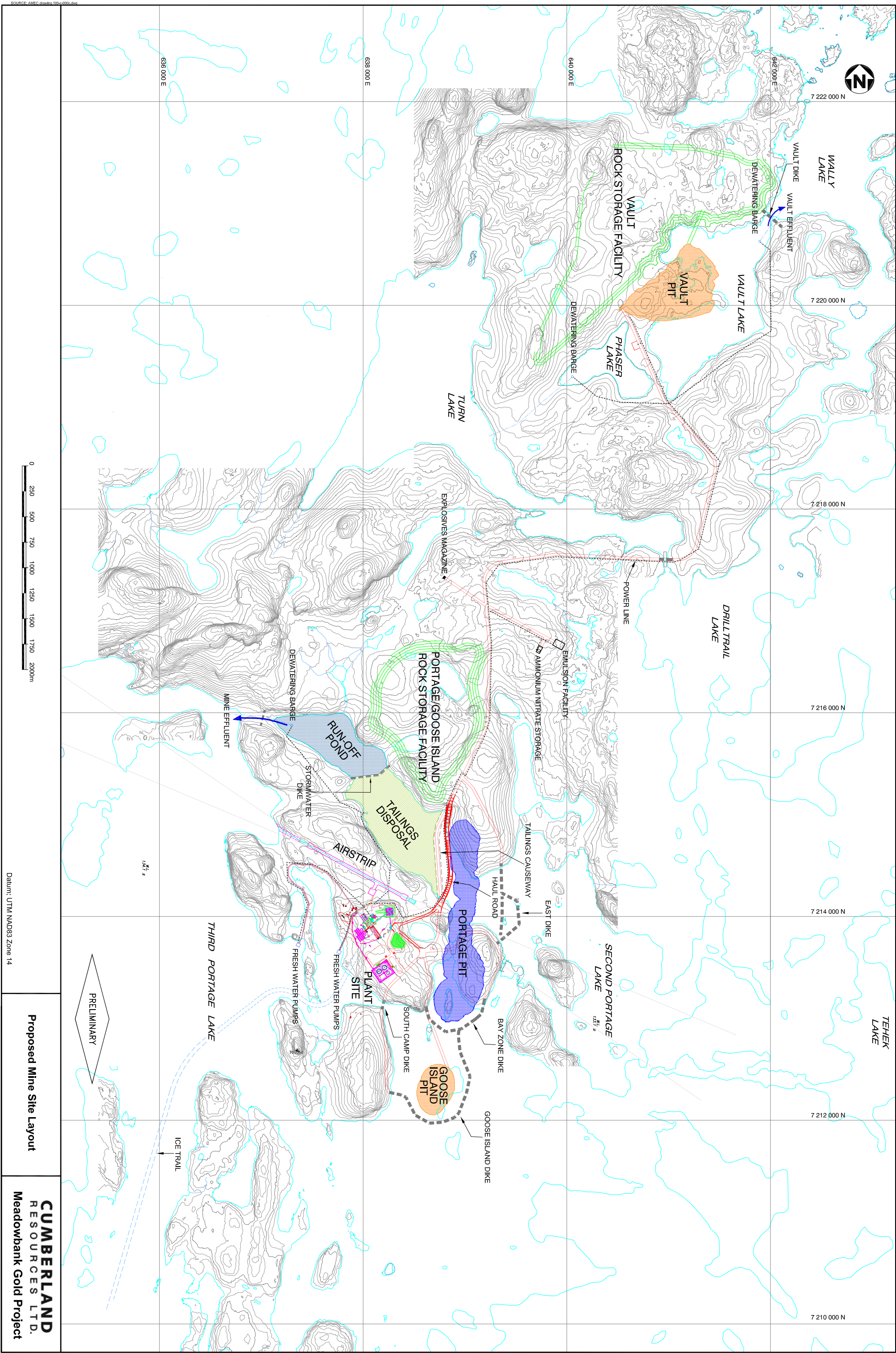
**EIA DOCUMENTATION ORGANIZATION CHART**



**PROJECT LOCATION MAP**







## **SECTION 1 • INTRODUCTION**

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This report describes the proposed measures that will be undertaken by Cumberland Resources Ltd. (Cumberland) to mitigate and monitor the socioeconomic impacts of the project and enhance the benefits to the Baker Lake community and the Kivalliq region in general. These measures have the potential to increase the overall net socioeconomic benefit of the project.

This report is included as part of the environmental assessment (EA) documentation for the Meadowbank Gold project. Other relevant studies include:

“Baseline Socioeconomic Report” – This report describes the Kivalliq Region and the community of Baker Lake through detailed profiles (demographic; economic; employment, education and training; community health and wellness; available services and infrastructure) and descriptions (current housing situation and government structures).

“Socioeconomic Impact Assessment” – This report provides an assessment of the socioeconomic impact of developing the Meadowbank project on the people of Baker Lake and the Kivalliq Region in general.

## **SECTION 2 • IMPACT MITIGATION**

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### **2.1 APPROACH TO IMPACT MITIGATION**

The primary vehicle for project impact mitigation and benefit enhancement will be the Inuit Impact and Benefit Agreement (IIBA) to be negotiated between Cumberland and the Kivalliq Inuit Association (KIA). Because the agreement has not been completed and no details of the terms are available, this section presents general mitigation and enhancement measures that are broadly consistent with impact agreement best practices. It is to be noted in this context that measures additional to those below could be proposed and agreed during upcoming negotiations.

The following principles guide IIBA negotiations:

- Consultation and participation will be practiced throughout the process to define priorities, needs, and preferences, and to decide how mitigation and enhancement measures will be implemented.
- The development and implementation of mitigation and enhancement measures will be undertaken in partnership not only with communities, but also with a range of organizations from government and civil society that are able to bring culturally appropriate experience and knowledge to maximizing net socioeconomic benefit.
- Implementation of both the terms of the IIBA and project operations will be conducted in an environment of accountability and transparency.
- Sustainability criteria will be incorporated by emphasizing the need to enable local and territorial participation in employment and business opportunities, training, and partnerships with government and community. In addition, productivity of any social investments will be considered.

The main objectives of the IIBA are as follows:

- mitigating the impacts and enhancing the benefits of project development
- creating opportunities for the people of Baker Lake specifically and the Kivalliq Region generally to participate in the project, thereby enhancing self-determination
- establishing Cumberland's role as an active member of the community and participant in the sustainable development of Baker Lake
- maintaining goodwill and good relations with communities and their governments.

The Nunavut Land Claims Agreement outlines the appropriate benefits to Inuit of project development. Matters relevant to the potential socioeconomic impacts of the Meadowbank project include the following:

- Inuit training at all levels
- Inuit preferential hiring



- employment rotation reflecting Inuit needs and preferences
- labour relations
- business opportunities for Inuit, including:
  - provision of expert advice
  - notification of business opportunities
  - preferential contracting practices
- housing, accommodation, and recreation
- safety, health, and hygiene
- language of workplace
- identification, protection, and conservation of archaeological sites and specimens
- Inuit access to facilities constructed for the project, such as airfields and roads
- information flow and interpretation, including liaison between Inuit and the proponent regarding project management and Inuit participation and concerns
- coordination with other developments
- arbitration and amendment provisions
- obligations of subcontractors.

## **2.2 IMPACT MITIGATION & BENEFIT ENHANCEMENT**

Impact mitigation and benefit enhancement measures are discussed by category, rather than by impact, in this section. Presenting measures specific to each socioeconomic impact identified in the “Socioeconomic Impact Assessment” is repetitive because of the interrelated nature of effects. For example, preferential employment and contracting can be expected to directly increase individual, community, and territorial economic activity and income, but will also likely build capacity in the formal wage economy, provide resources for subsistence activity, reduce demand for government services, and contribute to overall community wellness.

### **2.2.1 Employment**

Cumberland’s employment policy has and will continue to be to maximize employment of local people, ensuring that the Nunavut economy and its population directly benefit from project development. For those individuals who have little or no experience with the mining sector, project-specific initiatives can be implemented to remove barriers to employment. There are real barriers to employment with the project for many local residents. It is important to segments of the local population that wage employment not conflict with subsistence activity that is both economically and also socially and culturally critical to livelihoods and individual and community wellness. Underrepresentation in the workforce by women may be for lack of opportunity rather than lack of desire to participate. Cross-cultural challenges can represent a strong disincentive to participation. Few jobs at the mine will require less than a Grade 10 education, and many will require a Grade 12 education.

Although subject to agreement with the KIA within the contract of the IIBA, possible initiatives related to human resource policy and procedures are identified below. Education and training initiatives are addressed in Section 2.2.3.

- providing detailed information to the Baker Lake community and the KIA on workforce requirements, job descriptions, qualifications, and performance criteria
- reviewing educational, training, and language requirements for project positions and conducting prior-learning assessments with a view to accepting experience in lieu of qualifications where legal
- designing recruitment methods, advertisements, application procedures, interview protocols, selection procedures, and training and promotion decision-making to reduce artificial barriers
- providing career development, on-the-job training, and management training programs to enhance employee satisfaction and promotion
- conducting exit interviews in an effort to understand the barriers that prevent successful long-term employment; using this understanding to create other, more-effective initiatives
- providing cross-cultural training to all employees to facilitate the integration of Inuit employees into the workforce
- enforcing zero-tolerance policies for the use of personal firearms, controlled substances, alcohol, harassment, and vehicle misuse.

### **2.2.2 Business**

Over the past seven years, Cumberland has demonstrated a genuine effort to maximize opportunities for businesses in the Kivalliq Region to provide goods and services. Where local businesses have little or no experience with the mining sector, project-specific initiatives can be implemented to allow these businesses to successfully bid on procurement contracts.

At present, the business operations in Baker Lake are generally small and basically structured to meet the consumption needs of the resident population and the needs of mineral exploration initiatives rather than those of a large mining project. There is limited experience with the management and logistics of procurement, including of preparing offers of goods and/or services. Existing business do not have the breadth, depth, or financial resources to bid on large contracts. They have limited experience with quality control or the exigencies of supplying large, time-sensitive operations.

Initiatives that could be put in place, subject to agreement with KIA, to enhance the ability of local businesses to supply goods and services to the project are identified below.

- Providing the KIA and its associated partner organizations with full and timely information on procurement requirements in areas that are mutually considered to be within the capacity of local businesses. Examples are road construction and maintenance, accommodation, catering, janitorial services, trades work, materials handling and expediting, cross-cultural and other training services, light vehicle maintenance, warehousing, secretarial services, environmental and social monitoring, and air services.

- Establishing a contracting policy of “first-response” by entering into good-faith negotiations with local businesses and giving them the opportunity to supply the goods or services required by the project before moving towards open bidding on a larger scale.
- Developing procurement contracting procedures that take into account the potential need to break down procurement packages, waive financial guarantees, implement early payment procedures, or otherwise facilitate the participation of local business.
- Providing an explanation to any local business that competes unsuccessfully on a goods or service contract.
- Establishing evaluation criteria for open market businesses that include the extent to which they use Kivalliq Region labour, goods, and/or services in meeting their obligations.
- Assisting the KIA in developing and supporting training programs for existing and potential entrepreneurs to improve their success rates at offering goods and services to the project and the broader market.
- Working with other companies in the region to share information on Kivalliq Region businesses with a view to widening the market for local goods and services.

### **2.2.3 Education & Training**

Cumberland wishes to enhance the potential access of Inuit people to employment and business opportunities created by the project and intends to provide assistance with project-related education and training. The company also recognizes that poor educational performance contributes both to lack of economic opportunity and to social challenges that are the consequence of unemployment and poverty. As well, there is concern particularly among the elders in Baker Lake that traditional knowledge is being lost to the community at large.

The promotion of education and training is therefore intended to address project requirements and to contribute to long-term participation in both the wage and traditional economies in the interests of sustainable development. Accordingly, Cumberland is willing to work with the KIA and education authorities in Baker Lake to develop a detailed education and training strategy with broad-based goals and objectives. Subject to agreement, program elements could include the following:

- school-based career counselling, stay-in-school workshops, mentoring, and achievement awards to encourage students to stay in school and to support them in this endeavour
- support for youth programs intended to develop traditional skills, particularly those related to subsistence activity, and to address the management of mixed economy livelihoods
- summer employment programs and cooperative education opportunities at the mine site to provide job experience to young people
- support for high-school completion programs for people who do not meet the educational requirements for specific jobs but are otherwise good candidates for those jobs
- establishment of apprenticeship programs

- on-the-job training directed towards enhancing the prospects for advancement
- working with Arctic College towards the development of courses with mining sector content
- working with other mining organizations in the region to enhance education and training strategies across the sector through sharing of best practice experience and resources.

#### **2.2.4 Negative Income & Other Indirect Impacts on Community Wellness**

Negative effects from increased income are largely the result of individual spending choices and the inequities introduced between different segments of society. Other negative impacts related to the project could result from migration and an increase in cross-cultural contact. Indirect impacts of this type are most likely to be experienced in Baker Lake, where the degree of participation in the project will be significant relative to the community as a whole, and the sum of individual decisions has some potential to spill over to the community.

None of these impacts is directly within Cumberland's control to mitigate completely. It is in the company's interest, however, to provide support to both individuals and the community in managing the potential indirect negative impacts of the project. It is also important to recognize that the increased economic activity the project represents is generally considered to be of overall benefit, particularly in a context of alleviating high unemployment and poor incomes, which in themselves have significant negative effects on families and on communities.

The following measures are of particular relevance to mitigating the potential for indirect negative effects:

- as part of the terms of employment, the provision of a confidential assistance program to employees and their families that can competently address, in a culturally sensitive and knowledgeable fashion, the full range of work-life issues that may arise for an individual employee—this would include problems with drug and alcohol abuse, addictions including gambling, inappropriate sexual behaviours, personal financial management, adjustment to change and stress, and family relationships
- in the longer term, role model and mentoring programs and other education and training initiatives for youth to enhance life skills in the context of participation in both the formal wage and traditional economies
- employment policies and procedures that give value to and enable the practice of traditional ways of life, including the principles of sharing and cooperation
- support for community initiatives in Baker Lake, as may be agreed in the IIBA, to address to community priorities towards enhanced community wellness.

#### **2.2.5 Workforce Management**

Workforce policies are intended to minimize contact between the residents of Baker Lake and non-Inuit employees to control inappropriate behaviours when the inevitable contact does occur, to ensure that Inuit employees have the opportunity to engage in subsistence activity, and to provide workplace

conditions that accommodate Inuit culture. Workforce management measures would include the following:

- clear communication on points of hire and applicant eligibility and instructions to interested applicants on how to apply for jobs from elsewhere
- establishment of a workers' camp at the mine site to house out-of-area workers
- establishment and enforcement of a code of conduct governing any movements of out-of-area workers into the community of Baker Lake and their behaviour in relation to the local population while in the community (the code will also be applied to workers who move through Baker Lake in transit between their homes and the job site; the code would emphasize zero tolerance for alcohol and drug use, harassment of any sort, and all illegal behaviour)
- provision of facilities to meet all reasonable needs of out-of-area workers, including physical and mental health services, such that workers need not use Baker Lake facilities
- fly-in/fly-out work schedules that see employees removed from the area when they are not working. Restrictions on the transport services provided, such as a commitment to return employees only to their point of hire, may be considered in the event that migration into or out of Baker Lake becomes an issue in the community.
- cross-cultural training of all employees to encourage mutual understanding and respect in interactions of Inuit and non-Inuit employees
- measures, as described in the section on employment above, intended to create workplace conditions that accommodate Inuit needs.

#### **2.2.6 Public Health & Safety & Disturbance**

Direct project public health and safety risks will be managed using best health and safety practice (plans, health, and safety training, enforcement of health and safety practice). Emergency response planning is intended to ensure that potential damages can be contained in the event of a project accident. Project traffic represents the most tangible risk to the workforce and to the people of Baker Lake. Mitigation would include controls on the use of firearms along the winter road; driver training; enforcement of driver codes of conduct that govern speeds particularly but also the principles of considerate driving; scheduling traffic so as to minimize safety hazards; and public education on road and water safety.

To mitigate the negative impacts of disturbance, Cumberland will apply the full range of construction and operations best practices within the limitations of the best accepted technology that is economically achievable to minimize air quality, noise, and visual effects. These would include measures for erosion control, dust suppression, good vehicle maintenance, visual barriers, careful waste disposal, spill prevention, and other measures described elsewhere in the EIA. Careful traffic scheduling will minimize traffic disturbances.



### **2.2.7 Closure**

The socioeconomic impacts of closure are most keenly felt when the employment and business opportunities created over the life of a project end and negative social impacts result from an economic downturn. The challenge is to ensure that in the process of enhancing local access to those opportunities during the mine life, consideration is always given to the mine's eventual closure. The intent is to increase the capacity of local labour and business to engage in economic activity that is independent of the mine.

The measures described above for employment, business and education and training include a number of components that are intended to realise this intent. The closure of the project will inevitably cause dislocation, particularly in Baker Lake. Nevertheless, to the extent that the following are successful, this dislocation should be attenuated.

- Preferential employment; on-the-job training; culturally sensitive employment practices that contribute to job satisfaction, retention, and promotion for the people of Kivalliq Region; and making local employment a criterion for evaluation of bids from non-Northern businesses will build capacity to participate in the formal wage economy. These measures will provide the workplace experience that will give people a competitive edge in competing for jobs elsewhere in the economy.
- Preferential contracting; assistance with the development of business expertise; making the use of local businesses a criterion for evaluation of bids from non-Northern businesses; and sharing information with other companies in the region on the capacity of local businesses will build experience and broaden markets.
- Education and training programs that emphasize not only the preparation of adults for work in the Cumberland mine, but also encourage young people have implications for long-term employability in the formal wage economy, have implication for long term employability. In addition, such programs can be expected to motivate individuals to achieve higher education levels in other areas such as health, education, public security, and business administration. The potential for gradually replacing non-Inuit social service delivery personnel, who are often rotated in and out, with qualified local individuals will increase employment opportunities in these areas and strengthen community resilience to the changes that will occur with closure.
- The impact of closure will be lessened for individuals who are able to combine formal wage employment with subsistence activity through appropriate and supportive education and training programs.
- Career counselling at the time of closure will assist employees in finding alternative employment.

### **2.2.8 Compensation**

In the course of project development to date, including exploration at the mine site, the people of Baker Lake have observed no disturbances to subsistence resources. As such, there has been no requirement for compensation for the loss of economic resources. Given the results of the traditional knowledge study and the environmental impact assessment, no such disturbances are anticipated.

In the event that project operations should have unforeseen consequences on subsistence resources, compensation may be required. A possible example is the necessary restriction on the use of firearms along the winter road for health and safety reasons—this could interfere with an individual's harvesting efforts. While unlikely, some environmental risk may be realized with consequent detrimental effects on wildlife. In either case, Cumberland would intend to negotiate compensation with affected individuals based on estimates of foregone harvest and the value of that harvest, taking into consideration cultural loss.

The project is expected to have no significant impacts on commercial activity related to environmental resources. The project area is not used for commercial harvesting or tourism and is remote from fishing grounds and parks. Again, in the improbable event that impacts occur, compensation would be negotiated with the affected individuals based on demonstrable loss.

### **2.2.9 Protocols in the Event of Discovery of New Heritage Sites**

The potential for disturbance to as-yet undiscovered archaeological or other heritage sites during the construction phase of the project is limited, given the extensive consultations with particularly the elders of Baker Lake. Cumberland will however negotiate a protocol with the KIA for use in the event that a potential site is uncovered during construction. The protocol would normally call for notification of the find to the Department of Culture, Language, Education, and Youth and a halt to construction until the find can be examined and a course of action determined. If it were deemed appropriate to leave the site undisturbed, a design modification would be required to avoid the site. The alternative would be to remove the artifacts and place them under protection.

## **2.3 MITIGATION IMPLEMENTATION**

The IIBA will address the details of how eventual mitigation and enhancement measures are to be implemented. Consultation, partnerships, and grievance mechanisms all imply not only the participation of but also roles and responsibilities relative to managing project impacts and benefits on the part of the people of Baker Lake, the KIA and partner organizations in Nunavut, and Cumberland.

### **2.3.1 Consultation**

Consultation throughout the life of the project will provide the information necessary to adaptively manage impacts that are difficult to identify with any certainty at the project outset. The consultation process will provide people with the mechanisms they need to participate in and provide content to mitigation and enhancement measures. The disclosure of information in both Inuktitut and English will permit people to participate from an informed position in project decisions that affect them. Consultation and information disclosure could include:

- assigning responsibilities to the Community Relations Officer in Baker Lake (already on Cumberland staff) to enhance the exchange of information on project-related issues, including employment, business and training interests, measures to accommodate Inuit culture in project operations, and priority community needs
- establishing a project advisory body, such as a community liaison committee, in Baker Lake with the participation of the KIA or other selected organizations as agreed

- holding public meetings with the residents of Baker Lake at least twice annually and at other times as may be requested
- holding meetings with subgroups of the population at large, such as business owners, where issues or opportunities arise that may not be of general community interest
- scheduling formal meetings with KIA leadership and partner organizations that may be working with Cumberland to implement mitigation and enhancement measures
- distributing information on employment and business opportunities in Baker Lake and the Kivalliq Region
- distributing a quarterly newsletter on project progress and events of interest (two issues have already been circulated)
- providing training to all management and supervisory staff on effective means of communication with Inuit employees
- fostering a workplace environment that facilitates employee input without fear of misunderstanding or retribution, including, for example, Inuit human resource personnel, comment boxes, and/or worker feedback meetings.

### **2.3.2 Partnerships**

Effective implementation of many of the mitigation and enhancement measures outlined above will require the participation of and cooperation with the KIA as well as government and civil society organizations in Baker Lake, Kivalliq Region, and Nunavut. Potential partnerships could include but are not limited to the following:

- *Economic development organizations* – to distribute information on employment and business opportunities created by the project, to obtain information on workforce and business capabilities to supply project needs, and to identify opportunities to assist businesses to participate in project contracting for goods and services
- *Secondary and post-secondary education organizations* – to identify opportunities for project input into mentoring and other activities intended to encourage students to stay in school; also to provide input into programs to better prepare students for work in the mining sector
- *Government of Nunavut* – to integrate on-the-job training and apprenticeships with existing programs
- *Government agencies responsible for social service delivery* – to ensure that Cumberland's employee assistance program can be implemented within the Inuit cultural context, that any support to community initiatives in Baker Lake is complementary to existing programs aimed towards community wellness, and to participate in monitoring programs.
- *Other private sector project proponents* – to share information and best practice and to coordinate programs in the interests of overall efficiency and effectiveness.

### **2.3.3 Grievance Procedures & Dispute Resolution**

There will inevitably be instances over the life of the mine where people feel they have, and may indeed have, grounds for complaint. In addition, as the IIBA will lay down obligations for both Cumberland and the KIA, grievances may be raised by either of these two parties. While such potential disputes are ideally resolved through informal means in the course of regular consultation, a formal mechanism is also necessary to permit concerns to be registered and to track their resolution. Cumberland and the KIA will establish a formal mechanism to hear grievances and resolve disputes in a timely and satisfactory manner, based on the following principles:

- a simple process to lodge a grievance in the language of choice, either verbally or in writing, taking care to ensure that everyone finds the process accessible
- clear roles relative to addressing the grievance for each of the person lodging the grievance, the KIA, and Cumberland
- a time frame within which a response to the grievance is provided
- where a grievance escalates into a dispute because the response is not deemed satisfactory by either the person lodging the grievance, the KIA, or Cumberland, an appeal process that defines time frames and roles through mediation or arbitration
- a system to record all grievances, disputes, and their resolution
- agreement on how the costs of grievance resolution are to be shared
- means of ensuring feedback to Cumberland operations of where systematic grievances are being observed.

## **2.4 ANTICIPATED EFFECTIVENESS OF MITIGATION & ENHANCEMENT MEASURES**

Cumberland intends to implement measures to maximize the benefits from the project for Baker Lake specifically, and for the Kivalliq Region and Nunavut more generally, and to contribute to sustainable development beyond the life of the mine.

However, many socioeconomic impacts are unpredictable, and dependent on decisions and actions by individuals, communities, and their governments. Baker Lake currently experiences the full range of social and economic challenges that have proven difficult to reverse elsewhere in even the medium term. It is anticipated that in maximizing local economic benefits through employment, business, and education and training initiatives, one of the most effective tools—increasing income—for improving quality of life will in fact be effective.

At the same time, because not everyone will benefit from the economic effects of the project and because increased incomes can have a range of negative side impacts, additional measures will be required, as outlined above, to address the specific concerns expressed by the residents of Baker Lake about the project. These measures will be negotiated and agreed to with the KIA and the Hamlet of Baker Lake and will be based on best practice and community consultations. They are therefore expected to effectively address potential negative project impacts.

To the extent that any of these measures do not produce the anticipated results, the balance between positive and negative effects may shift towards the negative. No particular measure is likely to fail entirely, but will be more or less successful on a continuum. In addition, the interrelationships between socioeconomic effects suggest that comparative lack of success with one measure, if compensated by success with another, may not be of consequence. For example, people in Baker Lake might respond more energetically to employment than to business enhancement measures, without any overall negative or less-positive effect than if the response were the reverse.

Finally, effectiveness of mitigation and enhancement measures in face of unpredictability will be determined by monitoring that will allow the KIA, the Hamlet, and Cumberland to identify evolving project effects and address these on an iterative basis. Should monitoring demonstrate at any point in project development that the potential for negative impact is being realized, Cumberland, the KIA, and the Hamlet of Baker Lake would work towards adapting mitigation and/or enhancement measures to address new concerns.



## **SECTION 3 • IMPACT MONITORING**

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The imperative of the project to deliver concrete economic benefits suggests that the measurement of those benefits is a priority for monitoring activity. Monitoring is also necessary to establish trends in community wellness so that problems that may be related to the project, or those the project can effectively address, can be identified. The primary objectives of socioeconomic monitoring are thus to:

- record the uptake of employment, business, and workplace training opportunities over time and to analyze the trends in this uptake in relation to expectations and targets
- monitor the implementation and effectiveness of education, training, and other community support initiatives
- evaluate the trends in community wellness and the relationship between these and project operations.

Monitoring will generate the information Cumberland and the KIA, as well as the people of Baker Lake, will need to adjust implementation as socioeconomic mitigation and enhancement proceeds. Regular monitoring allows problems and successes to be identified, and this information can then be used to improve implementation of agreed initiatives.

Cumberland's Community Relations Officer and other management staff would informally monitor the day-to-day implementation of socioeconomic mitigation and enhancement measures in the course of management and administration of their relationship with the project workforce, the population of Baker Lake and their leadership, and partner organizations. By giving the workforce and the people of Baker Lake access to Cumberland management, concerns can be identified as they evolve. A system of formal monitoring and documenting of results is also required.

### **3.1 OPERATIONS MONITORING**

Cumberland's own operations will provide monitoring data on the undertakings described in the IIBA. Such records will include human resource activities and patterns of project expenditures. In this regard, Cumberland undertakes to:

- maintain full human resource records in a form that will permit an annual roll-up of selection, employment, promotion, training, and exit statistics on the workforce by residence, ethnicity, gender, level, and field as a percentage of the total workforce
- maintain procurement records in a form that will permit an annual roll-up of the number, value, and general content of contracts for goods and services by supplier location and ownership as a percentage of total procurement
- require all contractors and subcontractors to provide annual reports documenting the same employment and business information

- maintain health and safety, accident, workforce behaviour, and other relevant records pertaining to events that occur in direct relation to Cumberland operations
- at least annually, undertake a formal review of the results of the above to determine the success and trends over time of initiatives to enhance participation of Inuit people and businesses, accommodate concerns of the local population, and to identify any specific obstacles or problem areas
- maintain records on all formal consultations, meetings, and grievance and dispute events with the public, leadership, partner organizations, the project workforce, contractors, and advisory bodies to the project, noting attendance, issues raised, and resolutions
- at least annually, undertake a formal review of the results of the above to identify any systematic successes or failures.

Cumberland will communicate the results of this monitoring internally to management and to the workforce as appropriate, such that the information can be used to adjust policies, procedures, mitigation and enhancement measures, and behaviours where deemed necessary. The results will also be reported annually in an appropriate form and discussed with Baker Lake and the KIA as part of ongoing consultation, information exchange, and monitoring on the project.

### **3.2 COLLABORATIVE MONITORING ON COMMUNITY WELLNESS**

Cumberland will participate with the people of Baker Lake, the KIA, and the Government of Nunavut to develop a framework for collaborative monitoring of community wellness. The details of this framework will be negotiated as part of the IIBA, but are expected to include an agreement to establish a collaborative monitoring group—with the participation of Baker Lake, the KIA, and Cumberland—and for Cumberland to provide some financial support for this group.

Principles underlying such collaborative monitoring include the following:

- *Participation of affected people* – Cumberland would work with the community of Baker Lake and the KIA to establish roles and responsibilities for monitoring that provide a lead role for the people who are affected by the project.
- *Efficiency* – While it is important that people affected by the project themselves identify indicators to be used to monitor project impacts, the extensive amount of data already being collected by the territorial government (and its departments and agencies) should be used to the extent possible to select such indicators. This will enhance cost effectiveness and data comparability and interpretation across both space and time.
- *Confidentiality* – Much socioeconomic data, even for small communities, must be treated as confidential.

Two areas expected to require collaborative monitoring are the effectiveness of any education and training strategy developed as part of the IIBA and the potential for indirect project impacts on

community wellness. Considerations in developing a monitoring framework for these two areas, as part of the IIBA negotiations, are outlined below.

### **3.2.1 Education & Training Strategy**

Cumberland has undertaken to work with the KIA to put in place an education and training strategy that will identify the objectives and content of the community-based education and training component of socioeconomic mitigation. With the articulation of these objectives and content, indicators can be developed to monitor implementation, and responsibilities can be assigned for collection of data on these indicators. A complete monitoring program is likely to have four general elements:

- number and brief description of programs, including contributions of human resources or funds from Cumberland (responsibility of Cumberland)
- levels of participation and completion rates relative to programs (responsibility of partners implementing programs)
- over time, educational performance and employment indicators, such as rates of high-school completion, labour force participation rates, and unemployment rates (routinely collected Government of Nunavut statistics)
- follow-up studies on program effectiveness; for example, on how participants are using knowledge that may have been gained in a particular program (responsibility to be determined based on the study parameters).

Although the first three types of monitoring data are fairly straightforward to collect and report, they are unlikely to provide the kind of information necessary to adaptively manage education and training initiatives. The first two simply provide information on inputs and outputs. Interpretation of the third relative to the success of any particular education and training strategy is confounded given the number of other factors that will influence the data. Therefore, the fourth kind of investigation is required for full monitoring. Given the potential sensitivity of follow-up work on beneficiaries of education and training, this type of monitoring will largely be the responsibility of the Inuit membership of the collaborative monitoring group, with financial support by Cumberland if agreed. Methodologies and results would be discussed with Cumberland such that the company has the information it needs for its human resource planning and decision-making, as well as for adjusting its support for education and training initiatives.

### **3.2.2 Community Wellness**

Potential socioeconomic impacts to Baker Lake, including those on individual, family, and community wellness, will also require formal monitoring. This is problematic because although there is much experience in identifying indicators of community wellness, it has proven extremely difficult to disentangle cause and effect. The project will not be the only force of change in the area. For example, any observed increase in substance abuse may be the result of several combined factors, from the continuation of an existing trend attributable to pre-existing conditions that have nothing to do with the project, to failure to get a project job, stress on family life of rotational employment, or as a result of new sources of supply introduced by out-of-area workers.

Nevertheless, it is in Cumberland's interest to understand socioeconomic trends so that the project has the information to intervene effectively, where appropriate. Cumberland has a long-term interest in the health of the Baker Lake community. In addition, establishing a monitoring framework that attempts to understand cause and effect is important to both Cumberland and to Baker Lake. This would be an important contribution both to maintaining a constructive relationship between the community and the project and to adjusting project mitigation measures in response to evolving impacts. Collaborative monitoring is essential to this process and involves the consideration of a variety of data from different sources.

The baseline study has collected some data against which to measure trends in such areas as population, educational achievement, average household size, participation and employment rates, and average income. These data are periodically publicly reported by government based on household surveys or other sources of information, and thus are fairly straightforward to collect over time.

Local education, health, and police services keep detailed data on their operations. Such data include rates of teenage pregnancy, attempted and actual suicides, incidents of domestic violence, mental health breakdown, and arrests for various types of crime. Much of these community-level social service data are confidential, but are often more pertinent to monitoring wellness than household survey data. These data could be provided in appropriate, aggregated form to members of the collaborative monitoring group by the agencies collecting them.

Monitoring perceptions through ongoing consultation with affected populations is also important. The extent of sharing and cooperation, the degree to which the project workplace accommodates Inuit culture, the levels of disturbance due to increased traffic, and the legal but disruptive behaviour of out-of area workforces are examples of subjective experiences. Cumberland's ongoing consultations with its workforce and the people of Baker Lake will provide some such information. It may also be possible for the collaborative monitoring group to organize additional consultations to acquire specific data.

As data from the above activities become available, they will need to be interpreted to indicate any evidence of socioeconomic trends and their relation to the project if the monitoring results are to be used effectively in adjusting mitigation. It should be noted that the type of investigations that may be necessary to disassociate project impacts from overall social change could be particularly invasive. Understanding the drivers of an unforeseen rise in, for example, teenage pregnancy requires more than evidence of coincidence of the observed rise and the mobilization of a project. To frame or adjust mitigation measures, it would be necessary to identify who the fathers are and under what circumstances the pregnancies occurred. The collaborative monitoring group may choose to undertake special studies as deemed valuable.

Monitoring and analysis of the impacts of resource development projects on communities across the North is ongoing by governments, special purpose agencies, academics, and resource extraction companies. Insights from such studies can inform the interpretation of data collected in Baker Lake as described above. The collaborative monitoring group could include review of such studies in deliberations on the cause-and-effect relationships between Cumberland's activities and community wellness indicators.

### **3.3 FUNDING FOR MONITORING**

Cumberland will bear all costs of monitoring and reporting on its own operational activities. Cumberland will also negotiate options for funding the collaborative monitoring of education and training initiatives and of community wellness with the KIA as part of the IIBA. The costs associated with this type of monitoring, particularly as it may involve special-purpose studies, will include the time expended by members of the collaborative monitoring group, household surveys, services of experts, translation, and/or reporting.



## SECTION 4 • REFERENCES

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