Results presented in Annual Reports may not be quoted or cited except with the written permission of the West Kitikmeot Slave Study Society. The results and conclusions are based on preliminary data. The Society and the authors take no responsibility for errors in the data or its interpretation that result from the preliminary nature of the data. Anyone interested in details about the results and supporting data should contact the Society.

WEST KITIKMEOT / SLAVE STUDY SOCIETY

Re: Community Based Monitoring 1998 (Cycle Two, Three & Four)

STUDY DIRECTOR RELEASE FORM

This Annual Report is the result of a project conducted under the West Kitikmeot/Slave Study. I have reviewed the report and advise that it has fulfilled the requirements to this stage of the approved proposal and can be subjected to independent expert review and be considered for release to the public.

Study Director

May 4/00

Date

INDEPENDENT EXPERT REVIEW FORM

I have reviewed this annual report for scientific content and scientific practices and find the report is acceptable given the preliminary stage of the project, its specific purposes, and subject to the field conditions encountered.

Reviewer

Ane 25/00

INDEPENDENT EXPERT REVIEW FORM

I have reviewed this annual report for scientific content and scientific practices and find the report is acceptable given the preliminary stage of the project, its specific purposes, and subject to the field conditions encountered.

Reviewe

Date

BOARD RELEASE FORM

The Study Board is satisfied that this Annual Report has been reviewed for scientific content and approves this Annual Report to be released to the public.

Chair

West Kitikmeot/Slave Study Society

July 18/00

Annual Report Community-Based Monitoring 1998 Cycles Two, Three and Four

May 1999



Submitted to:
The West Kitikmeot Slave Study Society

Submitted by: Lutsel K'e Dene First Nation

Prepared by: Brenda Parlee and Evelyn Marlowe

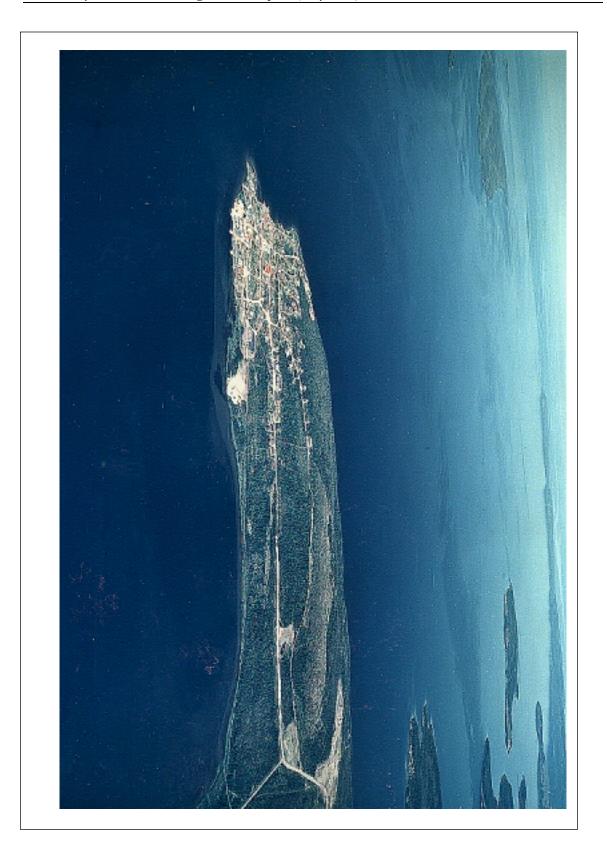


Figure 1: Arial Photo of Lutsel K'e, Northwest Territories

Summary

In 1996, the *Community-Based Monitoring Pilot Project (1996)* took place in Lutsel K'e, Northwest Territories. Similar to other northern communities in the Slave Geological Province, Lutsel K'e is currently faced with unprecedented mineral resource development. The goal of the *Community-Based Monitoring Pilot Project (1996)* was to design a tool that would increase the capacity of Lutsel K'e and other northern communities to address both the positive and negative effects (achieve benefits and mitigate negative effects) of such development.

The project was organized according to three phases. Phase one involved gathering ideas and Chipewyan terminology for concepts like monitoring, indicators and community health. During phase two, themes and indicators of community health were developed through open-ended home-visits with one hundred households in the community. In phase three, a four-step process of monitoring was designed.

Once this model for *Community-Based Monitoring* was developed, the Lutsel K'e Wildlife, Lands and Environment Committee recommended that a baseline of traditional knowledge about the Dene way of life (Dene ch'anie) be gathered. A proposal was submitted to the West Kitikmeot Slave Study Society for the *Traditional Knowledge Study on Community Health*, a study that began in March of 1997. During that project, elders told stories about the Dene way of life as it was in the past. These stories reflect many of the indicators developed during the pilot project.

Following the *Traditional Knowledge Study on Community Health (1997)*, the model for *Community-Based Monitoring* was implemented according to the process of monitoring designed during the pilot project. The four step process follows a four month time line and includes:

- 1) Information Gathering
- 2) Summarizing of Information
- 3) Evaluation
- 4) Reporting

Cycle One took place during September-December 1997 and the results are included in the *Community-Based Monitoring* Annual Report (1998). This report presents the results of Cycles Two-Four the results of which are summarized in Figure 2. A summary of the results of Cycle One are also included in Figure 2 and in the conclusions of this report for the purposes of comparison.

Indicator	Results from Cycle One-Four		Evaluation of Impacts
Employment			
	Twenty-two (22) people from Lutsel K'e were reported as employed in the mining sector in August 1997.	1998 Cycle Two Three (3) people from Lutsel K'e were reported as employed in the mining sector in January of 1998.	A comparison of the results of Cycle One and Cycle Two reflects the seasonal and short –term nature of employment opportunities for community members in the mining sector. Whereas 22 community members were employed in August 1997, only 3 people remained employed six months later. Responses to Question #5 of the survey done with mining sector employees in Cycle One (1997) may also provide clues as to the rapid flux in employment levels during the two study periods. Those responses included, low wages and no over-time, little room for advancement, no native food, and concern about environmental hazards. The Local Employment officer suggests that there are other institutional obstacles facing Lutsel K'e Dene Band members pursuing jobs in the mining sector. They include: • lack of job readiness • inadequate training and development programs • drug and alcohol problems • lack of local resource people able to assist in business development • lainited capacity for investment in business development • lack of infrastructure to support business development One way to begin addressing these problems according to the Employment Officer is a "Comprehensive Training Strategy" that would include five stages: • Life Skills and Job Readiness • Adult Upgrading • Pre-Employment Training • On-the-Job Training • On-the-Job Training

Traditional Food Consumption					
	1997	1998	In 1997-98, the most commonly consumed traditional food in		
	Cycle One	Cycle Two	Lutsel K'e was caribou meat, eaten five times a week on		
			average. The level of consumption for other kinds of traditional		
	Community Members	Community Members	food naturally varied according to the season and the kind of		
	interviewed in 1997 eat	interviewed in 1998 said they eat	wild game available. Ducks are one example of a food		
	traditional food between 11.6	traditional food between 7.55	consumed in late summer but not in winter. During August-		
	and 15.30 times per week.	and 9.2 times per week.	September, people eat slightly more fish than during December-		
	<u>Age</u> <u>Total per Week</u>	<u>Age</u> <u>Total per Week</u>	January. Moose and muskrat are also more commonly consumed		
	61+ 11.6	61+ 9.2	in late summer.		
	41-60 13.09	41-60 7.4			
	20-40 15.54	20-40 8.2	The results do not suggest that elders and adults eat more		
THE RESIDENCE OF THE PARTY OF T	10-19 15.30	10-19 7.55	traditional food than youth. In one case, the opposite appears to		
()			be true. Youth, aged 10-19, reportedly eat more caribou meat		
			and organs than do elders (61+). The community researchers		
2			explained this difference in consumption by the fact that caribou		
THE PARTY OF THE P			meat may be the most available and cheapest source of protein		
			available to parents feeding their young families. The		
			Community Health Worker added that youth might eat more		
			caribou meat/organs because they are better able to chew the		
			meat than are elders.		
			The level of traditional food consumption may be positively or		
			negatively affected by increased mineral development. A		
			baseline for late summer and winter consumption levels in		
			Lutsel K'e has now been established. Decreases in levels		
			between 1997 and 1998 are assumed to be seasonal. Further		
			monitoring of this indicator in the late summer of 1999 will		
			reveal whether there has been any <i>real</i> change in traditional food		
			consumption over a two year period.		
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Youth Goals for Education / Employment

1997 Cycle One

92% of youth are interested in careers visible in the community.

46% of youth are knowledgeable about specific training required to meet their goals.

0% of youth interested in mining sector related employment.

1998 Cycle Two

69% of youth are interested in careers visible in the community.

85% of youth knowledgeable about specific training required to meet their goals.

0% of youth interested in mining sector related employment.

The education of youth is an important aspect of their participating effectively in the community. In the past that education came largely through the family and focused on the skills and knowledge required for surviving on the land. Today the emphasis lies in youth gaining skills and knowledge needed to secure employment in the community.

During Cycle Two, students in Grades 4-6 were given the same questionnaire. The responses were similar to those given in Cycle One. With the exception of lawyers, all the careers, children were interested in were those visible in the community. None of the youth surveyed during Cycle One or Two identified education, jobs or career opportunities in the mining sector as a goal. If awareness and understanding among youth of the education and employment opportunities is a factor in youth pursuing those opportunities, it is likely that most youth will pursue training and employment in the professions that they identified, the majority of which are in the community. (teachers, nurses, and RCMP).

If it is the goal of Lutsel K'e Dene First Nation to encourage youth to take advantage of employment and careers in the community supporting them in meeting their current goals for education and employment would be valuable. If it is the goal of Lutsel K'e Dene First Nation to take greater advantage of job opportunities in the mining sector, further work to encourage and educate youth about the opportunities that exist for them in that sector would be beneficial. Neither of these goals are mutually exclusive, however, the former goal may be interpreted as better serving the community's interest in self-government.



Healing



1997 Cycle One

45% of those community members interviewed said the **Drug and Alcohol Worker** is the greatest form of support for people working on their sobriety and personal growth.

32% of community members interviewed said that there is little or **no support** available.

1998 Cycle Two

57% of those community members interviewed said that **AA or Group Meetings** are the greatest form of support available to community members.

0.03% of those community members interviewed named the **Drug and Alcohol Worker** as a form of support.

25% of those community members interviewed said there was little or **no support** available.

The results of Cycle One and Cycle Two reveal a rapid shift in the kinds of healing services people feel are valuable from Drug and Alcohol Worker to AA and Group Meetings. This rapid shift can be explained by the absence of a Drug and Alcohol Worker during the January-February, 1998.

The results do not suggest there is any change in the kinds of healing services required. The sensitivity of drug and alcohol issues makes it difficult to directly question people as to their use of services. According to the testimonies of Health and Social Services Staff, however, there has been an increase in the level of service required during the study period. More people are requiring care as a result of drug and alcohol problems.

An increase in drug and alcohol related problems in the community might in part be attributable to increased incomes from mining sector employment. However, as stated by the Employment Officer, drug and alcohol problems are often an obstacle to community members securing employment (where mandatory drug testing is a condition of employment). Workplaces where mandatory drug testing is not enforced may see a higher level of employee turn-over attributable to drug and alcohol problems.

Further monitoring of this indicator will be done in Cycle Seven. In order to more clearly determine whether the healing needs of the community members are changing as a result of mineral resource development, a sub-set of questionnaires will be conducted with mining sector employees and their families.

Housing



1998 Cycle Three

More Housing is required particularly for single people.

Housing is sometimes unfinished and poorly maintained.

Housing is good, reliable, and better than in the olden days.

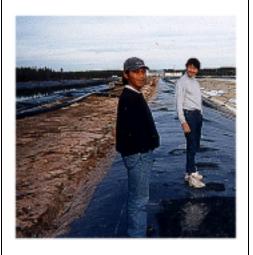
The quality of the housing in Lutsel K'e is an important issue for many community members. The results of Cycle Three suggest that there is a shortage of housing in the community, particularly for single people. Also, some people feel housing is unfinished and poorly maintained. Despite these concerns, many people that were interviewed suggested that housing was better, more reliable and warmer than in the olden days.

There are various ways that the housing might be affected by increased mining activity. An increase in employment in the mining sector may increase the capacity of some families to build and maintain their own homes (as opposed to renting). On the other hand, employees in the mining sector are also spending less time in the community and with their families. This may lead to a decrease in the capacity of families to maintain their homes.

There is also the potential for employees and their families to move away from the community. Although this may have a negative impact on the community in some ways, such outmigration may also lead to an increase in the number of housing units available in Lutsel K'e.

These results suggest nothing about the effects of mineral resource development on housing conditions. The community researchers will ask community members the same set of questions in Cycle Eight. Drawing guidance from the impact hypotheses on housing (Figure 4), several questions may be added to determine if people see any change in the ability of community members to build or maintain their own homes.

Impacts of Resource Development on the Land and Water



1997 Cycle Three

The resource development projects discussed during the study period by the Wildlife, Lands and Environment Committee include:

- 1. BHP Ekati Diamond Mine at Lac de Gras Area
- 2. Diavik Diamonds Inc. Proposed Diamond Mine at Lac de Gras
- 3. Glacier Power Proposed Hydroelectric development on the Barnsten River
- 4. Highwood Resources Proposed Beryllium Mine (Bulk Sample) at Thor Lake
- 5. Monopros Ltd. Diamond Exploration at Kennady Lake
- 6. Proposed Hydroelectric
 Development on the Lockhart
 River
- 7. Proposed Mini Hydro- Snowdrift River

As discussed during the *Traditional Knowledge Study on Community Health* (1997) and the *Community Based Monitoring Pilot Project* (1996), the impacts of **Talston Hydroelectric Development** are of continued concern to community members.

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During Cycle Three of the *Community-Based Monitoring Project*, a review of minutes of the Wildlife, Lands and Environment Committee revealed the kinds of mineral resource development projects that Lutsel K'e is currently facing in their traditional territory. This review also revealed the kinds of impacts that the committee was concerned about during their consultations with the mineral resource developers. During the *Traditional Knowledge Study on Community Health (1997)* and the *Community Based Monitoring Pilot Project (1996)*, the impacts of Talston Hydroelectric Development was also revealed as a continued concern to community members.

Mineral resource development and hydroelectric projects such as the Talston Hydroelectric Projects may have potential adverse impacts on the land, water and wildlife.

Specific impacts of individual projects may not be evaluated as significant by corporations and government consultants, however, the cumulative effects of many resource developments in the region may be tremendous. Although these "potential effects" are not well understood by the scientific community, they are the cause of great anxiety for members of Lutsel K'e Dene First Nation. Such anxiety may inevitably lead to greater social stresses within the community. As mineral resource development continues on Lutsel K'e Dene First Nation land, the insecurity, frustration and anxiety surrounding "potential effects" should be recognized as an impact on the Dene way of life.

The effects of resource development on the land (water) will be reviewed again in Cycle Eight.

Knowledge of Traditional Values



1998 Cycle Three

The Lutsel K'e Dene began visiting Parry Falls long before the elders can remember.

The average number of times community members have visited the falls is 4.6.

People describe the "Old Lady" as sacred and their visit as an expression of *spirituality*, *Chipewyan history and culture*, and *love for the land*.

The community's knowledge of traditional values including those associated with the "Old Lady of the Falls" may be impacted by increased mineral resource development in various ways.

More disposable income may increase the capacity of individuals and families to spend time engaged in activities (i.e. harvesting) that may lead to sharing of traditional values. On the other hand, it may lead to families spending less time engaged in those activities. The increase in training and education opportunities may also lead to a decrease in the amount of time people spend on the land

In response to the decrease in individual and family led cultural activities and in the effort to offset perceived impacts on the traditional economy, the Band may organize more community activities. A potential increase in moneys from Impact and Benefit Agreement may result in an increase in opportunities for community members to engage in activities that would lead to sharing of traditional values.

Cultural Programs

1998 Cycle Three

In the past, the skills and knowledge required for living on the land was passed on to youth through different forms of learning.

In 1998, there were fourteen cultural programs taking place in Lutsel K'e.

- 36% involved elders
- 93% involved youth
- Language was part of 29%
- 35% were on the land
- 43% were family activities
- 43% were school organized
- 57% were organized by the community.

The best approaches to cultural programs include: involve children and a key motivator, offer programs on the land, work with elders, offer programs that kids can see, feel, and experience things.

Cultural programs may be positively or negatively affected by mineral resource development.

More disposable income may increase the capacity of individuals and families to spend time on the land involved in cultural activities. It may also lead to families spending less time on the land and involved in cultural activities. The increase in training and education opportunities may also lead to a decrease in the amount of time people spend on the land and involved in cultural activities.

In response to the decrease in individual and family led cultural activities and in the effort to offset perceived impacts on the traditional economy, the Band may organize more community activities. A potential increase in moneys from Impact and Benefit Agreement may result in an increase in opportunities for community members to develop and participate in cultural programs. The values, knowledge and skills passed on through family oriented cultural programs may not be the same as those passed on through larger community programs offered by the Band. Efforts by the Band may not therefore wholly compensate for changes in individual and family lifestyle.

In 1998, almost one half (43%) of the programs offered were family oriented, and over half (57%) were organized by community members. Comparison of this information on cultural programs with results from future monitoring will provide more insight about the community's capacity to deal with the impacts of mineral resource development.

Togetherness



1998 Cycle Four

Those community members interviewed interpret working together as: "sharing ideas", "problem solving" and "working towards a common goal".

Respecting one another, cooperating, understanding and sharing each other's roles and responsibilities are also seen as important elements of working together.

Mineral resource development might impact on togetherness in the community in several ways. With the potential increase in moneys from Impact and Benefit Agreements, community organizations may find it easier to achieve their goals. However, if not distributed equitably within the community, these moneys may cause community organizations to work less well together.

The increase in training and employment opportunities that might result from mineral resource development may also affect the capacity of community members and organizations to work together. It may mean individuals spend less time in the community and as a result, their capacity to share ideas, problem solve and work towards a common goal may be diminished. Education can also provide community members with tools for working together. Increased self-esteem, knowledge, and skills can be developed that can increase the capacity of community members to share ideas, problem solve and work towards a common goal.

Traditional Knowledge and Skills (Caribou Harvesting)

1998 Cycle Four

The Caribou Harvesting Workshop and Dry-meat Making Workshop provided specific measurable baseline information about traditional knowledge and skills for caribou harvesting in Lutsel K'e. Knowing and understanding the caribou, the signs of a healthy animal, how to respect the animal during the hunt and the skills required to respectfully use, share, prepare and store meat were shared during the caribou harvesting workshop in Lutsel K'e. The step-by-step description of how the caribou should by cut up and prepared is baseline information that can be used in future monitoring.

Increased employment opportunities and the resulting increase in individual and family income may also result in changes in harvesting activities. More disposable income may increase the capacity of individuals and families to spend time on the land involved in harvesting activities. It may also lead to families spending less time on the land involved in harvesting activities. The increase in training and education opportunities may also lead to a decrease in the amount of time people spend on the land involved in harvesting activities.

A potential increase in moneys from Impact and Benefit Agreement may result in an increase in opportunities for community members to engage in harvesting activities. However, the skills and knowledge passed on during family oriented activities may be different than those offered in school programs or Band organized activities.

Traditional Knowledge and Skills (Land Use)



1998 Cycle Four

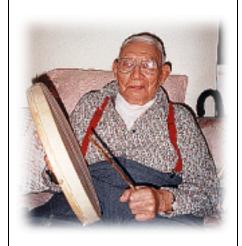
In recent years people have traveled, hunted and trapped in areas as far east as Beaverhill Lake and Sid Lake, as far south as Talston Lake, as far west as MacKay Lake and as far north as Alymer Lake.

During Cycle Four of the *Community-Based Monitoring Project* forty-four (44) interviews were completed regarding land use activities. The people's ages ranged from twenty to eighty years old. Out of 27 interviews, only one female was interviewed. Some people told stories as they drew their land use area. The trapping and hunting areas span as far east as Beaverhill Lake and Sid Lake, as far south as Talston Lake, as far west as MacKay Lake and as far north as Alymer Lake. (It is important to note that this area does not represent the entirety of Lutsel K'e Dene First Nation Territory.)

Increased employment opportunities and the resulting increase in individual and family income may result in changes in land use. More disposable income may increase the capacity of individuals and families to spend time on the land involved in cultural activities. It may also lead to families spending less time on the land. The increase in training and education opportunities may also lead to a decrease in the amount of time people spend on the land.

In response to the decrease in the amount of time families spend on the land and in an effort to offset perceived impacts on the traditional economy, the Band may offer more on the land activities. A potential increase in moneys from Impact and Benefit Agreements may result in an increase in opportunities for community members to develop and participate in on the land programs. However, the values, skills and knowledge passed on during family oriented activities may be different than those offered through larger Band organized activities.

Traditional Knowledge and Skills (Drumming)



1998 Cycle Four

During Cycle Four of the project a set of interviews were conducted with elders known to have traditional knowledge and skills for drumming. The kinds of songs they play are Cree and Dogrib songs that they learned from other Dene during celebrations or feasts and dances. One elder suggested there may have been Chipewyan songs in earlier times, but they are not aware of any today.

Traditional knowledge and skills for drumming may be affected by increased mineral resource development.

More disposable income may increase the capacity of individuals and families to spend time involved in traditional activities such as drumming. On the other hand, it could lead to families spending less time involved in traditional activities such as drumming. The increase in training and education opportunities may also lead to a decrease in the amount of time people spend in the community engaged in traditional activities such as drumming.

Depending on how it is spent, a potential increase in moneys from Impact and Benefit Agreements could offset negative impacts if it is used to develop opportunities for community members, especially youth, to participate in cultural activities. However, the skills and knowledge passed on during family oriented activities may be different than those offered in school programs or larger community activities.

Figure 2: Summary of Results and Conclusions from Community-Based Monitoring Cycle Two, Three and Four (1998)

Acknowledgments

Lutsel K'e Dene First Nation Lutsel K'e Dene First Nation - Wildlife, Lands and Environment Committee Former Chief Florence Catholique Chief Felix Lockhart

West Kitikmeot Slave Study Society

Cindy Allen of the Department of Musicology at Carleton University and Nicole Beaudry from the Department of Music at the University of Quebec.

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Objectives

The objectives of the Community-Based Monitoring Project Cycle Two, Three and *Four (1998)* included:

1. Home-visits

To measure changes according to specific indicators through home-visit information gathering.

2. Analysis (Summarize Information)

Analyze information gathered, recognising any change that may have occurred since the last baseline.

3. Analysis (Evaluate Information through Workshops) Verify Changes to Indicators through Workshop Consultation.

6. Communication of Results

To present this information through newsletters or some other meaningful form of communication such as public displays.

2.0 Project Description

Community-Based Monitoring Cycle Two, Three and Four (1998)

The aim of the Community-Based Monitoring Project was to meaningfully involve Lutsel K'e community members in documenting and understanding changes in the health of their community. Indicators of community health developed in 1996 during the pilot project were the basis for monitoring during Community-Based Monitoring Cycles Two, Three and Four (1998).

3.0 Methodology / Methods

3.1 Background

Community-Based Monitoring Cycle Two, Three and Four (1998)

Cycle Two, Three and Four of the Community-Based Monitoring Project (1998) followed the Action Research methodological framework established during the Community-Based Monitoring Pilot Project (1996) and the Traditional Knowledge Study on Community Health (1997). Although similar to Participatory Action Research (PAR), this methodology allows for flexibility in how it is implemented. This flexibility was important because Lutsel K'e had its own ideas about the way research should be done based on past experiences with researchers and research projects. Of primary interest to the community is the nature of community participation. The main elements of community participation that were emphasized as important in the planning stages of the research were, (1) coordination with the local leadership, (2) training of local people and (3) broad participation of the community.

Training

On the job training of a local person has been fundamental to the development of the Community-Based Monitoring Project. The goal of this training process is to ensure that skills and knowledge from the project are being developed and passed on to local people. These skills and knowledge are a means to increase the capacity of both the individual The three trainees during Cycle Two-Four of the project were and the community. Evelyn Marlowe, Bertha Catholique and Marie Catholique. Evelyn Marlowe also began to take on more of a trainer role, passing on the knowledge she had gained to additional local community members hired to work on the project.

Coordination with the Local Leadership

The second aspect of community involvement is coordination with the local leadership. Coordination is achieved through communication and information exchange with the Lutsel K'e Dene Band Council and the committees (Wildlife, Lands and Environment Committee, Elders' Committee, Youth Committee). The aim of such coordination is to ensure that the local leadership is directly involved in the process of monitoring as well as in the evaluation of results. Their primary tasks in Cycle Two-Four was to assist the community researchers in selecting indicators and measures for monitoring, to oversee the data collection process, reflect on the results of the project and how they might be used and to approve reports destined for the West Kitikmeot Slave Study Society.

Interest in the project by the Chief and Council, and Wildlife, Lands and Environment Committee and other local agencies such as the Health and Social Services Administration has grown over the last two years. As more comparative results are put forward by the researchers for evaluation by the community, feedback on the information and the changes being documented has mounted. The community researchers are seeing the project increasingly as a "community planning tool". Their determination to see the information used by local agencies is growing. Some examples of the local agency and leadership implementation of the results in 1998 are listed below.

- Results on Land Use / Nutrition / Family Wellness were used by the Wildlife, Lands and Environment Committee during the recent Environmental Assessment of the Proposed Diavik Diamond Mine (Charlie Catholique – Chair Wildlife, Lands and Environment Committee) Brenda Parlee – Coordinator Wildlife, Lands and Environment Committee)
- Results on Healing were Used by Health and Social Services Administration to Affirm the Importance of the Drug/ Alcohol Worker in the Community. (Rachael Abel – Health and Social Services Administration)

The community researchers recognize that they could achieve even greater success in the Action-Research methodology and are consistently looking to improve their approach to coordination with the leadership. One example of their efforts was the development of an Elders' and a Youth Committee to assist with the selection of indicators, the development of questionnaires, and the evaluation of results.

Broad Participation:

Facilitating broad participation of the community was the third aspect of community participation emphasized as important during the planning of the project. Home-visit questionnaires with large numbers of community members ensure that everyone in the community is involved. Since the local language in Lutsel K'e is Chipewyan many of these home-visits are conducted by the researchers in their Aboriginal language. Homevisits continue to be the most successful means of including large numbers of community members in the project. Evaluation of results is also been done through home-visits. As the community researchers gain more confidence and results develop, workshops have become an increasingly effective means of evaluating results.

3.2 Project Management

Project Management shifted during Cycles Two and Three from Evelyn Marlowe to Brenda Parlee. Evelyn Marlowe took over as Project Manager again in Cycle Four. She became responsible for implementing all four components of the monitoring process under the direction of the Wildlife. Lands and Environment Committee.

3.3 Selecting Indicators

The present project builds on work done during the Community-Based Monitoring Pilot Project (1996) and the Traditional Knowledge Study on Community Health (1997). During these projects, indicators of community health were defined based on home-visits with every household in the community. Because there were so many indicators, a process of selection had to undertaken to find the most appropriate and useful indicators for monitoring.

Given that the process of monitoring is based on Action Research and is designed to be community-based, selecting indicators of significance to the community was fundamental to the project. In September 1997, the Project Director (Evelyn Marlowe) and community researcher Dora Enzoe selected indicators to monitor during Cycle One. The selection process involved a 3-hour evaluation of each of the indicators based on several criteria. First, they discussed whether or not the indicators were important in the sense that they reflected something significant or of concern to the community. The main references for evaluating the significance of the indicator to the community were the results from the Community-Based Monitoring Pilot Project and the Traditional Knowledge Study on Community Health.

There were also some basic practical issues to consider in selecting the indicators. The researchers considered whether the indicators were being monitored by other agencies. For example, indicators related to physical health were being monitored by the Health Centre. The vast majority of the indicators defined during the pilot project however, were not known to be monitored by other agencies. The community researchers also considered how easy it would be to collect information. Some indicators such as child well-being (happiness) were considered too difficult to monitor. The specific rationales for indicator selection are based on the stories told during the pilot project and the traditional knowledge study. Because of the sensitivity of that information those stories are not publicly available but may be accessed by contacting the Lutsel K'e Dene First Nation Band Council. A summary of those rationales however are found here in sections 3.3.1 - 3.3.12.

3.3.1 Nutrition - Consumption of Traditional Food

Food from the land is an important element of the Dene way of life. Because of its high nutritional value, it is a strong indicator of individual nutrition. It also reflects other health issues including that of the environment and cultural values. The community researcher and Wildlife, Lands and Environment Committee valued these elements of the indicator. Because traditional food consumption is so fundamental to the community's well-being, they saw it as necessary in monitoring potential impacts of mineral resource development.

3.3.2 Employment in the Mining Sector

Employment is an important issue in many northern communities including Lutsel K'e. Employment that leads to greater economic development and selfgovernance was revealed during the Community-Based Monitoring Pilot Project as particularly important. Presently, the increase in exploration and developments such as BHP Diamonds Ltd. has raised hopes among community members that employment in the mining sector will increase. The community researchers and the Wildlife, Lands and Environment Committee therefore recognized the value of monitoring change in employment in that sector.

3.3.3 Youth Participation in the Community

The ability of youth in the community to define and meet their own goals was another indicator considered to be important for monitoring. It can provide insight about how youth in the community are doing as well as their potential role in the community's vision for self-government. This was important to the community researchers as well as the Wildlife, Lands and Environment Committee who are concerned that, "Something must be done for the youth." They also saw the value in monitoring the extent to which youth are interested in education and employment in the mining sector as a indication of the impact that mineral resource development is having on the youth and their goals for the future.

3.3.4 Healing Services

The healing process is a fundamental aspect of the Dene way of life in Lutsel K'e. Understanding that process, particularly community needs for healing services and approaches to sobriety and personal growth is also useful as the community works to take on its own health and social service programs. The community researchers, Wildlife, Lands and Environment Committee as well as local staff of Health and Social Services programs saw the value in monitoring the healing needs and perspectives of community members, recognizing that as mineral resource development in the region increases, the community's needs for healing may also change.

3.3.5 Cultural Programs

The Dene way of Life is based around a set of skills and system of knowledge that has developed over generations. Ensuring that these skills and knowledge are passed on to the youth is very important to the community. One of the means by which these skills and knowledge are being passed on are through cultural education programs. During the pilot project there were concerns about limited number of programs in place and the effectiveness those that were being offered. The community researchers and the Wildlife, Lands and Environment Committee therefore sought to learn more about the number of cultural education programs in place, their effectiveness and how they might be affected by mineral resource development.

3.3.6 Housing

The quality and availability of housing in the community was an aspect of community health identified as important by interviewees during the pilot project. In addition to its significance to the community, the community researchers and the Wildlife, Lands and Environment Committee recognized the potential for mineral resource development to increase the capacity of community members to build and/or maintain their homes.

3.3.7 Traditional Values - "The Old Lady of the Falls"

Traditional values are important to the community's health in the sense that they guide the process of cultural preservation as well as other social, economic, spiritual and political dimensions of the community. One concrete example of the community's traditional values is the annual pilgrimage to the spiritual site called the "old lady of the falls" on the Lockhart River, one hundred kilometres east of Lutsel K'e. Based on the stories told by elders during the *Traditional* Knowledge Study on Community Health and the pilot project, the community researchers recognized the number of visitations made to the "Old Lady of the Falls" to be a useful quantitative measure. The Wildlife, Lands and Environment Committee as well as the Elders' Committee from the *Traditional Knowledge* Study on Community Health were consulted about the appropriateness of this indicator for monitoring. The researchers had some concerns that because of the spiritual significance of the site, some community members might not want to talk about it. The two Committees were supportive of the idea suggesting it might educate people outside the community about the importance of respecting that area

3.3.8 Impact of Resource Development on the Land (Water)

A key concern raised during the pilot project was the past, present and future impacts of resource development on the land. Potential impacts on the water including key spiritual sites such as the "Old Lady of the Falls" on the Lockhart River was of particular concern. The community researchers and the Wildlife. Lands and Environment Committee felt it was important to assess the level of local knowledge including community fears and anxieties about development projects and their impacts to understand how mineral resource development and its disturbance of the environment is affecting the community's health.

3.3.9 Land Use

The Wildlife, Lands and Environment Committee suggested gathering information related to current land use. In addition to the important economic value associated with traditional land use and wildlife harvesting, traditional land use facilitates the preservation and development of many cultural and spiritual aspects of the Dene way of life. In that way, it was recognized by the community researchers as central to the well-being of the community. The community researchers and the Wildlife Lands and Environment Committee, also recognized that increased income in the community and disturbance of the regional

environment resulting from mineral resource development could impact on traditional land use.

3.3.10 Togetherness

The capacity of the community to work together was emphasized by community members during the pilot project as a major issue of community well-being. Elders during the *Traditional Knowledge Study on Community Health* also raised this as an important aspect of the Dene way of life. The community researchers under the direction of the Wildlife, Lands and Environment Committee selected this indicator because they felt it was important to learn to work together. By working together, the community would be better able to take advantage of opportunities created by the development as well as deal with any negative socioeconomic or cultural impacts. The community researcher also felt that monitoring this indicator would encourage community members and the leadership to make better decisions for future generations.

3.3.11 Traditional Knowledge and Skill (Drumming)

The sharing of traditional knowledge and skills such as drumming are fundamental to the community and their efforts toward cultural preservation. In the indicator selection process, a Band Councillor emphasized drumming of a skill passed on from previous generations that has both cultural, spiritual and social significance. The community researchers therefore included drumming to their list of indicators for monitoring.

3.3.12 Traditional Knowledge and Skills (Caribou Harvesting)

Respecting, harvesting and preparing caribou is also fundamental in the community's journey of cultural preservation. In addition to the economic value that harvesting caribou has within the family and the community, the knowledge and skills have cultural, spiritual and social importance. The Wildlife, Lands and Environment Committee recommended gathering detailed information about caribou harvesting as a measure of changes in the level of traditional knowledge and skills in the community. The community researchers also recognized that increased incomes and environmental disturbance from mineral resource development could have an impact on caribou harvesting and therefore

Sensitivity of the indicators to the influences (stresses) of mineral development was another consideration in the selection of indicators. A literature review and a preliminary assessment of the indicator sensitivity, revealed that many of the indicators would be sensitive to changes introduced by mineral resource development. (See *Community-Based Monitoring Pilot Project 1997*)

Some of the indicators developed during the pilot project were recognized as more sensitive to predicted effects that others. Understanding how the indicators might be affected by mineral development aided by the development of impact hypotheses. An impact hypothesis links sequentially the inputs of a particular development to the effects that it has within the system. Essentially it is an illustration of the multiple

interactions between an action taken and its effects. Although impact hypotheses can be complex and mathematical equations of cause and effect relationships, they can also be simple tools for thinking about and anticipating potential effects. In that way they illustrate the community's interpretation of how the influences of mineral resource development might affect the health of the community.

Impact Hypotheses for each indicator monitoring during Cycles Two-Four are found in Figure 3-5. Each hypothesis includes a textual descriptions as well as an arrowed diagram or effects map. These impact hypotheses were developed by Brenda Parlee based on the stories told during the Community-Based Monitoring Pilot Project (1996) and the *Traditional Knowledge Community Health* (1997).

These effects maps use various measures of the influences of mineral resource development (e.g. employment opportunities) and measures of changes in the community's health (e.g. increased employment and income levels) to trace effects to each indicator, highlighted in bold. (e.g. potential increase in investment in equipment for on-the-land activities > increased potential for harvesting of traditional food > potential increase in traditional food consumption).

The impact hypotheses suggest that the main pathways by which mineral resource development is likely to affect the community are:

- Employment in the mining sector
- Impact and Benefit Agreements
- Disturbance of the Environment

There may be other pathways by which mineral resource development might affect the community. The hypotheses are phrased as questions rather than as predictions. As such the hypotheses are not definitive descriptions of how the community is changing. They are instead meant to be food for thought, to assist those concerned about socioeconomic and cultural impacts on northern communities, to understand some of the important issues and potential opportunities for community benefits and mitigating negative impacts.

Indicator	Rationale / Impact Hypotheses
Self-Government Economic Development Employment	Assuming there is an increase in the number of job opportunities in the mining sector: • To what extent will the community members participate in training programs and secure employment in the mining sector?
Desired Job Opportunities / Level of Employment The number of (mining sector) jobs in the community.	

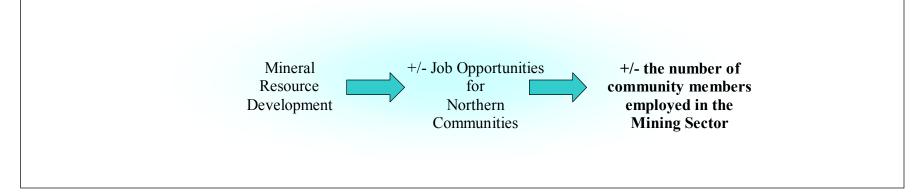


Figure 3a: Impact Hypothesis #1 - Employment in the Mining Sector (1998).

Healing Individual Health

Nutrition

The number of caribou, moose, other wildlife consumed during the study period.

Consumption of traditional food in the community may be affected positively or negatively by mineral resource development.

Assuming employment levels increase in Lutsel K'e, and there is a corresponding increase in income in the community:

- To what extent will consumption of traditional food decrease and store-bought foods increase?
- To what extent will income be spent on tools and equipment for on-the-land activities?
- Assuming there is an increase in tools and equipment for on-the-land activities:
 - To what extent will the on-the-land activities include the harvesting of traditional food thus increasing traditional food consumption in the community?

Assuming there are Impact and Benefit Agreements made with mining companies,

- to what extent will the revenue from those agreements be invested in community on-theland activities
- Assuming some revenue is invested in community on-the-land activities
 - > To what extent will the on-the-land activities include the harvesting of traditional food thus increasing traditional food consumption in the community?

Assuming employment in the mining sector increases and the amount of time employees and their families spend on-the-land decreases:

• To what extent will the harvesting and consumption of traditional food in the community decrease?

Figure 3b: Impact Hypothesis #2 - Traditional Food Consumption (1998).

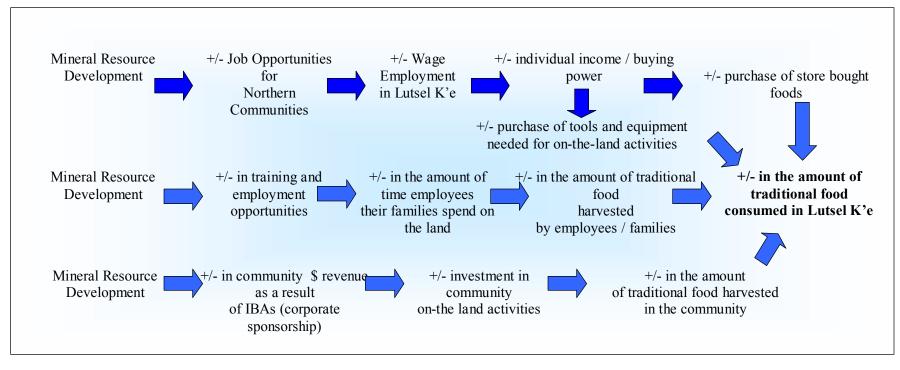


Figure 3b: Impact Hypothesis #2 - Traditional Food Consumption (1998).

Self-Government Youth Participation in the Community

Knowledge and Capacity of Youth – Education How well are youth in doing in education? The ability of youth in the community to define and meet their own goals may be affected positively or negatively by mineral resource development.

Assuming there is an increase in the number of training and employment opportunities in the mining sector:

• To what extent will the community members participate in training programs and secure employment in the mining sector?

Assuming there is an increase in the number of community members trained and employed in the mining sector:

- To what extent will these individuals be role models in the community and encourage youth to continue their education and seek employment in the mining sector?
 - > To what extent will youth continue their education and seek employment in the mining sector?

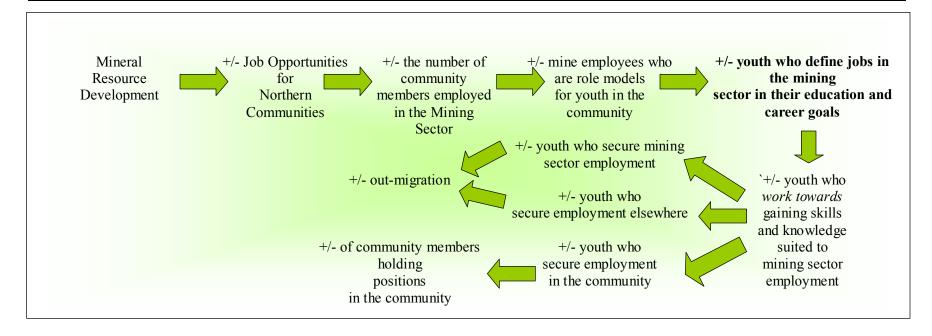


Figure 3c: Impact Hypothesis #3 -Youth Goals for Education and Employment (1998).

Healing Services

Capacity of Healing Services to Meet
Community Needs
How successful are healing services in
meeting community needs?

The capacity of healing services to meet the community's needs may be affected by mineral resource development positively or negatively.

Assuming there is an increase in the number of community members employed in the mining sector and assuming income of individuals increases and the amount of time families spend together decreases:

- To what extent will the capacity of individuals to meet their basic needs and the needs of their families change?
- To what extent will stress on the family increase?
 - > To what extent will this lead to an increase / decrease in family wellness?

Assuming there is a change in family wellness:

• To what extent will community needs for support services such as drug / alcohol services change?

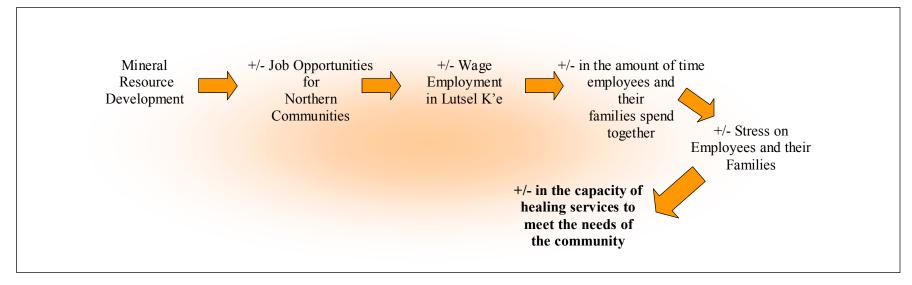


Figure 3d: Impact Hypothesis #4 - Healing Services (1998).

Indicator	Rationale
Self-Government What the Community Looks Like? The Quality and Effectiveness of Local Services [Infrastructure] How well is the Band doing in serving the community?	Housing in the community may be affected by mineral resource development in community positively or negatively. Assuming there is an increase in employment opportunities / employment in the mining sector and the incomes of employee members and their families increase: • To what extent will the capacity of individuals / families to maintain rental (public) housing increase? • Will individuals / families move out and rental (public) housing and build / maintain their own homes? • To what extent will the availability of rental housing increase? Assuming employment in the mining sector increases: • How many employees and their families move out of the community? • To what extent will out-migration lead to an increase in the availability of housing in the community?

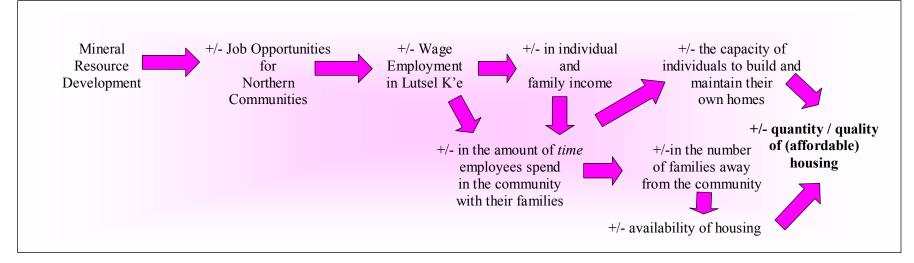


Figure 4a: Impact Hypothesis #5 - Housing (1998).

Economic Development

The Effects of Development on the Environment

How are the developments in the region affecting the environment?

Assuming there is an increase in mineral resource development in the region:

• To what degree will disturbance of the regional environment increase?

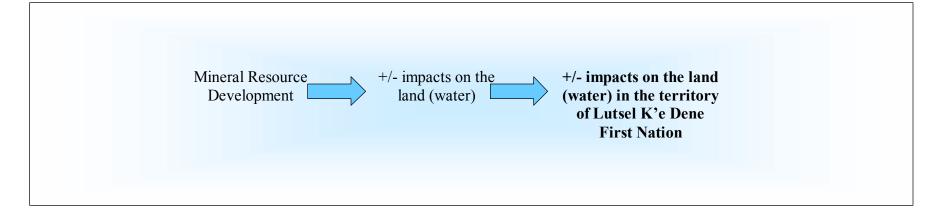


Figure 4b: Impact Hypothesis #6 - Impacts of Resource Development on the Land (Water) (1998).

Traditional Knowledge

Knowledge of Traditional Values How much do people respect the land, water, and wildlife? (Case: "Old Lady of the Falls") Mineral resource development may affect traditional values in various ways.

Assuming there is an increase in community revenue as a result of IBA Agreements and corporate sponsorship:

- To what extent will this increase the resources available to finance the spiritual gathering at the "Old Lady of the Falls"?
 - > To what extent will this increase the capacity of community members to practice their traditions, and pay respect to the "old lady of the falls"?

Assuming there is an increase in employment in the mining sector and the incomes of individuals and families increases:

- To what extent will this increased individuals invest in tools and equipment for on-theland activities
 - > To what extent will this increase the capacity of individuals / families to practice their traditions and pay respect to the "old lady of the falls"?
- Will individuals / families spend less time in the community and involved in on-the-land activities?
 - > To what extent will this decrease in the capacity of individuals / families to practice their traditional values?

Figure 4c: Impact Hypothesis #7 - Knowledge of Traditional Values "The Old Lady of the Falls" (1998).

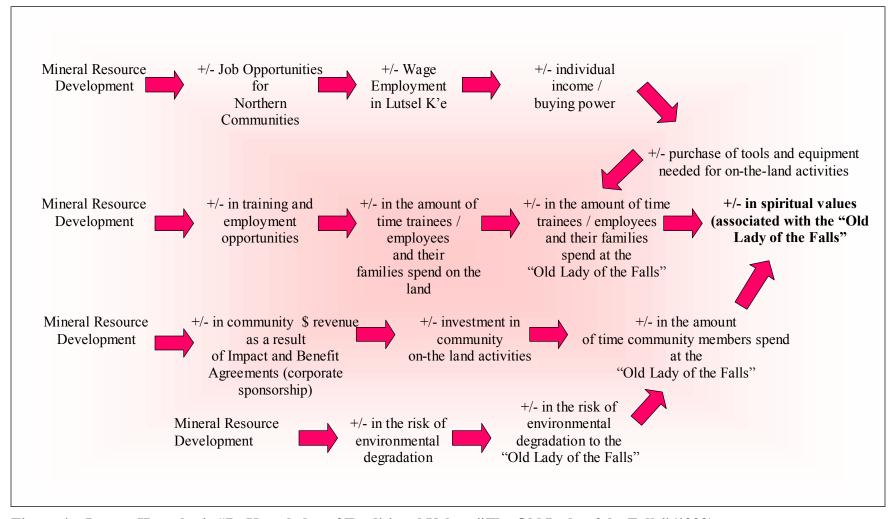


Figure 4c: Impact Hypothesis #7 - Knowledge of Traditional Values "The Old Lady of the Falls" (1998).

Cultural Education

Success of Cultural Programs
Currently Being Offered
How successful are the cultural
programs currently being offered?

Mineral resource development might affect the success of cultural programming in various ways. Assuming there is an increase in community revenue as a result of IBA Agreements and corporate sponsorship:

- To what extent will this increase the resources available to finance cultural programs?
 - > To what extent will this increase in the number of cultural programs and the cultural education of young community members?

Assuming there is an increase in employment in the mining sector and the incomes of individuals and families increases:

- To what extent will this increase the number of individuals who invest in tools and equipment for on-the-land activities
 - > To what extent will this increase the capacity of individuals / families to support cultural programs including on-the-land activities?
- Will individuals / families spend less time in the community and involved in on-the-land activities?
 - > To what extent will this decrease in the capacity of individuals / families to support cultural programs?

Assuming there is an increase disturbance to the environment as a result of in mineral resource development:

- To what extent will the level of anxiety about the health of the land increase?
 - > To what extent will this lead to a decrease in the amount of time people spend on the land engaged in cultural programs?

Figure 4d: Impact Hypothesis #8 - Cultural Education (1998).

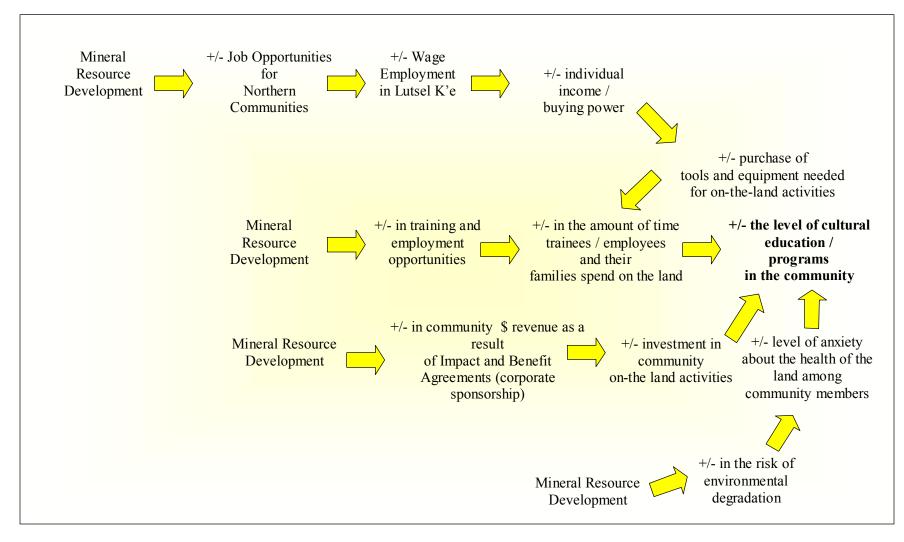


Figure 4d: Impact Hypothesis #8 - Cultural Education (1998).

Indicator	Rationale
Self-Government Togetherness Communication and Respect How well are people in the community respecting and communicating with each other?	Mineral resource development might affect communication and respect in the community in several ways. Assuming there is an increase in community revenue as a result of IBA Agreements and corporate sponsorship and the financial resources of the community as a whole increase? • To what extent will this increase the collective capacity of local organizations? > To what extent will this increase the capacity of organizations to work together? • To what extent will this increase the capacity of individual local organizations? > To what extent will this decrease the capacity of local organizations to work together? Assuming there is an increase in employment in the mining sector and the income of those community members already employed increases? • To what extent will this lead to greater income inequity in the community? > To what extent will the capacity of community members to work together decrease? Assuming there is an increase in employment in the mining sector and the income of those community members previously unemployed increases? • To what extent will this lead to greater income equity in the community? > To what extent will this lead to greater income equity in the community? > To what extent will the capacity of community members to work together increase? Assuming there is an increase in employment in the mining sector and the amount of time employees spend in the community decreases: • To what extent will communication between employees and the community decrease? • To what extent will this limit the capacity of community members to work together?

Figure 5a: Impact Hypothesis #9 - Togetherness (1998)

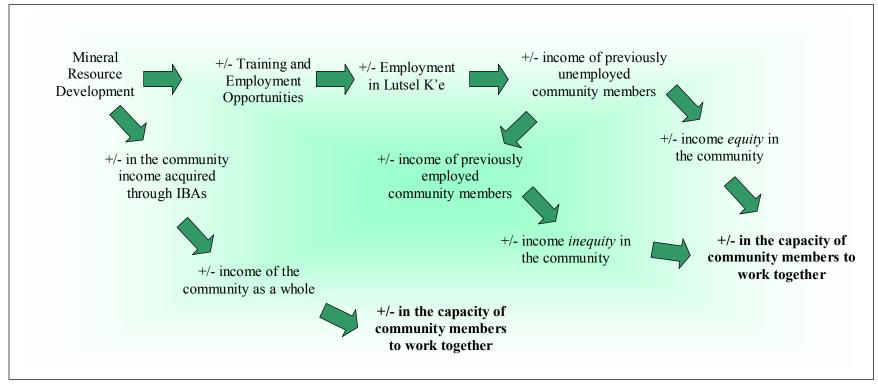


Figure 5a: Impact Hypothesis #9 - Togetherness (1998)

Cultural Preservation Land Use

Traditional Land Use and Appreciation

The number of people trapping or involved in traditional land use activities?

Assuming there is an increase in community revenue as a result of IBA Agreements and corporate sponsorship:

- To what extent will this increase the resources available to support traditional land use activities?
 - > To what extent will this increase in the number of community members involved in on-the land activities?

Assuming there is an increase in employment in the mining sector and the incomes of individuals and families increases:

- To what extent will this increase the number of individuals who invest in tools and equipment for on-the-land activities?
 - > To what extent will this increase the capacity of individuals / families to participate in traditional land use activities?
- Will individuals / families spend less time in the community and involved in on-the-land activities?

Assuming there is an increase disturbance to the environment as a result of in mineral resource development:

- To what extent will the level of anxiety about the health of the land increase?
 - To what extent will this lead to a decrease in the amount of time people spend engaged in on-the-land activities?

Figure 5b: Impact Hypothesis #10 - Land Use (1998)

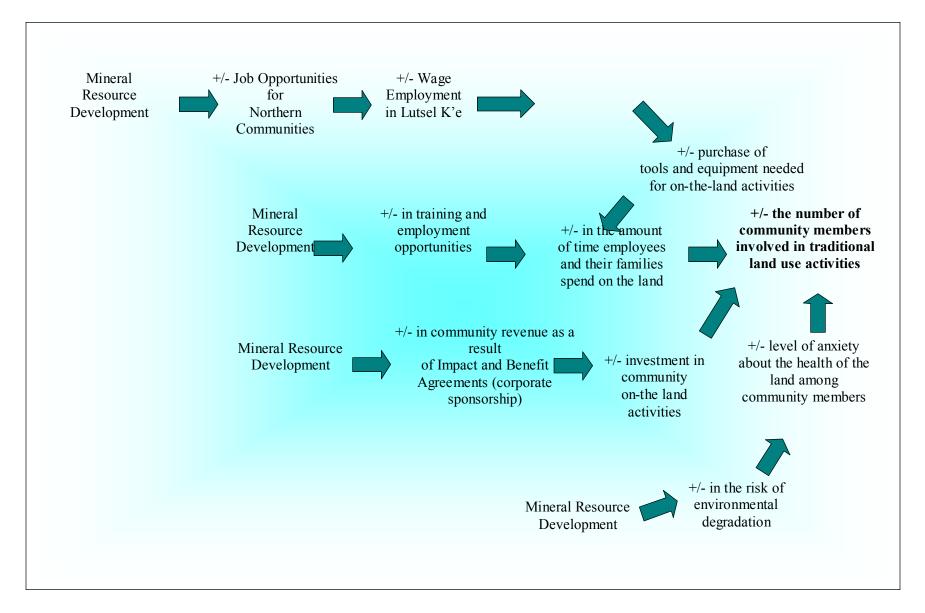


Figure 5b: Impact Hypothesis #10 - Land Use (1998)

Cultural Preservation Traditional Knowledge

Traditional Knowledge and Skills *How much do people know about drumming?*

Assuming there is an increase in community revenue as a result of IBA Agreements and corporate sponsorship:

- To what extent will this increase the resources available to finance cultural programs that teach knowledge and skills related to drumming?
- ➤ To what extent will this increase in the number of community members who drum? Assuming there is an increase in employment in the mining sector and the amount of time employees spend in the community with their families decreases?
 - > To what extent will this decrease the opportunities for individuals / families to support cultural programs including drumming?

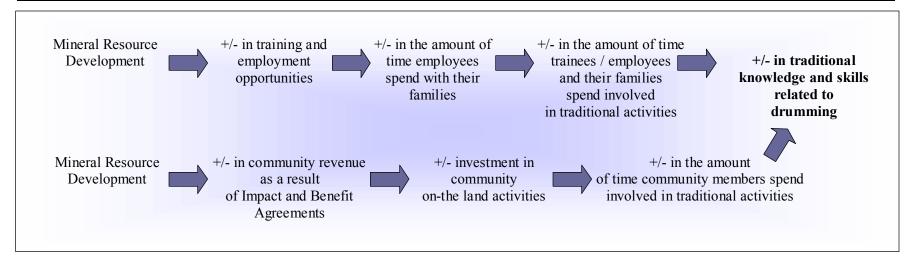


Figure 5c: Impact Hypothesis #11 - Traditional Knowledge and Skills (Drumming) (1998)

Cultural Preservation Traditional Knowledge and Skills

Knowledge about Harvesting [Caribou Harvesting / Cutting]

Assuming there is an increase in community revenue as a result of IBA Agreements and corporate sponsorship:

- To what extent will this increase the resources available to finance cultural programs that teach knowledge and skills related to caribou harvesting?
 - > To what extent will this increase in the number of community members engaged in caribou harvesting?

Assuming there is an increase in employment in the mining sector and the incomes of individuals and families increases:

- To what extent will this increase the number of individuals who invest in tools and equipment for on-the-land activities?
 - > To what extent will this increase the amount of time individuals spend on-the-land activities and the opportunities to harvest caribou?

Assuming there is an increase in employment in the mining sector and the amount of time employees spend in the community with their families decreases?

> To what extent will this decrease the opportunities for individuals / families to engaged in caribou harvesting?

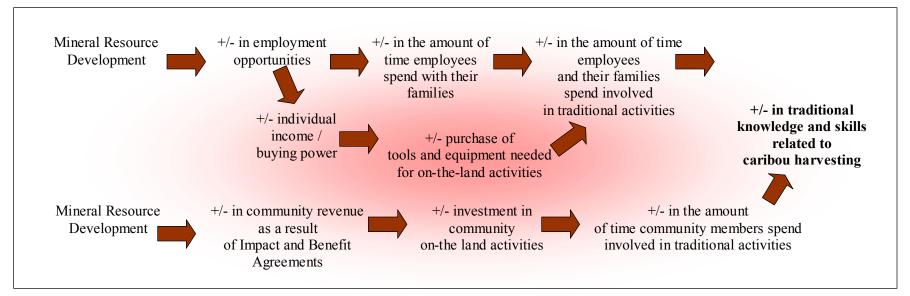


Figure 5d: Impact Hypothesis #12 - Traditional Knowledge and Skills (Caribou Harvesting) (1998)

3.4 Data Collection

The method of data collection and the rationale varied from indicator to indicator.

3.4.1 Nutrition - Consumption of Traditional Food

The community researchers used the 1993 work of Centre for Indigenous People, Nutrition and the Environment (CINE)¹ as a model. The CINE "Traditional Food Frequency Questionnaire" was intended to reveal the frequency of consumption of traditional food in the last three months prior to the visit. The researchers during the Community-Based Monitoring Project adapted that questionnaire from a three month to a two month recall. The methods for the CINE Study were also done as home-visits (individual interviews). The sample of households for Community-Based Monitoring (40) has been similar or slightly larger than the 10% sampled during the CINE project. The researchers for both the CINE study and the Community-Based Monitoring Project used four age categories and attempted to sample the same number of males as females.

The detailed and quantitative nature of the CINE "Traditional Food Frequency Questionnaire "for the Community-Based Monitoring was valuable model because it allowed the researcher to gain a great deal of quantitative data which is easily compared through charts and tables. The lack of open ended questions, however, limited the amount of qualitative information collected. Stories, and other narrative comments about traditional food consumption would have provided valuable context to the lists of numbers. In some cases, the interviewees did provide contextual or evaluative information along with their quantitative responses. For example, elders spoke about the health of fish in a nearby lake or changes in the population of certain waterfowl species. The researchers recorded these comments separately from the quantitative data.

By using the same or similar methods and questionnaires the community researchers recognized they would be able to use the results from the 1992 CINE study for comparison in Community-Based Monitoring.

During Community-Based Monitoring Cycle Two (1998), home-visit questionnaires were conducted on traditional food consumption. The survey focused on consumption of caribou, moose, whitefish, trout, and muskrat.² These species were selected because they are commonly consumed in Lutsel K'e during the December – January season. These species correspond with the harvest calendar from the Centre for Indigenous Peoples' Nutrition and the Environment produced in 1993.

¹ Oliver Receveur et.al. <u>Variance in Food Use in Dene/Metis Communities</u>. Montreal: McGill University-School of Dietetics and Human Nutrition. (October, 1996)

Rabbit, ptarmigan are also harvested during the December- January season. The community researchers did not include these animals in their survey. Thirteen musk-oxen tags were also distributed by the Wildlife Officer in Lutsel K'e for the winter season. From the results it is assumed that these animals were harvested after the December – January study period.

The study period for Cycle Two was December 1997 – January 1998. A total of thirty-five (35) people were surveyed, randomly selected from four age groups. (10 people - Aged 10 to 19) (9 people - Aged 20 to 40) (8 people - Aged 41 to 60) (8 people - Aged 61 and over) In both Cycles everyone of those surveyed reported eating some traditional food.

3.4.2 Employment:

The community researchers developed a questionnaire in Cycle One which they used again in Cycle Two. Similarly, the questionnaire was to be conducted with a focused group of community members - namely those employed in the mining sector. The questionnaire provided employees with opportunities to provide specific information related to their positions, to reflect on their employment experiences and provide opinions about the adequacy of training programs. Only three people employed in the mining industry were able to complete questionnaires during Cycle Two. It should be noted that the Project experienced a staff turnover during Cycle Two which limited time and opportunity to located employees who may not have been in the community at the time of the interviews.

Economic	1. Which Mining Company were you Employed by?
Development	
Employment in	
the Mining Sector	
	2. What was your Position?
	3. How long were you employed?
	4. What did you like about the position that you held?
	5. Do you think more training programs should be implemented in town
	(Lutsel K'e) that would lead to more permanent employment? (Yes/No)
	If yes, what kind of training programs would you recommend?
	6. Are you still employed? (Yes/No)
	If no, what was your reason for leaving your job?
	7. What are your recommendations?

3.4.3 Youth Goals for Education and Employment

The community researchers decided to take an action-based approach to monitoring this indicator and took on a "career counselling" role, providing youth with an opportunity to reflect on how they could achieve their goals following the delivery of the questionnaire.

The questionnaire was developed by the community researchers in consultation with the Wildlife, Lands and Environment Committee. Youth who have role models employed in the mining sector are more likely to become employed in the mining sector than are students without those role models. Although the youth interviewed were young and are likely to change their goals before graduating high school, the community researchers saw value in learning more about their young ideas of the future. As a secondary aim the community researchers wanted to learn more about the reasons behind the students' goals why the employment

was important and whether the youth were aware of the steps he/she would have to take to achieve their goals.

Youth Participation Youth Goals for Education and Employment	What is your goal for future employment (career)?	
	Why is this employment important to you?	
	Do you know what step you have to take [to achieve your goal]?	
	What support do you have? (Parents, teachers, resource people, family members)	
	Are you willing to move out of town to further educate yourself or for employment?	
	Who is your role model? Explain?	

The survey related to youth goals in education and training was given to thirteen (13) youth in the classrooms of Gr. 4-6 and Gr. 7-9. It should be noted that the project experienced a staff turnover during Cycle Two which limited the time and opportunities available to interview more than the thirteen students.

3.4.4 Healing Services

Questions for monitoring this indicator were developed in consultation with the Lutsel K'e Drug and Alcohol Worker. Through the healing questionnaire, the community researchers sought to learn what kinds of approaches (including programs and services) are currently important to adults and young adults in the community.

Twenty-eight (28) people were randomly selected for the healing survey. There was no formal methodology for random selection. Instead, random selection was overseen by the Project Director based on an interest in interviewing people not commonly vocal in public meetings and getting a good sample from different family groups and age groups.

Healing	What kind of support is in place at the moment for people that are trying to
Healing	keep their sobriety or improve on personal growth?
Service/Sobriety	
	How can you be supportive?
	What kind of approach are you taking regarding healing or personal
	growth?
	What gives you strength in sobriety or on personal growth?
	Are there any recommendations? For example for the Drug and Alcohol
	Worker or Chief and Band Council?

3.4.5 Cultural Programs

The monitoring of cultural programs largely dealt with a community concern raised during the pilot project about the *limited number* of cultural programs ongoing in the community. Therefore the researchers sought to find out exactly how many formal opportunities for cultural education existed in the community during the study period. For ease of data collection the researchers limited their search to only those activities that were formally organized in the community. Those cultural activities that occur informally in the home were not considered. A focused set of home-visits with ten (10) cultural program leaders were done in the community with persons responsible for managing and delivering programs. The questionnaire was developed to determine the number of cultural programs in the community as well as to assess the value/success and potential to improve these programs.

Cultural	What kind of cultural programs are currently offered in the community?
Preservation	
Cultural	
Education	
	When do these programs take place?
	What is your opinion on the best approach to offering cultural programs in
	the community?
	Describe the program. What are some challenges you face?
	How do you know if the program is successful? (What are the signs that
	you have achieved your goal of cultural education?)

3.4.6 Housing

In consultation with the Housing Authority, the community developed a questionnaire that focused on quality and quantity of housing in Lutsel K'e. The questionnaires were completed during home-visits with twenty (20) randomly selected people in the community. There was no formal methodology for "random selection". Instead, random selection was overseen by the Project Director based on an interest in interviewing people not commonly vocal in public meetings and getting a good sample from different family and age groups.

The open-ended questionnaire was designed in part to reflect and affirm the Lutsel K'e Dene history of living on the land as told by elders during the *Traditional Knowledge Study on Community Health*. In that study, elders often prefaced or concluded their comments about the community by talking about other areas where people used to live. That being the case, the questionnaire provided an opportunity for people to identify and discuss other places where Lutsel K'e Dene people used to live.

The questionnaire was also designed to more clearly identify the issues surrounding current housing conditions in Lutsel K'e. When asked to comment, community members responded with some general and specific and specific comments as well as recommendations.

Community	Do you know of any places where Lutsel K'e Dene people used to live?
Infrastructure	
and Services	
Housing	
	What was housing like at that time?
	What do you think of the current housing situation?
	What do you think can be done [to improve the current housing]?

3.4.7 Traditional Values ("Old Lady of the Falls")

Legends about the "Old Lady of the Falls" and her power to heal Dene people were eloquently orated by Lutsel K'e elders and set a context for other stories and comments made by community members and their experiences. A quantitative measure - the number of times community members have visited the site - was included to provide additional perspective on the traditional values associated "Old Lady of the Falls".

Healing	How many times have you been to Parry Falls? (1 / 2 / 3 / 4 / 5 / 6 / 7 More)
Spiritual Values	
	Why is Parry Falls Important to You?
	Do you have any stories about Parry Falls and what it has done for the
	people?

The community researchers conducted the questionnaire with a sample of twentynine (29) community members - eight (8) elders, eight (8) adults and thirteen (13) youth.

3.4.8 Impacts of Development on the Land (Water)

Given the increasing number of projects in the region and their complexity, the researchers felt that community members did not have enough information in hand to clearly comment about the various projects.

The researchers therefore decided the most appropriate method would be to review comments made by community members during consultation meetings with the various developers as recorded in the minutes. The home-visit approach to gathering information was therefore modified to one of existing information review.

3.4.9 Current Land Use

The community researchers conducted twenty-seven (27) home-visits with hunters, trappers and land users in the community The respondents ranged in age from twenty to eighty years old. Only one woman trapper was interviewed. All other respondents were male. The researchers collected a range of quantitative information about land use. They decided to focus on travel routes and sites related to hunting and trapping and spiritual land use. They asked community members to map out their travel routes using mylar overlays and 1:250 000 scale map sheets. Rather than carry these materials house to house, the researchers encouraged their informants to come to the office to map their information. The majority of the information collected related to hunting and trapping rather than spiritually related land use.

Cultural	Hunting:
Preservation	1. During the past year did you hunt or trap for food?
Land Use	2. How may years have you been hunting?
(Current)	3. How was hunting last year (refers to # of animals)?
	Caribou Beaver
	Moose Geese
	Muskox Muskrat
	Porcupine
	4. How did this year's hunting compare with previous years?
	5. What was the cause of the change?
	6. Can you draw you hunting area for 1997 on the map?
	7. Where do you go if there is no hunting close by?
	8. Do you have any interesting stories about hunting that you would like to
	share with us?
	<u>Trapping</u>
	1. During the past year did you trap for fur? With whom?
	2. How many years have you been trapping?
	3. How was the trapping last year? (refers to # of animals)
	Wolverine Mink
	Beaver Marten
	Wolf Fox
	4. How did trapping this year compare with previous years?
	5. What was the cause of the change?
	6. Can you draw your trapline for 1997 on the map?
	7. What weather conditions are most favourable for trapping these species?
	8. Do you have any interesting stories about trapping you would like to share with us?

3.4.10 Togetherness - Good Communication

For ease of data collection the researchers focused on the communication between various community organizations. They consulted two key organisational representatives - Lucy Sanderson (Wildlife, Lands and Environment Coordinator) and Addie Jonnasson (Health and Social Services) to assist in developing the questionnaire. The questionnaire was completed by 17 organizational representatives in the community including members of Chief and Council.

Self-Government Working Together	What does working together mean to you?
	What positive things do you see with different organizations working together?

What other positive things would you like to see happening?
What kind of fun things would you like to see happening in different
organizations?
Do you have any encouraging words that you would like to share about
working together?

3.4.11 Traditional Knowledge and Skills (Dene Songs)

The community researchers developed questions for gathering information about drumming with the assistance of researchers doing similar studies in other parts of the north including Cindy Allen of the Department of Musicology at Carleton University and Nicole Beaudry from the Department of Music at the University of Quebec.

The community researchers did a set of focused interviews with seven (7) community members who were known as drummers. Community members with traditional skills in fiddling were also interviewed. Because of the nature of the information (song), community members were interviewed using the video camera and audio-mini-disc recorder. Each interview took about an hour. The video and audio discs are stored in the Band Office.

Cultural Preservation Traditional Knowledge and Skill (Drumming)	Do you know any drum songs?
	Can you play them for us?
	Do you have any stories about these songs that you would like to
	share with us?
	Where did you learn these songs?
	Where did the songs come from?
	What are the songs about?

3.4.12 Traditional Knowledge and Skills (Caribou Use)

On the recommendation of the Wildlife, Lands and Environment Committee and elders who were consulted by the researchers, a caribou cutting workshop was held rather than a set of home-visits. The community researchers asked an elder (J.B. Rabesca) to provide information to the students about properly respecting, harvesting and preparing caribou meat. School students were invited to the community hall, while the elder skinned the caribou and explained the different parts. A translator relayed the information to the students. The elder told stories about how to identify a healthy caribou and named all the important parts of the caribou in Chipewyan for the students. The students had a good laugh when J.B. demonstrated calling for caribou. The workshop was video-taped. A few days later, the community researchers showed the students how to cut up hind quarters and to make dry-meat. The students and a few adults also had a chance to make dry-meat. This dry-meat making workshop was also video-taped.

Cultural Preservation	Where do you get your caribou meat from?
Traditional Knowledge	
and Skill (Caribou Use)	
	What is your favourite part?
	Why are some meats more tender?
	How do you know if the caribou is male, female, young or old?
	How do you know which one to kill? (signs)
	How are each of the caribou parts used?
	How long do caribou live?
	Do you have any stories about caribou that you would like to share
	with us?

3.5 Method for Use of Results

Use of project results is another aspect of the methodology which requires discussion. As a community-based process, the two most legitimate users of the information are the community members themselves and the local leadership. There are potentially three ways in which the results might be used - (1) self-reflection, (2) community planning and for (3) gauging potential impacts of resource development.

3.5.1 Self-Reflection for Community Members

Knowledge gained through "Community-Based Monitoring" can be a useful tool for self-reflection. As community members provide input and receive feedback through reporting, a greater awareness can emerge about current changes and potential changes in the journeys of Self-Government, Healing and Cultural Preservation (Figure 3).

Lockhart (1990) describes some of the benefits of an action and community oriented process of sharing knowledge in the context of dependency.

[It] encourages innovative as distinct from regulated approaches to problem definition and solution. The learning that takes place is public and emphasizes collective as well as individual costs and benefits. As a consequence, "ownership" of the development problem and hence "responsibility" for its solutions cannot so easily be delegated to, or co-opted by, outside interests. Most important of all, the action approach encourages participants to overcome the "culture of silence" (Friere 1984) that typifies the feelings of hopelessness that so characteristically overtake those who live under conditions of economic dependency. (Lockhart 1990, p.5)

While monitoring is often associated with measurement and data, the definition of community-based monitoring in northern Aboriginal communities may be somewhat different. Where there is a connection to traditional or otherwise common processes already in place in the community, greater ownership over monitoring can be developed. For example, during the pilot project monitoring was defined as "watching, listening, learning and understanding changes". Other potential conceptual frameworks for monitoring community health issues include storytelling and sharing circles.

3.5.2 Community Planning

The indicators from the pilot project are a set of measuring sticks which community leaders may find useful in community planning. Similar to visioning, the indicators reflect goal statements for community capacity building which can be used as lenses for decision making. For example, if the Band Council is faced with the task of deciding whether to implement program (A) or program (B), they might consider which program would better build community capacity in self-government, healing and/or cultural preservation.

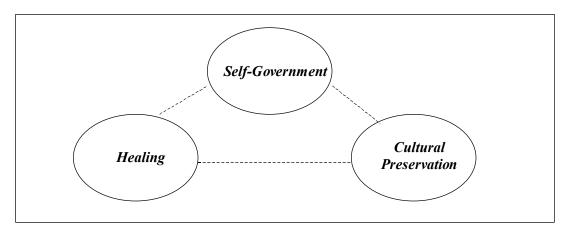


Figure 6: Journeys of Change - Self-Government, Healing and Cultural Preservation - Community-Based Monitoring Pilot Project (1996)

3.6 Communication

A summary of the results from Cycle One were communicated to the community through poster displays, reports to committees and ongoing and informal communication with other members of the community.

Communications during Each Cycle

- Informal Communication with Community Members
- Poster displays in Local Store, Health Centre and Band Office
- Ten Home-visits Evaluations of Results following each Cycle.
- Presentation of Interim Reports to the WLEC Committee, Elders Committee and Youth Committee

Annual Communications

- Detailed Evaluation of results with local Peer Review Committee (Stan Desjarlais, Marie Catholique, Jim Fatt, Chief Felix Lockhart)
- Summary Presentation of Report during a Public Meeting
- Forwarded results to appropriate local agencies and the WKSS

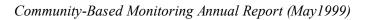
Figure 7: Communications Community-Based Monitoring Pilot Project (1996)

3.7 Preparing the Annual Report

The Annual Report was prepared by Brenda Parlee using data from the *Community-Based Monitoring Pilot Project (1997)*, the *Traditional Knowledge Study on Community Health (1998) and Community-Based Monitoring Cycle Two-Four*.

Activities for Year

The Activities of the Year for each of Cycle Two, Three and Four followed a four month cycle gathering information, summarizing information, evaluation, and reporting.



Results

Employment in the Mining Sector

Community-Based Monitoring Cycle Two (1998)

The indicator of employment was selected from the set of pilot project indicators for monitoring during Cycle One of the project. The community researchers in consultation with the Wildlife, Lands and Environment Committee valued the indicator because of its direct sensitivity to the impacts of mineral resource development. They wanted to know to what extent community members were benefiting from the employment opportunities promised by government and mining companies. With the increase of mineral resource development, a corresponding increase in wage employment in Lutsel K'e is anticipated.

During the December – January study period of *Community-Based Monitoring - Cycle Two* (1998), only three community members were reported as employed in the mining sector. These people were employed in administrative, semi-management positions. Two of the three people had completed questionnaires in Cycle One. The first respondent was still employed with the one of the two major mineral development corporations at Lac de Gras and had received training in five different areas of the project. The other two people working in the mining sector in January 1998 were unavailable to answer questionnaires.

Youth Participation - Goals for Education and Employment Community-Based Monitoring Cycle Two (1998)

In consultation with the Wildlife, Lands and Environment Committee, the community researchers chose to monitor youth goals for education and employment during Cycle Two. The Committee's concern for youth participation in the community was the main reason for selecting this indicator. "We need to do something for the youth". Other community members had expressed concern about youth participation in the community during the pilot project. Although the behaviour of youth in the community and the relationships between youth and elders were discussed, the capacity of youth to succeed in the education system was an issue touched upon by elders, adults, and youth alike.

During Cycle Two, students in Grades 4-6 were given the same questionnaire as in Cycle One. The responses were similar to those given in Cycle One. The careers children were most interested in included RCMP, school teacher, lawyer and pilot. With the exception of lawyers, all the careers, children were interested in were those visible in the community.

The children were asked to describe what support they have to achieve these career goals. Family members were again identified as the greatest support. (76%) Sixty-one percent (61%) of children said that their friends were their support. The children also saw teachers and those pursuing careers as supports. Parents were seen as role models by 61% of the children. Other important role models included friends and teachers. All the children had some understanding of the steps they would have to take to achieve their goals. All of the children also said they would move out of the community for an education or employment.

None of the youth surveyed during Cycle Two identified education, jobs or career opportunities in the mining sector as a goal.

Nutrition Study – Consumption of Traditional Food

Community-Based Monitoring Cycle Two (1998)

The results from monitoring *traditional food consumption* in Cycle Two are found in Figure 9. As with the results from Cycle One, the amount of traditional food consumed varies by age group and by food. For comparison, a summary of the results of Cycle One is provided in Figure 8. The totals listed in bold represent the average number of times per week that the meat and meat/organs of each species are consumed by the various age groups. For example, those eleven (11) people surveyed in the 20-40 year old age group in Cycle Two consume whitefish meat 1.5 times per week on average. Those ten (10) people surveyed in the 10-19 age range consume trout meat an average of 1.45 times per week on average. According to the eight (8) people surveyed (age 61+), elders consume caribou meat 5.6 times per week. The total average consumption of each species is listed in the first column. The total average consumption for each age group is listed beneath each column.

Caribou

Of those surveyed, 40 % eat caribou 6-7 times a week. Another 40% eat caribou 3-5 times a week. Of the age groups surveyed elders appear to eat the most caribou meat (5.7) average, followed by older adults at (5.4), young adults (5.0) and then youth (4.9). Further analysis suggests that youth during the months of December 1997 and January 1998 consume slightly more caribou meat/organs (average 2.1 times per week) than do elders at (average 1.8 times per week). This is similar to the results found in Cycle One where youth consumed caribou meat/organs 3.1 times per week compared to elders at 1.8 times per week.

Whitefish

People were also asked if they eat whitefish. Of the thirty-five people surveyed, 45% eat whitefish less than once a week. Another 20% eat whitefish 1-2 times a week. Another 5% eat whitefish 3-5 times a week. Among the age groups surveyed, elders appear to eat the most whitefish (1.6) followed by young adults (1.5), older adults (1.2), and youth (1.2).

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¹ Note* The results in the *Community-Based Monitoring Final Report (1997)* do not reflect the same level of detail in analyzing the results of the nutrition survey. Therefore the results from Cycle One are also included here for comparison.

Results of Cycle One Questionnaire - Consumption of Traditional Foods

Species	Age 61+	41-60	20-40	10-19
Whitefish	1/5/1/2/3/2/0/	5/1/1/5/2/1	1/5/7/1/1/5/2/	3/0/1/2/2/2/2
(Av. Meat 2.33)	3		2/2/2/2	/ 1 / 5 / 2
(11v. Weat 2.55)	(Meat=2.1)	(Meat=2.5)	(Meat=2.72)	(Meat=2.0)
	(Meat/Organs=1.4)			(Meat/Organs=1.2)
Trout Fish	1/2/1/2/2/2/1/	5/1/3/2/2/2	5/5/5/1/1/2/2/	4/2/2/2/2/2/2
(Av. Meat 2.81)	2		2/2/2/1	/2/2/1
(1111 111000 2:01)	(Meat=1.6)	(Meat=2.5)	(Meat=2.54)	(Meat=2.1)
	(Meat/Organs=0.8)			(Meat/Organs=1.2)
Caribou	7/2/7/3/2/5/7/	5/2/2/7/5/7	7/7/5/3/5/7/5/	2/5/5/2/5/5/5/
(Av. Meat 4.6)	7		5/3/5/3	5/5/7
(11) Tileat 110)	(Meat=5.0)	(Meat=4.60)	(Meat=5.0)	(Meat=4.6)
	(Meat/Organs=1.8)			(Meat/Organs=3.1)
Moose	1/0/1/0/1/2/1/	1/3/1/5/2/0	1/1/0/1/2/2/2/	2/7/0/5/5/2/2
(Av. Meat 1.93)	5		2/1/3	/ 1 / 5 / 2
((Meat=1.3)	(Meat=1.83)	(Meat=1.5)	(Meat=3.1)
	(Meat/Organs=0.6)			(Meat/Organs=0.6)
Muskrat	0/0/0/1/0/0-	1/0/0/0/2/0	1/0/0/0/0/2/2/	0/0/0/0/0/2/0/
(Av. Meat 0.38)	(Meat=0.1)		0 / 1 / 1 / 0	0 / 1 / 0
(,	(M/O=0.002)	(Meat=0.5)	(0.63)	(0.3) T=0.13
Black Duck	0/1/2/0/0/1/1/	1/0/0/1/2/1	1/1/5/1/1/5/2/	2/1/1/1/2/2/2/
	5		0/2/1/0	1/1/1
(Av. Meat 1.29)	(Meat=1.25)	(Meat=0.83)	(Meat=1.7)	(Meat=1.4)
	(M/O=0.39)		,	(M/O=0.50)
Pintail	0/0/0/1/0/1/0/	0/0/0/0/2/0	1/1/5/0/0/5/2/	0/0/0/0/0/2/1/
(Av. Meat 2.33)	0		0/2/0/0	0 / 0 / 0
(Av. Meat 2.33)	(Meat=0.25)	(Meat=0.33)	(Meat=1.45)	(Meat =0.3)
	(M/O=0.07)			(M/O=0.04)
Total	Total Meat Av. 1.65	Total Meat Av. 1.87	Total Meat Av. 2.22	Total Meat Av. 1.97
	Total M/O Av72			Total M/O 0.96

Figure 8: Traditional Food Consumed for August-September 1997 (Cycle One)

Trout

Of the thirty-five people surveyed 50% consume trout less than once a week. Another 28% eat trout 1-2 times a week. There were 10% of people who said they eat trout 3-5 a week. Elders ate the most trout (2.0) followed by young adults (1.6), youth (1.45) and adults (0.6).

Moose

Of those 35 people surveyed, one person reported consuming moose meat in January 1998.

Results of Cycle Two Questionnaire - Consumption of Traditional Foods

Species	61+	41-60	20-40	10-19
Whitefish	2/2/1/2/5/1/1/	1/0/2/2/1	1/1/1/2/3/2/2/	5/1/0/0/0/1/0/1
(Av. Meat 1.37)	2 / 1		1/1/1	/ 3 / 1 / 2
(11/11/12/14/17/17/17/17/17/17/17/17/17/17/17/17/17/	(Meat=1.6)	(Meat=1.2)	(Meat=1.5)	(Meat=1.2)
Trout Fish	2/2/1/2/5/1/1/	1 / 0 / 1 / 0 / 1	1/1/1/2/3/2/2/	5/1/1/0/1/1/0/
(Av. Meat 1.41)	2/2		2/1/1	1/3/1/2
(111. Weat 1:41)	(Meat=2.0)	(Meat=0.6)	(Meat=1.6)	(Meat=1.45)
Caribou	2/7/5/5/7/7/7/	7/7/5/1/7/7	2/5/5/7/7/3/5/5/5/7	7/5/5/2/5/5/7/
(Av. Meat 5.3)	5			3 / 7 / 3 / 5
(Av. Meat 3.3)	(Meat = 5.6)	(Meat=5.6)	(Meat=5.1)	(Meat = 4.9)
	(Meat/Organs=1.8)	(Meat/Organs=2.3)	(Meat/Organs-1.9)	(Meat/Organs=2.1)
Moose	0 –	0 –	1 / 0 –	0 –
(Av. Meat 0)	(Meat =0)	(Meat=0)	(Meat=0)	(Meat=0)
Total	Total Meat Av. 3.1	Total Meat Av. 2.47	Total Meat Av. 2.73	Total Meat Av. 2.1

Figure 9: Traditional Food Consumed for December – January 1998

1. Everyone surveyed (35 people) consumes traditional foods.

2. The level of consumption depends on the kind of food being consumed.

The results of the study suggested that caribou was the most widely consumed food in December-January (1998) followed by whitefish, moose, trout, black duck, Pintail and muskrat.

3. The level of consumption varies among age groups

The results of this survey suggest that youth consume slightly more caribou meat and organs than do elders. This may reflect some variation in the sample as well as some disadvantages elders have in acquiring traditional foods and eating them. That youth consume the highest amount of caribou meat/organs suggests that preference for traditional food does not decrease among younger generations.

For a more visual presentation of the difference in consumption levels between 1997 and 1998, see Figure 10.

The survey results suggest that everyone in Lutsel K'e consumes traditional food. As in *Community-Based Monitoring Cycle One*, the most significant food consumed was caribou. The difference in survey results regarding caribou consumption reflect a seasonal variance in the amount of caribou consumed. It may also reflect small differences in the study sample.

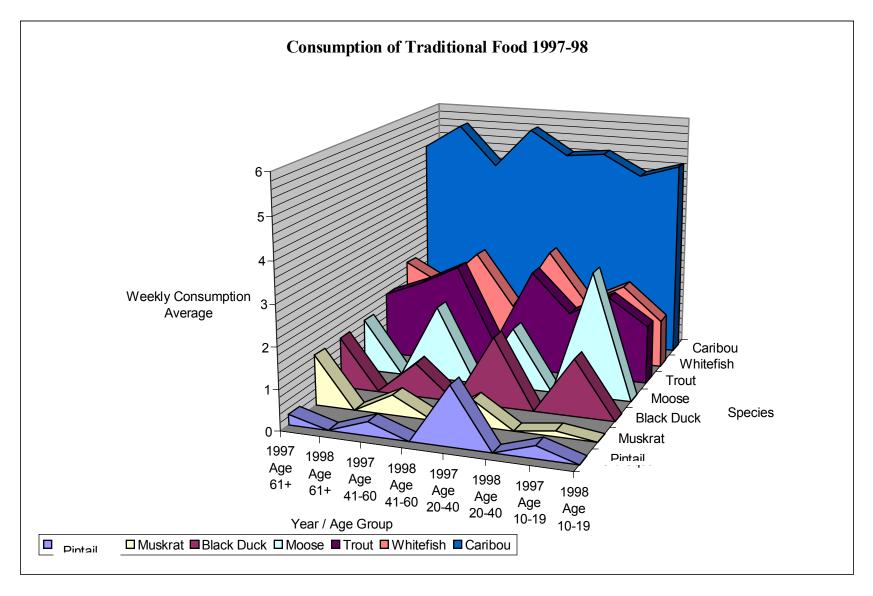


Figure 10: Comparison of Traditional Food Consumption 1997-98

Healing Process

Community-Based Monitoring Cycle Two (1998)

The capacity of healing services to meet the needs of the community was an important aspect of community health emphasized during the pilot project. The community researchers, the Wildlife, Lands and Environment Committee and the Drug / Alcohol Worker decided to monitor this indicator in Cycle One, and Two because of its significance to the community and its healing journey.

They felt that gathering information about the need for healing services and about the community members' own approaches to sobriety and personal growth would assist them in developing effective health and social service programs. They felt it would also be useful and instructive for other communities facing similar challenges as well as agencies seeking to lend support to communities involved in a healing process.

Twenty-eight (28) people were asked what kind of support is currently in place for people trying to keep their sobriety or improve on personal growth. They were also asked about their own approach to sobriety and personal growth, what gives them strength and for recommendations about the healing process.

The detailed responses of the interviewees are documented and organized in chart and table form. Because of the sensitivity of the information, those responses are not included in this report. However, the conclusions drawn from those results are as follows:

- 1. A.A. and group meetings were seen as the greatest support for people trying to keep or improve upon their sobriety.
- 2. Talking about how things and going to treatment yourself were listed as the main ways people feel they can be supportive of one another.
- 3. The main approaches to healing and personal growth of those interviewed were described as praying, "saying no" and keeping busy.
- 4. People find strength for sobriety mainly in prayer and from their families.
- 5. On the issue of healing, people mainly recommended that the Chief and Council should be sober role models and the RCMP should patrol more (especially on weekends).

Housing

Community-Based Monitoring Cycle Three (1998)

Gathering information about the quality of infrastructure in the community was suggested as an indicator for Cycle Three by the Wildlife, Lands and Environment Committee. The Committee and the community researchers valued the indicator because of its relationship to many different family wellness and physical health issues. During the pilot project, the issue of greatest concern with respect to community infrastructure was housing.

When asked what they thought of current housing conditions and what they would do to improve it, people responded with some general and specific comments as well as some recommendations.

Comments	Recommendations	
	,	
Terrible (A01, A07)		
need more housing (A11, Y02, Y07)	 build more housing 	
	 train more people to build houses 	
more housing for single people (A11, Y04)	 build more housing for single people 	
Houses are unfinished (A08)		
Houses are not maintained / repaired (A08,	• repair houses every 5-6 years	
A011)	• improve heating / boilers	
People don't pay bills for rental housing (A09)		
not enough traditional housing / log homes with	build more traditional housing	
modern facilities (A11)		
Housing is not culturally appropriate (Y03)	maintain cultural integrity	
Houses are too fancy (A02)		
Houses are too small (Y02)		
Town should be bigger (A02)	 move across bay / expand the town 	
Houses are too close together (A02)		
Houses should have yards		
Treaty rights for housing not being exercised to	• allocate more funding for First Nations	
full potential (A02)		
Should have more choice in the way	meet with Housing Committee /	
(government) houses are built (A03, A07)	Council	
People should own their own houses (A03)	meet with Housing Committee /	
	Council	
Individuals should build their own homes, do it	• people should be allowed to build their	
for themselves (A07)	own homes using assistance from the	
	government	
	 housing rules could be changed 	

	people should be part of the process
Complicated / need to go to school first (Y04)	
Power bills are too high (A04, Y03)	 make everything free
too expensive (Y04)	
good / warm (A10)	
Reliable (Y05)	
Excellent / better than the olden days (Y01,	
Y06)	

Figure 11: Comments on Housing from Cycle Three

Four major issues related to current housing conditions were revealed by the questionnaire. Four people talked about the need for more housing, including more housing for single people. An equal number of people said current housing is good, reliable, excellent and better than in the olden days. Three people expressed concern that houses are un-finished, not maintained properly and that people do not pay their rental bills. Three people said that getting housing is too complicated and expensive. There were two people who commented on the way government housing is built and said it would be better if people owned or built their own homes.

Spiritual Values

Community-Based Monitoring Cycle Three (1998)

The "old lady of the falls" is a tremendously sacred place for the Lutsel K'e Dene. The elders say that people have been visiting the site long before they can remember. The "old lady of the falls" or Parry Falls is located within the Slave Geological Province. Although the area sits within a proposed National Park, there is still concern by people in Lutsel K'e that the area will be "disturbed" or "spoiled" by increasing mineral resource development in the region.

Because of such concern in the community, the Wildlife Lands and Environment Committee supported the idea of gathering information from the community about this spiritual site and its significance to the people. Although very sacred, the Wildlife, Lands and Environment Committee hopes that by gathering information about the falls, government, resource developers and the other people outside the community will learn something and will work with the community to protect the area from the effects of mineral resource development.

A good starting place for understanding the relationship the community has to the
Lockhart River and Parry Falls is the legend of the falls as told by Lutsel K'e Dene elders
Zepp Casaway and Pierre Catholique. The story, which involves the giant Hachoghe and
two beavers, is insightful because it talks about the how the "Old Lady of the Falls" came
to be.

The Legend of Ts'ankui Theda The "Old Lady of the Falls"

as told by: Zepp Casaway and Pierre Catholique Transcribed by: Alizette Abel

I will tell you a true story about how it was in the beginning and how Ts'ankui Theda (the "old lady of the falls") came to be. This story was passed on to me as it was passed on from generation to generation. The "old lady of the falls" has been there since the earliest of times.

It started in the place called Kaché (Ft. Reliance) and Æedacho kué (Artillery Lake). It used to be called Beaver Lake in those days because there was a beaver living there. You could see the beaver's lodge if you happened to be out at Æedacho kué. People were often in that area because that is where they went caribou hunting in the fall time. Even today Dene people still go there to hunt caribou.

In those days there used to be a man. His name was Hachoghe. He was a big man. One day Hachoghe saw the beaver's lodge. He could see it because it was on top of a small hill. He decided he wanted to kill the beaver but saw that he would have to get the beaver out of the lodge. So he started to push the dirt to one side. (Today you can even see where he pushed the dirt to one side.) He was so busy digging and moving the dirt that he didn't notice that the beaver had another lodge in the narrows close to the main land. It wasn't far from the main route that the Dene people used when they traveled in that area.

But the beaver did not stop at that lodge. Instead he went down the Lockhart River to the main lake – Tue Nedhe. The people there were starving. When they saw the beaver they thought they may be able to kill him. It was then that Hachoghe saw the beaver and ran after him with a shovel. He threw the shovel

into the water but the smart beaver swam away. The handle of the shovel broke and Hachoghe had to leave it there, sticking out of the water. That is why when you go to the north end of Æedacho kue you see a rock sticking out of the water. That is the handle of Hachoghe's shovel.

After Hachoghe broke his shovel, he didn't give up. He continued to follow the smart beaver back up the Lockhart River. By then the Dene people from Tue Nedhe were following Hachoghe. The river was strong and the beaver soon got tired and Hachoghe killed him. The Dene people were so hungry they went after the meat right away. There was enough meat from that beaver for all the Dene people for two or three days. But there was one woman who asked for the beaver's blood. Hachoghe told her he could not give her the beaver blood because there was not very much left. So the woman sat down at the falls and waited.

All of the other Dene people followed Hachoghe who was chasing another beaver down the river. They were heading toward the east arm of Tue Nedhe. After a while, the people noticed that the woman was still back at the falls. Hachoghe picked two healthy people to go back and look for her. They went all the way back up the Lockhart River and they found her sitting at the falls. She had been sitting there a long time and so she was stuck in the earth. The two people told her that Hachoghe was asking for her to return to Tue Nedhe. She said, "I cannot return with you. I have been sitting here too long and now I will be here for all eternity." Then she said, "Go back to where you came from. Go back to Hachoghe and the others and give them this message." So the two people returned to Hachoghe and the others and gave them the message. This is how the Dene people learned about the "old lady of the falls" (Ts'ankui Theda). From that day forward the Dene people have gone to visit the Ts'ankui

Theda to pay their respects, share their worries and to ask for help.

Visiting Parry Falls

The Lutsel K'e Dene began visiting Parry Falls long before the elders can remember. Many people continue to go there in small groups both in summer and in winter. In 1989, the Lutsel K'e Dene Band began to organize a community pilgrimage to Fort Reliance and to the Falls. The average number of times those who were interviewed had visited the Falls was 4.6. The number of times people have visited the falls, depends on their age. The breakdown in visitation by age group illustrated in Figure 12 shows that elders and adults have visited the falls significantly more often than young adults and youth.

Elders	Adults	Young Adults / Youth
6 / 8 / 10 / 10 / 9 / 10 / 2 / 9	4/9/10/5/9/10/9/0	5/0/0/0/1/0/0/1/0/6/
		0 / 1 / 1

Figure 12 - Visits to the "Old Lady of the Falls" from Cycle Two from the Community-Based Monitoring Project - Cycle Three (1998)

Why Parry Falls (Ts'ankui Theda) is Important

The second question related to the importance of the falls. Those interviewed were specifically asked, "Why is the falls important to you?" People responded with a variety of comments. The most common reasons and themes related healing, help, guidance. In addition to its importance in healing, Lutsel K'e people spoke the "old lady" as sacred and their visit as an expression of *spirituality, Chipewyan history and culture, love for the land.* Many people simply described the area as sacred.

It makes sense to me - my <u>identity</u> as a Dene person - I want things the Dene way. I ask myself, "Why am I Dene?" "Why am I Chipewyan?", "What is my <u>spirituality</u>?" I think about these things rather than have things imposed on me. [I think it is important for] <u>spiritual</u> reasons. In my life, I have struggled through different social issues. I looked to the old lady to get <u>help and guidance for a better life</u>. There is also hope to heal the community with the annual gathering. (AC - A27)

Around 1987 or 1988, when JL passed away, that is when we went to the "old lady of the falls". We don't know what it is - a <u>spirit</u> or a person. But it is there at the falls, all of the time. The way I heard about it, the falls is important because that is how it was for our <u>ancestors</u>. People used to be really wise in those days. One elder was trapping with me. We could see the smoke in summer or winter. You ask for help with all your <u>heart</u>. (ZC - E17)

It is something our ancestors believed in it. It is a strong <u>healer</u>. She came from our <u>land</u> - our Chipewyan people. I heard about it when my dad was alive. I was young and didn't really know about it then. But when someone close to you tells you something, it stays in your <u>heart</u>. (GC- A24)

In the olden times it was really important to the people. Now it's not really important. They don't believe in "her". The Creator made the land and everything we see. I <u>love</u> what I see around me - Parry Falls. (AC - E01)

The falls is a <u>healing place</u> for people - for comfort. It [represents] <u>unity</u> for the people, getting back to their <u>culture</u>. It's very peaceful when you go there. (SB - E15)

Stories about the Power of the "Old Lady of the Falls"

People were asked if they had any stories they would like to share about the falls and how it has helped the community. Some people had stories they would not share because they were too personal or special to them. Many people have stories about the falls, its significance and how it has helped them.

From what I have heard it has helped people feel stronger. It heals the minds and bodies of those who don't feel well. (SS - Y07)

She heals the people by praying for the sick people. She gives the smoke signals pointing to where the caribou.(BC - Y09)

I heard about one guy from Fond du Lac went to the Falls. This guy had traveled along distance to get healed by the old lady. I guess she heard his prayers and helped him. To me it is a sacred place to our people. (MC - Y10)

People go there to ask for help. They also give her some things in return. They also go there when they have cancer to ask her for help. They drink the water when they give her something in return. (AJC - YA11)

The story behind the falls is that it is a place where you pray and the lady of the falls will listen to your prayers and help your healing. It is also a place to respect our forefathers, grandfathers, and grandmothers that have passed away. (JJR - YA12)

In the olden days, people were very wise. They saw this vision of the old lady of the falls. One elder was so wise they called him Ray of the Sun (Satl'ule). Satl'ule said he would go see the old lady of the falls. There is an elder who is still alive today, Michel Seguia from Yellowknife who told me this story. Satl'ule became

a fly and was flying around the old lady. She said, "Get away from me, I don't want to be bothered." I'm sitting here to help the people. Satl'ule passed this on to his people.

The old lady knows where the people are coming to visit her and when they are hungry. When the lady kills the caribou, there was a spearhead marked on the hide and that is how they know - The dead caribou was floating down the river and the meat was still good. The last time this happened was last year and it was a moose that was killed.

People used to go to the old lady from the north side of Artillery Lake. There is a cave on that side of the river. There were some sticks from the teepees that used to be there. They are all rotten now. In those days there were no planes or skidoos. They did not know where the caribou were. They would go out to the left side of Artillery Lake (Timber Bay) to see the smoke. (PC-E13)

I go there to pray for my family, my children and my grandchildren. Certain things you give to her [the old lady], like bones, hides or tools (fleshers) or a cup. You have to pay her these things every time you see her for respect. Since people go there, miracles start happening. Young boys in their mid-twenties go for hunting and they would see a caribou already killed. Right under their shoulder [of the caribou] they would see where it was killed. The old lady knows when people go see her... It is something you have to believe in. (AC-E01)

Impacts of Resource Development on the Land (Water) Community-Based Monitoring Cycle Three (1998)

The impacts of resource development on the land (water) was selected by the researchers and the Wildlife, Lands and Environment Committee as important for monitoring in Cycle Three. They valued the indicator because of its direct sensitivity to mineral resource development activity.

The results of the review of minutes from fourteen Wildlife, Lands and Environment Committee meetings (June 18, 1997- January 7, 1998) are summarized below. The main focus of the review was on community member comments about impacts on the land (water). Comments specifically related to impacts on wildlife are not included here.

BHP Ekati Diamond Mine – Lac de Gras Area

An Environmental Assessment (Panel Review) of the BHP Ekati Diamond Mine began in 1995 and the mine was approved in 1996. The mine is now in its operations phase. During the environmental assessment, Lutsel K'e had various opportunities to learn about the development and its potential impact on the land (water). Lutsel K'e raised their concerns during a community hearing and a technical hearings

on water. Among their concerns, the effects of waste rock and tailings on water quality effects of wind-blown dust and contaminants on vegetation, snow and water and changed water levels due to the massive undertaking to drain lakes were documented. The impacts of draining lakes on wildlife and birds, potential downstream contamination of water was also a concern raised by many people in the community.

The risk of water draining south from the BHP Ekati Mine and Lac de Gras into Alymer Lake and the Lockhart River system is a worry to many people. In 1997, Lutsel K'e submitted a proposal to DIAND to do a Traditional Knowledge study on waterflow from Lac de Gras. proposal was not approved. Instead, DIAND invited three community members to do a helicopter study of waterflows. They look at waterflows at the Thonokied River, Seahorse Lake, and Starfish Lake. They found that the drainage divide is located just south of Lac de Gras. A report from DIAND suggests there is no risk of water flowing into this area from Lac de Gras. The Wildlife Lands and Environment Committee does not feel that the study adequately addresses the community's concerns about water flows. Based on their recommendation, another proposal for a traditional knowledge study on waterflows was submitted to BHP. There have been some communications about the proposal; however, BHP has not yet committed any funding for the project.

Cogema / Uruvan - Big Fish Lake

Uruvan Minerals Inc. and Cogema have been exploring for uranium around Big Fish Lake. This exploration is in a very early stage. The companies met with the community on June 5, 1998. During that meeting people raised concerns about potential impacts of uranium development on the wildlife and their habitat as well as the water. Many people talked about Stark Lake. The community remains opposed to any uranium development in their traditional territory.

Diavik Diamond Mine at Lac de Gras

Diavik Diamond Mine is proposing to mine four kimberlite pipes at Lac de Gras, north of Lutsel K'e. The kimberlite pipes are located off an island in the eastern arm of Lac de Gras. Diavik will be constructing dikes around the kimberlite pipes and open pit so that open pit mining can take place. Some underground mining will also take place. The Diavik Diamonds Project is currently undergoing an Environmental Assessment (Comprehensive Study).

The community has had various opportunities (community meetings) to learn about the project and its potential impacts. Some presentations have specifically been done about water quality. Although Diavik suggests the water in Lac de Gras will not be significantly affected, the Wildlife, Lands and Environment Committee is skeptical. As one member said during a meeting in September 1997, "Any mining will have some impact on the water." Other concerns raised about the potential impacts of this development on the land (water) are similar to those

raised during the Environmental Assessment of the BHP Diamond Mine. Those concerns include the effects of waste rock and tailings on water quality effects of wind-blown dust and contaminants on vegetation, snow and water and changed water levels due to the massive undertaking to drain lakes were documented. The impacts of draining lakes on wildlife and birds, potential downstream contamination of water in this area was also a concern raised by many people in the community.

Further discussion about the development and its impacts took place in the fall of 1998 and winter (1999) during the CEAA Comprehensive Study Process moves forward.

Glacier Power - Barnsten River

The Wildlife, Lands and Environment Committee first heard about a proposal for hydro development on the Barnsten River in May, 1997. Glacier Power met with the community on September 3, 1997 to discuss Once the community heard the presentation about the their project. project, they discussed the proposal. Many people were concerned because the Barnsten River is a traditional hunting and trapping area. In addition people were concerned about the potential impacts of flooding at McKay Lake on the Lockhart River. One elder raised her concerns with reference to Nanacho Lake. "The Lockhart River is a spiritual place for the Denesoline of Lutsel K'e. If this goes ahead there will be damages like Nanacho Lake. Trappers used to have traplines at Nanacho Lake now they don't use that area anymore". Another elder spoke about the impossibility of compensating for lost land, "If there is damage, how are you going to replace it?" One Lutsel K'e Dene, concerned about the future mining developments, suggested that the community should think about tourism and site-seeing on the land as an alternative to resource development.

Highwood Resources - Thor Lake

The Thor Lake area has been explored since 1986. There are details available to the community regarding the number of sediment samples taken, and core drill holes that have been made since 1986 to present. A "Demonstration Project" has been proposed by Highwood Resources and is currently being screened by the RERC. The demonstration project will include the production of 100 000 tones of ore during one summer season.

The company describes the potential impacts on the environment as minimal. These "minimal impacts" may occur as a result of dust, spillage during hauling and transportation, run-off from the waste rock and sample storage area. The major hazards are associated with beryllium, silica, and such radioactive elements as radium, lead-210 and radon.

Lutsel K'e was introduced to the project during a consultation in April 1997 and on September 3, 1997. During those meetings, elders talked about several concerns including the risks to water quality, fish habitat

and fish, of transporting the ore across Great Slave Lake. According to one elder, "A highway on the land would be better than going on the water." There were also concerns regarding reclamation, the market for the beryllium. One elder talked about his concerns with reference to previous developments. "The way I look at it, they [mining companies] are destroying the area just like at Stark Lake (1952 uranium exploration site) where all the fish are spoiled. In the future it could happen to Great Slave Lake."

The Wildlife, Lands and Environment Committee has taken a position that the development should not go ahead because of these environmental risks and because they feel it will not benefit the community.

Monopros Limited – Kennady Lake

The Kennady Lake area has been explored since 1992. In 1992 and 1993 sediment samples were collected from that area. In 1994/95 core drilling was done to reveal kimberlite pipes. In 1995/96 further sediment sampling and drilling was done. In 1997, Monopros began a detailed geophysical survey. Monopros Limited is currently proposing to do a bulk sample in the area which would involve further drilling of the 4 kimberlite ore bodies in the Kennady Lake (Gahcho Kué) area and processing kimberlite samples at Kennady Lake.

People in Lutsel K'e have raised some concerns about the work being conducted at Kennady Lake. Many of those concerns have been raised during meetings with Monopros Limited in Lutsel K'e, and at the Kennady Lake site. Specifically, several people in Lutsel K'e have raised some concerns that the drilling and the tailings ponds might pollute the water. There were other concerns raised about potential impacts on sacred sites around the Kennady Lake area. Other concerns raised related to the potential impacts on water quality in the Kennady Lake area and downstream. As one elder said, "We really have to watch the water coming down [draining into] Great Slave Lake."

Hvdro-Development on the Lockhart River

The Lockhart River is an important area to the Lutsel K'e Dene and has been long before the elders can remember. Their spiritual site, the "old lady of the falls" is located at Parry Falls on the Lockhart River. Several sites on the Lockhart River including Anderson Falls are known to have good hydro generating potential. The Northwest Territories Power Corporation recently visited the community to quell fears about hydrodevelopment on the Lockhart River. A representative from the Power Corporation publicly stated that no development would take place in that area without community consent.

Cultural Programs

Community-Based Monitoring Cycle Three (1998)

The community researchers and the Wildlife, Lands and Environment Committee selected to monitor cultural education or programs during Cycle Three (1998). They felt that clearly documenting the specific cultural programs currently offered in Lutsel K'e would provide the community with a better understanding of the formal opportunities that exist for educating youth about their culture. The researchers and Committee emphasized the importance of cultural education in the community's journey of cultural preservation.

During the *Community-Based Monitoring Pilot Project* community members described the complex elements of cultural preservation.

During the Cycle Three of the *Community-Based Monitoring Project (1998)* we focused on the success of cultural programs in the community as an indicator, in order to understand more about the journey of cultural preservation. We looked specifically at organized cultural activities that would include elder(s), a language component, and/or an on-the-land experience or in some way reflected spiritual / cultural values. We also noted whether the program was developed by the school or by the community.

Name of Program	Elder(s)	Youth	Language	On-the-Land	Spiritual	Families	School Org.'d	Community Org'd	
Dene Drumming	•	٠	•				•		Weekly
Chipewyan Language lessons (K-9)		٠	٠				٠		Daily
Nature walks (Plant / Species Identification)		•					•		Periodically
Chipewyan language (pre-school)		•	•				•		Periodically
Fall Hunt	•	٠		٠		٠		•	Seasonal (1-2 wks)
Pilgrimage to Parry Falls (July)		٠		•	•			٠	Seasonal (1 wk)
Dene Assemblies	٠	٠						٠	Yearly
Spring Camping Trip	•	•		•		•	•		Seasonal (1 week)
Young Adult Spring Canoe Trip		•			•		•		Seasonal (1-2 wks)
Winter Skidoo Trip to the Barrenlands (Winter)		•		٠		٠		٠	Seasonal (1-2 wks)
Winter Skidoo Trip to Parry Falls		٠	٠	٠	٠	٠		٠	Seasonal (1-2 wks)
Dene Games		٠						٠	Yearly (1 week)
Outpost Camps /Trapping				٠		٠		٠	Seasonal (1-6 months)
Sweats	٠	٠		٠	٠	٠		٠	Periodically (2-4 hours)

Figure 13 Inventory and Evaluation of Cultural Programs -1998 from the Community-Based Monitoring Project – Cycle Three (1998)

As a first step in measuring the success of cultural programs, we did an inventory of the kinds of cultural programs that are currently offered in the community. The questionnaire was conducted with 10 people involved in managing programs in the community. The following is an inventory of all cultural programs offered in the community:

Most of the programs are one-to-two week events that take place seasonally. The majority of these programs are aimed at families. Dene drumming and Chipewyan Language are offered during the fall, winter and spring through the Lutsel K'e Dene School (Kindergarten to Grade 10).

When asked their opinion on the best approach to cultural programming, those interviewed responded with similar ideas.

- involve the children
- have to involve a key motivator or initiator for things to get going
- offer programs on the land; programs in town are not as successful
- work with the elders
- involve kids in programs where they can ask questions, see, feel and experience things (e.g. nature walk)
- take children on the land; this way they will learn fast
- has to be economical
- cultural programs should be offered during gatherings when everyone is together
- teach children
- need to have programs more often
- have the elders teach the youth

Those interviewed were also asked about the challenges they face in offering programs.

- keeping the interest of the youth / children is difficult
- not enough support from the rest of the community
- people don't volunteer, they want to be paid first
- not enough training for programming
- not enough reliable people working
- programs should be offered at all times of the year
- cultural programs are not profit generating (i.e. tourism)
- people don't show up and participate
- it's expensive to involve the elders because of honoraria

The fourth interview question related to the perceived value or success of the cultural programs being offered. People were asked what changes they saw in the youth or children that suggested that the programs were valuable.

- expressions of happiness of the faces of the children
- they express a commitment to accomplishing something (e.g. small project)
- show that they have learned something
- people show up, attendance at events
- people start talking about cultural issues, their heritage
- pride is expressed in the culture and in the community

Togetherness – Good Communication (Working Together)

Community-Based Monitoring Cycle Four (1998)

To learn more about working together in the community, a set of home-visit questionnaires were conducted. Rather than conduct a random sample of individuals or families, the community researchers focused the major organizations, such as boards, committees and departments.

Forty-two (42) questionnaires were distributed and seventeen (17) were returned. The questionnaire was designed to find out how different organizations feel about working together.

Problem Solving (trouble shooting; coordinating all	WT01, WT14, WT15						
our resources to solve problems)							
Respecting (each other's opinions)	WT01, WT17						
Listening	WT01						
Communicating, Understanding (Sharing	WT05, WT06, WT11, WT13, WT15, WT16						
Information, Concerns, Ideas; sharing ideas as							
individuals and groups)							
Having Fun	WT01						
Helping Each Other to Reach a Common Goal	WT02, WT03						
Professional (Setting Aside Personal Feelings)	WT02						
Organized	WT04						
Everyone Involved in Trying their Best in Meeting	WT04						
Whatever the Challenge							
Getting Together (Meeting)	WT06						
Getting Things Done	WT08, WT12						
Creatively Access Each other's Ideas to Get Things	WT07						
Done							
Cooperation (Interact with People with a	WT09, WT10						
Cooperative Spirit an Open Mind; Interact during							
Hard and Easy Times)							
Sharing Unselfishly	WT09						
Learn and Teach Each Other the Pros and Cons	WT10						
Understanding the Roles and Responsibilities of All	WT11, WT17						
(sharing roles and responsibilities)							
Assisting Each Other	WT11						
Linkage	WT16						
Close Relationships	WT16						
Supporting	WT16						

Figure 14: Responses to Question #1 on "Working Together" – "What does working together mean to you?" from the Community-Based Monitoring Project – Cycle Four (1998)

Seventeen people responded to the questionnaires about working together. In response to the question, "What does Working Together Mean to You?", people gave many different ideas. The most common ideas revolved around communication and sharing ideas (35%), problem solving (18%). Working towards a common goal, respecting one another, cooperating, understanding and sharing each other's roles and responsibilities were also mentioned

Traditional Knowledge and Skills (Caribou Harvesting) Community-Based Monitoring Cycle Four (1998)

Based on the recommendation of the Wildlife, Lands and Environment Committee, the community researchers held a "caribou cutting" workshop with one of our elders in Lutsel K'e.

The *Traditional Knowledge Study on Community Health (1997)* and the *Community-Based Monitoring Pilot Project (1996)* provided us with some general ideas about how caribou should be harvested, however, there was little specific step-by-step description of how it should be done.

The purpose of the workshop was therefore to learn more about the specific ways in which caribou need to be respected and harvested to define a baseline of information for future monitoring.

Using a caribou from the community freezer, Jean Baptiste Rabesca demonstrated how to properly skin the caribou, quarter it, and named the various important parts in his Chipewyan language. He also shared valuable information about how to identify a healthy caribou.

On the second day, the elders Mary-Rose and Liza Enzoe explained how the different parts that are used for drymeat. The elders showed the students and few adults how to cut up a thigh and make drymeat. They also tried making drymeat because hands-on is a good way to learn.

Both of these workshops were organized as Action Research information gathering activities. Rather than simply ask the elders to define their traditional knowledge and skills for us as researchers, we encouraged youth (from the school) and community members to attend so that people in the community were learning at the same time. We feel this Action Research approach allows us to play a valuable role in encouraging cultural preservation rather than objectively measuring it.

Caribou Cutting Workshop

Caribou Cutting Workshop (Thursday, October 15, 1998) Translation by James Marlowe / Recorded by Evelyn Marlowe

JB: When you shoot a caribou, the first thing you do is check if the caribou is fat by cutting in the middle of the stomach. If the caribou is fat the hunter is happy. You skin the caribou by cutting the middle to the neck first, then the middle to the bottom. After that you empty the stomach by your hands.

It is best to skin a caribou when its fresh because easier to skin. Right now the caribou is still a little frozen.

When skinning the caribou you don't face the blade towards you when cutting because one guy killed himself that way, he had the blade facing him and the knife slid of the caribou into his stomach and died. Face the blade away from you when cutting meat.

Good looking caribou-their horns looks nice and the fur is pretty white-by that you know the caribou is fat. During the winter you don't shoot caribou with big horns because the meat is tough to eat. It is o.k. to shoot them during the summer because the meat is tender and fat. In the fall and winter, you shoot the female cow because they are fat. During the fall time you don't shoot the male bull caribou because they are skinny. They don't eat because they are chasing the female cows (rutting). Also bull caribou has a strong taste of urine (piss) because it eats the urine of a female cows. It is the same thing with moose. After they finish rutting they start eating again and after Christmas they are good to kill again.

(Students asked J.B. to make the sound of caribou and he did. He said when you call for caribou they come to you.)

JB: When I was a kid, I shot a caribou, my father taught me how to hunt. When hunting you have to watch which caribou to shoot because you want to shoot the ones are fat. I taught my son Alex when he was young how to hunt, so he knows which caribou are fat. When you shoot caribou anyway sometimes you shoot the skinny one. After you shoot the caribou and skin it, you cook the ribs on open fire. They also cook the caribou head to.

To kill a caribou you shoot it in the heart on the side and the caribou will not take that much steps and falls down. When you shoot the thigh part it ruins the meat and if the stomach is shot the intestine goes all over the meat and guts. When intestine goes all

over the meat you clean the meat in the water. It is o.k. when you shoot the arms.

When you are in a rush and you don't have time to skin the caribou, you can cut up the caribou with the fur on.

When you skin the caribou, you remove the fur away from the meat, so the hair doesn't get on the meat. If you are strong and healthy it is easy to skin a caribou or else it is hard.

After you cut the center of the caribou you use your hands to remove the skin. When using a knife the meat gets stuck to the skin.

Later on in life when you have a wife and you go hunting for caribou, you skinned it with a knife and there's meat on the skin she will get mad because it is more work for them to fix the hide.

Sometimes there's warble fly on the skin and he doesn't know what causes it. If there's so much on the skin they threw it away. There is no warble fly on the skin during the summer, only during the fall, winter and spring. It goes only on the skin. Warble fly on the throat during spring, then it all comes out and by summer it is all gone. During springtime when you kill a caribou you cut out like a sack from the throat, so it doesn't spread to the head. It doesn't bother people, its pretty safe. Even though it is in the throat the caribou can still breathe. In the springtime they just cough it out.

Caribou runs really fast, when a wolf chases a caribou it doesn't catch it right away only after a while.

When you skin a caribou you really have to watch it, so don't poke the stomach because it will splash all over your face. When the stomach splashes on your face you just wipe up your face and it is no problem.

I don't know how long caribou lives, when caribou is getting old and it is slow the wolf kills it. Same thing with me now, I'm getting old and I'm slow.

If you don't shoot the caribou in the right place, it will get away wounded and might get sick from it. When you shoot the stomach it will probably live 2 to 3 days, then die. That's why you don't shoot the stomach.

When you shoot a caribou, sometimes the shell will go right through the caribou or stay in the meat, so you don't shoot caribou when there is someone standing behind the caribou because you can kill a person that way. Sometimes you could shoot 2 to 3 caribou with one shot. Also when there's caribou in front of town you don't shoot the caribou because you can shoot someone accidentally.

It is good skinning a caribou during springtime because it is nice and warm out. When you are shooting one caribou too much you will spoil the meat.

When a caribou is shot in the leg and is wounded it sometimes heals by itself.

(JB then removed the intestines and cut off the arm and then the thigh.)

They use the thigh for drymeat making and also good for frying. Then they cut off the back strap that is use for making drymeat. Then they chopped of the ribs.

The main caribou parts JB highlighted were:

Arms Thighs Ribs Back Strap
Brisket Backbone Neck Hide

JB: You can make moccasins with the caribou hide or use it for a mattress, it is really warm to sleep on. There are a lot of things you can make out of the hide like coats, vests, pants or a jacket. It cost a lot of money to buy a hide.

Caribou are born out in the barrenlands. Not many people see that. Caribou eat grass, moss, branches and mud from the lake.

Caribou can hear you from long ways, it has really good hearing. It sees long distance very well to, so you have to hide from the caribou and when it gets close you shoot it. Also when you are sitting still, not moving, it can come close to you. Caribou has black eyes. It will be good to skin other animals to show the students how its done like muskrat, fish etc.

In the olden days they eat caribou meat for survival. Caribou meat is the same meat as you buy from the store. Elders prefer eating wild meat instead of store bought meat. That's why you have respect for the caribou because a lot of people use it for food. From the mining development you have to really watch the caribou

because its food to us. If it gets spoil it will be no more food. That's why we have to protect the caribou. All the caribou parts have names. Inside the bone there's marrow and people eat it with drymeat. You make lard out of bones, you hit it to small pieces and boil it with water. Caribou is good meat and you make soup out of the caribou blood. Brisket is the tasty part; you boil it with rice to make soup. When the fat is thick on the meat you cut it out and it taste really good with drymeat.

There is only one way to gut the caribou, you put the caribou on its left side because it is easier to remove the inside. You don't use a knife to take the inside out; you use your hands.

(With each group of students JB demonstrated the sound of a caribou.)

Drymeat Making Workshop Drymeat Making Workshop (Friday, October 16, 1998) Franslated by Dennis Drygeese / Recorded by Evelyn Marlowe

Translated by Dennis Drygeese / Recorded by Evelyn Marlowe

When you are cutting up a thigh it is like doing a puzzle, but taking it apart instead of putting it together.

When you see pus on the fat, you cut it out and throw it away. To cut up one thigh and make drymeat it takes them less than half-hour. It also depends on how fast the person can cut up a thigh. When you don't have a file to sharpen up your knife, you use two knives and rub them against each other. In the olden days they used sinew for thread. Best part of the caribou to make drymeat with is the back strap. Small left over pieces from making drymeat you can make caribou stew with the meat. Make sure you take off all the hair on the meat before making drymeat.

In the olden days I heard when the lady makes a hole in the drymeat their husband would slice their old lady thigh with a knife for making a hole. When the husband loves her wife a lot then he would tell her to sew up the hole just like when you're sewing a slipper together.

There's some dark color on the meat its because the meat go too warm. You can make drymeat with small knife as long as it is sharp and big knife is for breaking the bones.

(The students try making drymeat.)

The first thing you do to make drymeat is get a piece of meat and sharp knife, then you slice the meat half, but no all the way. It is like unfolding by slicing the meat and you do both side until your done. If you cut the drymeat to thick, it can easily spoil on you. Cutting the meat partially frozen you can easily cut your hands.

We didn't have any smaller knife for the younger ones, so they watched because they might cut their hands. Also showed the students how to hang the drymeat on a rack to dry.

(Little Dillon Enzoe knew how to make very good drymeat because his grandmother Liza taught him.)

When there is muscle on the meat-you have to cut it out. Also when there is a thick piece of fat on the meat you cut it off. The fat tastes really good with drymeat. Boys can also make drymeat too, no problem.

The ladies learned to make drymeat at a very young age by watching their grandmother and mother making drymeat.

In the olden days they didn't use to leave kids to do whatever they want. In the evening they would make the children come back in and sometimes teach them to pound drymeat. They always had work in the olden days and people hardly rested. You learned to do things by watching people. It is even faster to learn when you are interested in learning.

(Liza is showing the students how to make drymeat out of caribou ribs. You have to cut off the bones from the rib and then hang it to dry.)

In the olden days they didn't even threw caribou bones away. They used the bones for fat. They would pound up the bones into small pieces and boil in the water. Everything is kept from the caribou. Another reason they took the bones of the ribs was to make traveling lighter. When you hang the drymeat in the teepee [smokehouse] to smoke - it gives it a little taste. But don't smoke it too much. They also hang bone-meat to smoke it in the teepee.

Land Use (Current Land Use)

Community-Based Monitoring Cycle Four (1998)

During our interviews we focused on current hunting and trapline areas. The method of gathering information involved inviting hunters, trappers and land users to the Research Office to draw their land use areas on mylar overlays 1:250 000 scale maps. A total of

forty-four (44) interviews were completed regarding land use activities. Out of twenty-seven (27) interviewees, only one female was interviewed. The ages of interviewees ranged from twenty to eighty years old. The process was very productive as well as interesting for the community researchers. Some of the elders because some told stories as they drew their land use area. These maps are not currently available to the West Kitikmeot Slave Study Society.

Traditional Knowledge and Skills— Dene Songs Community-Based Monitoring Cycle Four (1998)

Our Lutsel K'e Dene Band Councilor, Archie Catholique approached one of the researchers about collecting Dene Songs to preserve them. So we took that into account and started our research on what kind of Dene Songs we should record and how we should go about it. We contacted Tom Andrews at the Prince of Wales Heritage Centre in Yellowknife, Cindy Allen Department of the Department of Musicology at Carleton University and Nicole Beaudry from the Department of Music at Quebec University. We also wrote a letter to Michael Asch from the Department of Anthropology of University of Alberta to get advice on the kinds of questions we should ask.

From there we decided to focus on types of Dene Songs. The first one is Dene drum songs and the second is fiddling music. We came up with a list of questions to ask during our interviews with the help of other researchers. We interviewed a total of 7 elders in our community and recorded their songs on video and audio cassettes.

One of the main conclusions drawn from the study is that elders do not know of any Chipewyan Dene Songs, although suggest that there may have been some songs in earlier days. The kind of songs they play are Cree and Dogrib songs that they learned from other Dene when they met together and had celebrations or feasts and dances. The fiddle music came from the non-Dene.

TO DISCUSSION AND CONCLUSIONS
BACK TO BEGINNING OF REPORT (INTRODUCTION)

Community-Based Monitoring Annual Report (May 1999)	
Discussion and Conclusions	

Discussion and Conclusions

The results of the *Community-Based Monitoring Project* (1998) provide baseline information about community health in Lutsel K'e. This information relates to:

- Employment in the Mining Sector
- Youth participation in the Community,
- Health and Healing,
- Nutrition (consumption of traditional food)
- Impacts on the Land (Water)
- Traditional Values (Spirituality)
- Cultural Programs
- Infrastructure and Services (Housing)
- Traditional Knowledge and Skills (Caribou Cutting)
- Traditional Knowledge and Skills (Drumming)
- Current Land Use
- Togetherness (Good Communication)

The conclusions detailed in the report are interpreted here within a broader context of what is known about the "Dene way of life" from the *Traditional Knowledge Study on Community Health (1997)*, the *Community-Based Monitoring Pilot Project (1996)* and *Community-Based Monitoring Cycle One (1997)*

Employment

The elders' stories from the *Traditional Knowledge Study on Community Health (1997)* suggest that "work" was a very important part of the Dene way of life in the past. According to the Lutsel K'e elders, people in the past worked very hard because they had to survive. The Lutsel K'e elders talked about the importance of passing on the skills and knowledge to survive. They explained how these skills and knowledge were passed on from generation to generation. Each family member, (grandmothers, grandfathers, aunts, uncles, mothers, fathers, sons and daughters) had different roles and responsibilities related to hunting, trapping, preparing traditional food, raising children and otherwise keeping the family healthy. The value and significance of "work" as it is discussed in the elders' stories is very different from "jobs" or present employment.

Today the Dene way of life is distinctive from that described in the elders' stories and the issue of employment and "work" has different meaning and significance. Of particular concern is the high-level of unemployment among Dene youth. To address these concerns many community members are hopeful of employment in the newly developing diamond mining industry.

In 1998, Lutsel K'e was faced with many hundreds of staked sites in their traditional territory however, only there of the developers were attempting to work with the Band and employing community members.

The BHP Diamond Mines Inc. was the largest of the development project in Lutsel K'e Dene First in 1998 with their diamond mining project located roughly 350 km. north of Lutsel K'e, north of Lac de Gras, NT. The mining project called *Ekati* was approved in 1996, proceeded immediately into a construction phase. BHP Diamonds Inc. employed directly or through sub-contractors between 800 and 1000 people during construction. In October 1998, Ekati became operational and is proposed to continue mining diamonds for another fifteen to twenty years. BHP Diamonds currently employs five hundred people.

The other major project in Lutsel K'e Dene First Nation territory was being developed by Diavik Diamond Mines Inc. During 1998, Diavik Diamond Mines was in the final stages of preparing its Environment Assessment related to its proposal to mine diamonds off the east island of Lac de Gras, 300 km. north of Lutsel K'e. During that year they employed roughly 50 - 100 people both on site and in their Environmental Assessment work.

The third developer working in Lutsel K'e Dene First Nation territory that employed community members was Monopros Limited. Their project at Kennady Lake was also focused on diamond exploration. They employed roughly 30 people during 1998. In all three projects, the busiest seasons were in summer and winter. Spring and fall seasons are typically slow periods of exploration.

During the *Community-Based Monitoring Project Cycle One* (1997), the community researcher conducted a survey of local people employed in the mining sector. Twenty-two people were surveyed. Of those, 11 people were employed through sub-contractors to the BHP Diamond Mine and 8 were employed through subcontractors or directly with the Diavik Corporation. There was one person employed with a small contract firm. Two of those surveyed did not report where they were employed. Those surveyed held a wide range of positions. Housekeeping and general laborer were the most common. Others included geology surveyor, drill helper and geologist technician. The average length of employment for those surveyed was 6.5 weeks. According to the results, the majority (20 of 22) of those surveyed were no longer employed at the time of the survey because their contracts or short term employment had been completed. Other reasons included, better jobs, low salary, injury, and time off.

Interest in employment in the mining sector was based on a range of factors including money, learning a new field, interest in promotion, a feeling of input in the project, helping people in the community benefit from employment, promotion, the challenge, finding diamonds and meeting new people. Almost half of those surveyed (10) had no complaints about the employment. The others surveyed (12) had a range of concerns including low wages and no over-time, little room for advancement, no native food, and concern about environmental hazards. All of those surveyed had recommendations for improving training programs.

During the December – January study period of *Community-Based Monitoring - Cycle Two (1998)*, only three community members were reported as employed in the mining sector. These people were employed in administrative, semi-management positions.

Two of the three people had completed questionnaires in Cycle One.

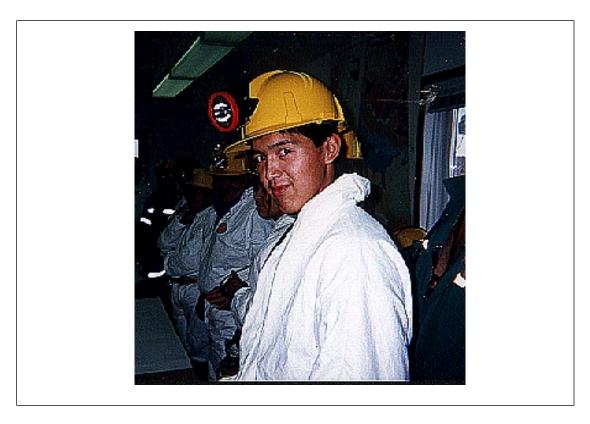


Figure 15: Michael (Yo) Rabesca during a Site Visit in Cluff Lake, AB (1998)

The first respondent was still employed with the one of the two major mineral development corporations at Lac de Gras and had received training in five different areas of the project. The other two people working in the mining sector in January 1998 were unavailable to answer questionnaires.

A comparison of the results of Cycle One and Cycle Two reflects the seasonal and short – term nature of employment opportunities for Lutsel K'e Dene Band members in the mining sector. Whereas 22 community members were employed in August 1997, only 3 people remained employed six months later. Responses to Question #5 of the survey done with mining sector employees in Cycle One (1997) may also provide clues as to the rapid flux in employment levels during the two study periods. Those responses included, low wages and no over-time, little room for advancement, no native food, and concern about environmental hazards. The Local Employment officer suggests that there are other institutional obstacles facing Lutsel K'e Dene Band members pursuing jobs in the mining sector. They include:

- lack of job readiness
- inadequate training and development programs
- drug and alcohol problems
- lack of local resource people able to assist in business development

- limited capacity for investment in business development
- lack of infrastructure to support business development

One way to begin addressing these issues according to the Employment Officer is a "Comprehensive Training Strategy" that would include five stages:

- 1) Life Skills and Job Readiness
- 2) Adult Upgrading
- 3) Pre-Employment Training
- 4) On-the-Job Training
- 5) Career Development

Former Chief Florence Catholique suggests that a strategy to encourage and support traditional land use activities coupled with an on-the-land counseling initiative would reinforce the cultural identity and empower many local people to become better workers.

During Cycle Seven of the Community-Based Monitoring Project, the community researchers will again survey community members employed in the mining sector. Because Cycle Seven will take place during the same season as Cycle One (September – December) the real increase/decrease in community employment in the mining sector 1997- 1999 can be determined.

Youth Participation

The education of youth is an important aspect of their participating effectively in the community. In the past that education came largely through the family and focused on the skills and knowledge required for surviving on the land. Many of the elders described in detail how the caribou were hunted, harvested and distributed among family members and within the community. The most strictly enforced rules regarding caribou, according to the elders, dealt with women. Young fertile women were not allowed to touch or walk over hunting gear, tools or the animal itself, nor were they allowed any contact with the hunter himself, or in some cases the entire camp would be negatively affected. According to many elders, sickness was the common outcome of disrespectful behaviour.

During the pilot project (1996), the importance of passing on these traditional skills was discussed. However, people also emphasized "formal" training and education as important. People described it as a basis for improving the community, a means to protect the land, and a basis for building a future and a basis for survival. People also spoke about the variables that affect youth training and education including student interest in doing well, student behaviour in school and parental support. Some people raised a concern about the difficulties of students attending residential high school away from Lutsel K'e. These concerns were in some ways similar to stories about missionary school told during by elders during the *Traditional Knowledge Study on Community Health (1997)*. The concern expressed by elders in that study, however, focused more on the students being unable to participate in the traditional economy rather than specific concern over their schooling. In general, the community expressed overall interest in students being able to achieve their training and education goals.

Today the focus of youth education is on gaining skills and knowledge needed to secure employment in the community. In addition to opportunities for employment directly in the community, a growing number of diamond developments in the region has led to an increase in training and employment opportunities.

During Community-Based Monitoring Cycle One (1997) students at the Lutsel K'e elementary school were asked about their employment and education goals for the future. To understand more about the impact of mineral resource development on youth participation in the community, the researchers developed a questionnaire to assess how many of the students had training and employment opportunities related to the mining industry.

When asked about their future employment interests, there were seven career options mentioned by youth. Of the 24 students surveyed, 41% or 10 students mentioned they wanted to be RCMP officers. Reasons behind this interest varied somewhat however, safety (keeping the town safe, protecting people) was mentioned by 50% or half of those students interested in being RCMP. Four students or 16% suggested they wanted to be teachers. Reasons included, a parent was a teacher (i.e. because of a role model), interest in working with kids, and an interest in teaching. Another 16% or 4 students said they wanted to be nurses. There were 3 students who had ambitions to be soccer players. Another 2 students wanted to be lawyers. There was one student who said they wanted to go into carpentry work and another who said fire fighter pilot.

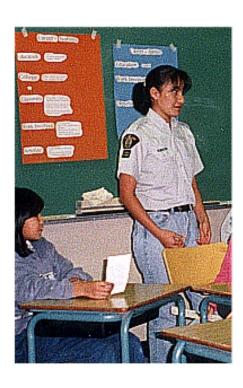


Photo 16: C. Desjarlais - Presentation at the Lutsel K'e Dene School (1997)

During Cycle Two, students in Grades 4-6 were given the same questionnaire. The responses were similar to those given in Cycle One. The careers children were most interested in included RCMP, school teacher, lawyer and pilot. With the exception of lawyers, all the careers, children were interested in were those visible in the community.

None of the youth surveyed during Cycle One or Two identified education, jobs or career opportunities in the mining sector as a goal. If it is the goal of Lutsel K'e Dene First Nation to encourage youth to take advantage of employment and careers in their own community, supporting them in meeting their current goals for education and employment would be valuable. If it is the goal of Lutsel K'e Dene First Nation to take greater advantage of job opportunities in the mining sector, further work to encourage and educate youth about the opportunities that exist for them in that sector would be beneficial. Neither of these goals are mutually exclusive, however, the former goal may be interpreted as better serving the community's interest in developing self-government.

During Cycle Seven of the Community-Based Monitoring Project, community researchers will survey the same students to determine if there is any change in their education and career goals and / or particularly in those careers related to the mining sector.

Healing

During the *Traditional Knowledge Study on Community Health (1997)* elders talked about the importance of having respect for oneself. For many elders, living off the land, is a strong sign of self-respect, drawn perhaps from the necessity for self-reliance. The following elder describes his relationship to the land.

I haven't stopped hunting and trapping. I work for/by myself well. I don't suffer because of some one else's mistakes. That is not to say that I'm better. Who ever wants to doubt my traditions – it's up to them. People know me, how I hunt, how I trap. Other than Dene people, there isn't anyone responsible for me. When I am alone in the bush or on the barren lands, I can stay alone for however, long I want. That is the way I live my life. (EM 021)

The relationship between living off the land and respecting one's self speaks to many issues around health and healing in the community. From reviewing the elders' stories, there are obvious emotional, spiritual, physical and mental ties that bind the community to the land. Overcoming sadness, for example or other emotional healing processes such as grieving, dealing with anger etc. is described in connection to the land. The following excerpt illustrates one elder's strong connection between emotional healing and the land.

When loneliness comes upon you, you've got to do something to take your mind off it. Maybe take a walk out in the forest. When you get up on the top of a hill and you see

all the beautiful scenery around you, like the trees, mountains, lake and shores, its so beautiful, it makes you wonder who did this all for you? This is how you forget about your loneliness. (EM 004)

Also visible in this excerpt, is the close connection between spirituality and the land. The Dene way of life in the past was highly integrated with and the land.

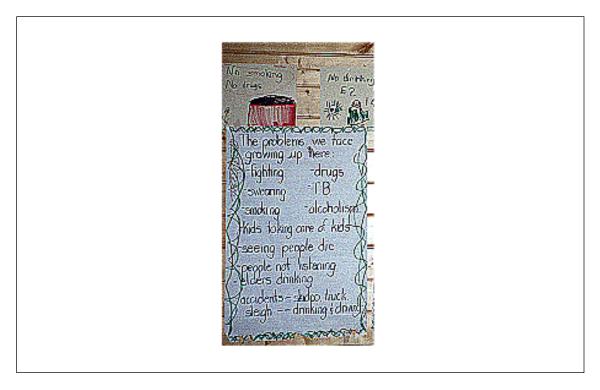


Figure 17: Posters from Community Youth on Health and Social Issues in the Community (1996)

The elders also talked about issues related to individual physical wellness. In the olden days, Lutsel K'e elders suggest there were few physical illnesses. What few illnesses there were, such as stomach problems, headaches and kidney problems, were cured by traditional medicine people who used spiritual powers as well as resources from the land to cure people. The increased presence of non--Dene people in the last 150 years, however, resulted in diseases such as tuberculosis and influenza to spread through this region. These diseases had a devastating effect on the Dene as told by Lutsel K'e elders. During the 1930s (c. 1928) flu epidemic, people traveled many miles to Fort Resolution where there was sometimes a doctor and to Fort Reliance, where the RCMP would give out medicine to the people. Many Dene people died in their effort to reach those with white man medicine. Gravesites along the route are testimony to the impact of these illnesses on the Dene and their way of life.

In 1996, the Lutsel K'e elders and other members of the community talk about another journey of healing. While physical illnesses, such as tuberculosis and cancer remain an

issue, illness associated with alcohol abuse emerged during home-visits (1996) as the most significant concern. Similar to the elders' stories from the *Traditional Knowledge* on *Community Health* (1997) health and healing were described with reference to spiritual, mental and emotional as well as physical elements.

Many people in the community talked about the healing or the process of strengthening oneself (or one's community) - emotionally, spiritually, physically and mentally. Many of their ideas specifically related to the success of treatment programs, personal initiative and local capacity to address local interest in healing. Twenty people talked specifically about the importance of different healing approaches. Of those, 30% of people talked about the value of healing on the land. Another 20% spoke about the importance of traditional healers and medicine men. More resource people, the importance of sharing and respecting one another, and the value of more traditional practices such as traditional medicine, and cultural healing each talked about by two people. The importance of treatment programs and healing workshops, mobile treatment Centre, healing as a part of school programs and work between youth and elders were other issues discussed.

During Cycle One and Cycle Two of the *Community-Based Monitoring Project* the community researchers sought to learn more about the healing journey in the community.

During Cycle One, forty-five percent (45%) of people interviewed said that the local Drug and Alcohol worker was the greatest support for people who are trying to keep their sobriety or improve on personal growth. Other forms of support included A.A. meetings, (sober) friends and family. It is important to note that thirteen people or 32% of those interviewed said there was little or no support available. The results from Cycle Two showed a somewhat different opinion about the support available. There was no mention of the Drug and Alcohol worker. Fifty-seven (57%) percent of people surveyed said that A.A meetings and/or group meetings were the greatest form of support in the community. Other forms of support mentioned were out of town treatment programs, and recreational activities.

The responses to the question, "How can you be supportive?" were relatively similar. People interviewed in Cycle One said, being available (47%), staying sober, giving advice, and listening were the main ways they could be supportive others. During Cycle Two, thirty-two percent (32 %) of people interviewed said that talking about things was the best way that they could be supportive. Another fourteen percent (14%) said that going to treatment oneself was the best way to be supportive.

When asked how they build their personal strength, people interviewed in Cycle One identified spiritual connections (45%) family and close friends (42%) as well as setting goals, working towards them and keeping busy (27%). The responses to the same questionnaire for January of 1998 were similar. When asked, twenty-one percent (21%) of people interviewed said they find strength for sobriety by praying to a higher power. Another seventeen percent (17%) said they find strength for sobriety in their family. Other sources of support mentioned included keeping busy, being on the land, spouses, and staying away from alcohol.

Comparing the results for Cycle One and Two reveals little change in people's ideas about being supportive and individual personal growth during the intervening six months. However, there is a sharp difference in what people see as "support" in Lutsel K'e. Whereas during Cycle One, the interviewees identified the Drug and Alcohol Worker as the major support, in Cycle Two to Group meetings during this same period. The change in emphasis from the Drug and Alcohol Worker to Group Meetings may reflect the fact that in January 1998, the availability of a Drug and Alcohol Worker in the community was relatively limited.

The change may suggest that people are keenly aware of when the Drug and Alcohol Worker is not available. Whether other forms of support (i.e. group meetings, AA Meetings etc.) can replace the support offered by the Drug and Alcohol worker is not known. Given the fiscal restraint being shown in the area of health and social services, these results may be a sign to Health and Social Services Program Administrators of the important role played by the Drug and Alcohol worker in healing.

The results do not suggest that there is any real change in the healing services needed in the community as a result of the effects of mineral resource development. Lutsel K'e Health and Social Services staff however, have pointed out that during the study period there was a net increase in the "level" of service required. More people are requiring more care as a result of drug and alcohol related problems. This increase in the level of service however, cannot be wholly or directly attributed to stress associated with employment / increased income from mineral resource development.

The connection between drug and alcohol problems and increased employment/income in the mining sector, may however, vary depending on the kind of employment and the nature of the project. For example, drug / alcohol problems were identified by the Employment Officer as one of the main obstacles to securing employment, particularly, where there is mandatory drug testing. Workplaces where mandatory drug testing is not enforced may see a higher level of employee turn-over attributable to drug and alcohol problems. According to some family members of present and past employees, it is the instability of employee turn-over and short-term employment, more than the employment itself, that is the source of much disruption to the community and their healing journey. Community members who are able to secure and maintain full-time employment and adapt to the new opportunities and pressures it has created do not tend to have such a disruptive impact on the community's health. (There are certainly exceptions to the rule.) However, the adaptation to full-time employment in the mining sector may be resulting in other stresses on the community's health. (See *Community-Based Monitoring Cycle Five – Interim Report 1999*)

The same questionnaire will be done during Cycle Seven of the *Community-Based Monitoring Project*. In order to more clearly determine whether the healing needs of the community members are changing as a result of mineral resource development, a sub-set of questionnaires will be conducted with mining sector employees and their families and analyzed separately for comparison.

Nutrition

Fundamental among the relationships Dene people had with the land was harvesting of wildlife and other food. "People used to go out and use the food they got from the land." (JB April 23, 1997) According to the elders' stories, harvesting required a range of skills and knowledge that was passed on from generation to generation. Some of these skills and knowledge related to traveling on the land. Harvesting caribou, a main source of food, required that hunters as well as their families travel great distances to hunt. There were also important skills and knowledge related to preparing and storing meat, berries and other foods. From the elders' stories it is clear that the distribution of food was highly organized. Knowledge about what kinds of foods were to be eaten by elders, youth and children, was offered in detail by the elders. These skills and knowledge enabled people to survive off the land, however, there were times when changes in the migration route of the caribou or unusually harsh weather conditions resulted in people going hungry.

During the pilot project (1996) the importance of eating food from the land was emphasized. Although the comments about traditional food appeared partially attributed to its cultural importance, the nutritional value of caribou meat and other traditional foods compared to that available in the store was emphasized. Some people even expressed caution and skepticism about eating food from the store. Another person commented on the expense of groceries, explaining that she had to spend a lot of the money she made from sewing to feed her family. There was one person who spoke about the importance of eating fruits and vegetables from the store as well as eating traditional foods.



Figure 18: Preparing Fish on Alder Branches (1998)

During Cycle One and Two of the *Community-Based Monitoring Project* a questionnaire was conducted to determine the amount of traditional food consumed in the community. The results suggest that everyone in the community consumes some traditional food. (Figure 18 / 19) The most commonly consumed traditional food is caribou meat, eaten five times a week on average. The level of consumption for other kinds of traditional food naturally varies according to the season and the kind of wild game that are available. Ducks are one example of a food consumed in late summer but not in winter. During August-September, people eat slightly more fish than during December-January. Moose and muskrat are also more commonly consumed in late summer.

The results do not suggest that elders and adults eat more traditional food than youth. In one case, the opposite appears to be true. Youth aged 10-19 appear to eat more caribou meat and organs than elders (61+). The community researchers explained this difference in consumption by the fact that caribou meat may be the most available and cheapest source of protein available to parents feeding their young families. The Community Health Worker added that youth may eat more caribou meat/organs because they are better able to chew the meat than elders.

During Cycle Seven, the community researchers will conduct another survey on traditional food consumption in Lutsel K'e. In order to more clearly determine whether the traditional food consumption is changing as a result of mineral resource development, a sub-set of questionnaires will be conducted with mining sector employees and their families and analyzed separately for comparison.

Housing

The migration of the Beverly and Bathurst caribou herds led the Lutsel K'e Dene south into present-day Manitoba and Saskatchewan and far into the barren lands. Housing in those days was temporary.

Teepees covered with moose or caribou hide were useful shelter since they could be set up and taken down quickly and were easily transportable. Given the amount of travel the elders described as involved in hunting caribou, this ease and flexibility of shelter was very important. Elders also talked about building and living in cabins. Although it is difficult to determine when these structures became popular, the elders' stories would suggest many were constructed during the 1930s.

During the Cycle Three evaluation with the Lutsel K'e Elders' Committee, the elders talked about another kind of shelter that was used early in their lifetimes. The shelter was similar in shape to a teepee and made of peeled spruce poles that were closely placed together. Unlike the teepee, the shelter was not covered in hide or canvas.

Although some were used as smoke houses (Photo 5), those built as shelters were more carefully constructed. The cracks between the poles were filled with mud and moss. One elder (JBR, 1998) said he used to live in something like this as a child. He remembered they used to build a fire pit in the middle. Another elder (ZC 1998) reported living in one

around Great Slave Lake. He said there were two doors on them. "We need to take pictures of the old sites", he said. He went on to describe how they used to tie the top of the poles with roots. "Before the axe, people used only small trees", he said. Another elder (AC 1998) said her brother made a similar shelter.



Photo 19: A Spruce Tree Shelter near the Barrenlands

In 1996, some people in the community expressed anxiety about having to leave their life on the land to live in permanent housing in Lutsel K'e. Some others talked about reestablishing cabins or improving existing cabins on the land. Other issues raised during that study related to the government's responsibility to provide housing, the shortage of housing in town for families in need. There were some comments that suggested current housing in Lutsel K'e is comparatively better than in the past and better than in some other communities.

During Cycle Three, a questionnaire was done to determine more about current housing conditions in Lutsel K'e. The results of that questionnaire suggest that more housing is required, particularly for single people. Others complained of housing being unfinished and poorly maintained. Some of the people interviewed characterize housing as good, reliable, excellent and better than in the olden days. Several others commented that it would be better if people owned or built their own homes.

Comparing these results together, one can gain some general understanding of how people in Lutsel K'e perceive housing has changed. The results of the pilot project suggest that many people still desire to live on the land. Some people even expressed anxiety about having had to move into permanent homes in the current community. Although current housing conditions could improve, many people see conditions as comparatively better than in the olden days.

There are various ways that the housing might be affected by increased mining activity. An increase in employment in the mining sector may increase the capacity of some individuals to build and maintain their own homes (as opposed to renting) which may free up rental housing for others currently in need. Employees in the mining sector are also spending less time in the community than their families. This may lead to a decrease in the capacity of individuals to maintain their homes. There is also the potential for employees and their families to move away from the community. Although this may have a negative impact on the community in some ways, such out-migration may also lead to an increase in the number of housing units available.

The results of the Cycle Two do not provide specific answers about the effects of mineral resource development on housing conditions, however, do provide a baseline of community perspectives and concerns about the housing in Lutsel K'e. The community researchers will ask community members the same set of questions in Cycle Eight. Drawing guidance from the impact hypotheses on housing, several questions may be added to determine if people see any change in the ability of community members to build or maintain their own homes.

Effects of Resource Development on the Land (Water)

During their lifetimes, Lutsel K'e Dene elders have experienced a great deal of change. One of the changes they have experienced is a change in the health of the environment (land) that they attribute to the "white man" and mineral resource development.

It was after the white man came that the land started to spoil. They drill rocks here and there. If they don't find minerals in one spot they don't clean it up, they just leave it like that and move on. (AM June 12, 1997)

Having experienced the impacts of previous mining exploration and development, the elders fear the impacts of future developments. One elder raised specific concerns about development near the sacred site on the Lockhart River, the Dene call the "Old Lady of the Falls".

If they build a mine near the ":old lady" she might not like it. She might do something we don't know about. Already I have heard some stories on the radio about the mine *in Yellowknife* and how the water is spoiled. In the future, what will it be like for our children and our children's children? I think It will be hard for them. I think about that a lot. (Late-JC June 18, 1997)

Other specific concerns relate to the loss of traditional medicine and the mess created by garbage that is left on the land.

Nineteen people or nineteen percent (19%) of people interviewed during the *Community-Based Monitoring Pilot Project (1996)* talked about the impacts of resource development on the land (water). Of those, twelve people (64%) raised concerns about the impacts of mineral resource development. Another five people or twenty-three (23%) made reference to the impacts of tourism. Three people or five (5%) talked about the hydroelectric development and its effects. General concerns about the land being lost, damaged or contaminated and the need to protect it were also raised.

During Cycle Three of the *Community-Based Monitoring Project*, a review of minutes of the Wildlife, Lands and Environment Committee revealed the kinds of mineral resource development projects that Lutsel K'e is currently facing in their traditional territory. This review also revealed the kinds of impacts that the committee was concerned about during their consultations with the mineral resource developers.

Increased mineral resource development, by its very nature, is having an impact on the traditional lands of Lutsel K'e Dene First Nation. While the effects from specific activities of individual resource development projects are likely to be insignificant, the cumulative effects of all activities in the region are not well understood by the scientific community. This was clearly the case during the Environmental Assessments of the BHP Ekati Mine and the proposed Diavik Diamond Mine. Although the cumulative effects are not well understood by the scientific community, such effects are the cause of great anxiety for members of Lutsel K'e Dene First Nation.



Figure 20: Gabe Enzoe and Dennis Drygeese Visiting a Mine in Cluff Lake, Alberta (1998)

Other research suggests that for Aboriginal people, whose culture, society, economy and spirituality is grounded in the "land", the insecurity associated with these potential effects is itself an impact on the way of life. Usher (1994) explains that the traditional economy is grounded in a people's sense of security about their ability to access an abundant nature resource base. If the security of that resource base or their access to it is compromised, or is threatened, so too is the community. This social stress over the potential or actual loss or degradation of the land base due to competition with mining activities may express itself in many ways. One expression includes inner frustration or inner conflict within individuals or within the community. Bielawski, (1993) pointed out in her work on the impacts of the Talston Hydro Electric development that the greatest impact on the community of Lutsel K'e was their frustration over their inability to prevent the damage that occurred, as much as it was the impact of the damage itself. A similar conclusion was reached by Usher (1994) during his work for the Nishanawbe-Aski Nation, Grand Council Treaty #3 and Teme-Augama Anishinabai.

People living directly from the land and water around them are acutely aware of indications that things are right or wrong with the natural world... Unnatural disruptions, -- for example river impoundment and regulation, or environmental contamination – are profoundly disturbing and give rise to deep seated anxiety and insecurity. (Usher 1992, p. 114)

Such insecurity, frustration and anxiety may inevitably lead to social stresses within the community. As mineral resource development continues on Lutsel K'e Dene First Nation land, the insecurity, frustration and anxiety surrounding "potential effects" should be recognized as an impact on the Dene way of life.

The effects of resource development on the land (water) will be reviewed again in Cycle Eight.

Knowledge of Traditional Values

Of the many indicators developed during the *Community-Based Monitoring Pilot Project* (1996), "knowledge of traditional values" in the context of traditional knowledge is one which is difficult to define clearly and analyze since "traditional" is a relatively vague concept. A review of the 1996 data which was used to define the indicator reveals its specificity to a spiritual connection to the land.

During the *Traditional Knowledge Study on Community Health (1997)*, elders spoke at length about spirituality and or a spiritual connection to the land. Many of these stories had to do with healing such as - medicine men, traditional medicine. They also spoke specifically about the "Old Lady of the Falls" where they used to go for help. Many of

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¹ It must be noted that the anxiety and insecurity over the effects of development is not limited to the time frame of the mine's operation. Many social scientists now recognize many effects, such as risk related anxiety can occur even prior to exploration and are obvious even after the operation is finished. (Gramling and Freudenburg 1993).

the stories dealt with Catholicism, the celebration of mass and Christian Holidays and *devotion* to the church. Prayer was also important. Prayer was an important means of preventing illness or bad luck. One elder described how people used to pray before the missionaries came. After the missionaries came, he said, people were more or less convinced to pray a certain way. Other forms of prayer were excluded. The emphasis on praying in the elders' stories was praying as taught by the Catholic Church.

During the *Community-Based Monitoring Pilot Project (1996)* the researchers reviewed interviewees' data for comments that related in some way to spirituality. We did a key word search for concepts such as Church, Creator, medicine, pray, prayer, spirituality, spirit, strength, religion respect/land. We also looked through the interview data for any additional references such as those related to being on the land or respecting the land that we considered spiritual and specific references to spiritual sites such as the "Old Lady of the Falls" and Lac Ste. Anne.

Thirty-one people or 31% of the people interviewed during the *Community-Based Monitoring Pilot Project* talked, in some way, about spirituality. Of those, sixteen people or fifty-two percent (52%) of the people talked about spirituality in relation to the land or respect for the land. Concern about the loss of spirituality / culture was raised by 22%. Issues related to the benefits of spirituality in healing, the importance of respect, the effects of residential school were each raised by twenty-four percent (23.8%). Other aspects of spirituality mentioned during the interviews included Medicine men / traditional medicine and the loss of Catholicism



Figure 21: Community Members Visiting the "Old Lady of the Falls" (1997)

A major symbol of Lutsel K'e Dene spirituality is the "Old Lady of the Falls". A good starting place for understanding the relationship the community has to the falls is the legend of the falls as told by Lutsel K'e Dene elders Zepp Casaway and Pierre Catholique. The story which involves a giant, Hachoghe and two beavers is significant because it talks about how the "Old Lady of the Falls" came to be. It may also be significant because of its similarity to the creation stories told by many other Dene nations in the north and other First Nations in Canada.

The Lutsel K'e Dene began visiting Parry Falls long before the elders can remember. Many people continue to go there in small groups both in summer and in winter. In 1989, the Lutsel K'e Dene Band began to organize a community pilgrimage to Fort Reliance and to the Falls. The average number of times those who were interviewed had visited the Falls was 4.6. Youth have made relatively fewer visits to the falls than elders which is commonsensical, given that youth have had fewer opportunities in their lifetimes to visit the falls. The fact that elders have visited the falls more often may also be interpreted to mean that the traditional values associated with the "Old Lady of the Falls" are more widely held by elders than youth.

When asked about the meaning and significance of the "Old Lady of the Falls" people spoke about the "old lady" as sacred and their visit as an expression of *spirituality*, *Chipewyan history and culture, love for the land*. Many people simply described the area as sacred. Stories told about the "Old Lady of the Falls" are testimony of its power to heal people who are in need.

The community's knowledge of traditional values including those associated with the "Old Lady of the Falls" may be impacted by increased mineral resource development in various ways.

More disposable income may increase the capacity of individuals and families to spend time engaged in activities (i.e. harvesting) that may lead to sharing of traditional values. On the other hand, it may lead to families spending less time engaged in those activities. The increase in training and education opportunities may also lead to a decrease in the amount of time people spend on the land

In response to the decrease in individual and family led cultural activities and in the effort to offset perceived impacts on the traditional economy, the Band may organize more community activities. A potential increase in moneys from Impact and Benefit Agreement may result in an increase in opportunities for community members to engage in activities that would lead to sharing of traditional values.

Cultural Programs

The Dene way of life in the past was the "culture" which underlies the cultural programs of today. From the elders' stories collected during the *Traditional Knowledge Study on Community Health (1997)* we learned that of the Dene way of life in the past revolved around surviving off the land. The skills and knowledge required for living on the land were passed on to youth through different forms of learning. Learning from parents -

experiential learning was a fundamental learning process. Some youth were also taught how to be medicine men. The elders' stories also emphasize the importance of youth learning how to respect and how to pray. Listening to the elders' stories to learn about the past and the future was also part of the education of youth.

In 1996, community members talked more specifically about "cultural programs." Twenty-six (26%) of the people who were interviewed made reference to cultural education or programs and commented on their current and potential value. Of those, eight people or thirty percent (30%) emphasized the role of the local school. An equal number of people (30%) emphasized the importance of family involvement in cultural education. Another fifteen percent (15%) commented on importance of the Chipewyan language.

During the Cycle Three of the *Community-Based Monitoring Project (1998)* we focused on the success of cultural programs in the community as an indicator, in order to understand more about the journey of cultural preservation. We learned that fourteen cultural programs took place in Lutsel K'e in 1998. Thirty-six percent (36%) of the programs involved elders. Ninety-three (93%) involved youth. Language was included in twenty-nine (29%) of the programs. Thirty-five (35%) were on-the-land programs. Forty-three (43%) were organized as family activities. Forty-three percent (43%) were organized by the school. The remaining fifty-seven percent (57%) were organized by the community.



Figure 22: Noel Drybones harvesting caribou in the Barrenlands(1999)

Best approaches suggested by the interviewees included: involve the children; involve a key motivator or initiator; offer programs on the land; work with the elders; and involve kids in programs where they can ask questions, see, feel and experience things. The interviewees suggested they could determine the success of the program by the expressions of happiness of the faces of the children, their commitment to accomplishing something (e.g. small project), whether they learned something, whether people attended the activity or event.

The data collected on cultural programs from the *Traditional Knowledge Study on Community Health (1997)*, the *Community-Based Monitoring Pilot Project (1996)* and *Community-Based Monitoring – Cycle Three (1998)* provide some perspective on "culture" that the Lutsel K'e Dene seek to preserve.

This information can also give us insight into the potential impacts of mineral resource development. Drawing on the impact hypotheses developed in Figure 4, increased individual employment and income and Impact and Benefit Agreement moneys are the two means by which the cultural programs might be affected.

More disposable income from individual employment may increase the capacity of individuals and families to spend time on the land involved in cultural activities. On the other hand, it may also lead to families spending less time on the land and involved in cultural activities. The increase in training and education opportunities may also lead to a decrease in the amount of time people spend on the land and involved in cultural activities.

In response to the decrease in individual and family led cultural activities and in the effort to offset perceived impacts on the traditional economy, the Band may organize more community activities. A potential increase in moneys from Impact and Benefit Agreement may result in an increase in opportunities for community members to develop and participate in cultural programs. However, the values, knowledge and skills passed on through family oriented cultural programs may not be the same as those passed on through larger community programs offered by the Band. Efforts by the Band may not therefore wholly compensate for impacts on cultural programs resulting from changes in individual and family lifestyle.

In 1998, almost one half (43%) of the programs offered were family oriented, and over half (57%) were organized by community members. Comparison of this information on cultural programs with results from future monitoring will provide more insight about the community's capacity to deal with the impacts of mineral resource development.

Togetherness

During the *Traditional Knowledge Study on Community Health (1997)*, elders talked about how people used to work together. A good Chief who was respected by the people was a key element of people working together. According to the stories, leaders were chosen by consensus. A good leader was often considered one who spoke well and was respected in the sense that people listened to him and followed his direction. A good

leader was also one who worked closely with the people and often traveled from camp to camp to visit. One elder talked about a good leader who would give advice to families who were having difficulties. Good leaders also had some ability to predict [plan] the future, particularly how the "white man" would affect the Dene way of life.

Gathering together also held particular significance in people working together. Elders also talked about traveling great distances to reunite with their families or to join in on an event such as a community hunt. The importance of sharing and helping out others without being paid was also emphasized in the elders' stories. Although the immediate family was a priority, people would generally help those who were having trouble surviving on their own. However, the ability to survive on one's own, rather than depend on others, was a priority.

During the *Community-Based Monitoring Pilot Project (1996)*, people spoke about the need to work together, the importance of consensus and about volunteerism in traditional activities.

During the *Community Based Monitoring Project Cycle Four (1998)* the community researchers learned more about what it means to work together in Lutsel K'e. Seventeen people responded to the questionnaires about working together. In response to the question, "What does Working Together Mean to You?", people gave many different ideas. The most common ideas revolved around communication and sharing ideas (35%), problem solving (18%). Working towards a common goal, respecting one another, cooperating, understanding and sharing each other's roles and responsibilities were also mentioned.

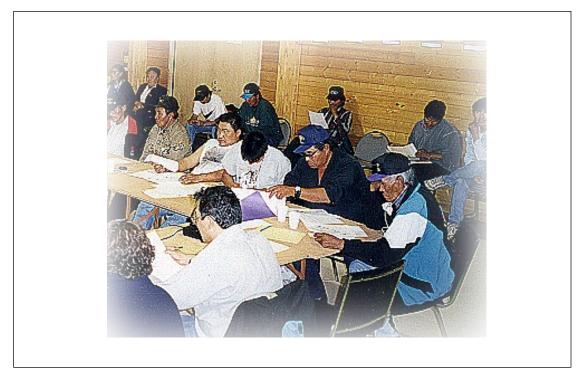


Figure 23: The Denesuline (Chipewyan Dene) Gathering in Lutsel K'e (1998)

Mineral resource development might affect "togetherness" including working relationships between community organizations. With the potential increase in moneys from Impact and Benefit Agreements, community organizations may find it easier to achieve their goals. However, if not distributed evenly within the community, these moneys may cause community organizations to work less well together.

The increase in training and employment opportunities that might result from mineral resource development may also affect "togetherness" and the capacity of community members and organizations to work together. It may mean individuals spend less time in the community and as a result, their capacity to share ideas, problem solve and work towards a common goal is diminished. Education can also provide community members with increased self-esteem, knowledge, and skills – tools that can increase the capacity of community members to share ideas, problem solve and work towards a common goal.

Traditional Knowledge and Skills (Caribou Harvesting)

The caribou plays a central part of the Dene way of life, nutritionally, economically, socially, culturally and spiritually. The Wildlife, Lands and Environment Committee recommended monitoring the traditional knowledge and skills related to caribou use for Cycle Four.



Figure 24: J.B. Rabesca at the Caribou Workshop in Lutsel K'e (1999)

Knowing and understanding the caribou, the signs of a healthy animal, how to respect the animal during the hunt, and the skills required to respectfully use, share, prepare and store the meat clearly reflect the importance of the caribou to the Lutsel K'e Dene.

Analysis of the elders' stories from the *Traditional Knowledge Study on Community Health (1997)* for the *Community-Based Monitoring Annual Report (1998)* revealed the relationship between harvesting caribou and travel, how people used to prepare and store the meat for immediate use or travel, distribute meat within and among families and how this differed from the life in the missionary school.

During the *Community-Based Monitoring Pilot Project (1996)*, people spoke specifically about the knowledge and skills they thought should be passed on as traditional knowledge. For the purposes of this analysis, traditional knowledge was defined as any knowledge or skill that has developed over generation and defined as something that needs to be passed on to future generations.

The *Traditional Knowledge Study on Community Health (1997)* and the *Community-Based Monitoring Pilot Project (1996)* provided us with some general ideas about how caribou should be harvested, however, there was little specific step-by-step description of how it should be done. During Cycle Four, the community researchers held a workshop to learn more about the specific ways in which caribou need to be respected and harvested. The specific data from the caribou harvesting workshop will be used as a baseline for future monitoring. For example, youth in future cycles of monitoring will be questioned about their level of knowledge about caribou harvesting. The responses to these questionnaires will be compared to details provided by the elder during the caribou workshop.

Increased employment opportunities and the resulting increase in individual and family income may impact on the community's traditional knowledge and skills for harvesting caribou. More disposable income may increase the capacity of individuals and families to spend time on the land involved in harvesting activities. On the other hand, such income may lead to families spending less time on the land involved in harvesting activities. The increase in training and education opportunities may also lead to a decrease in the amount of time people spend on the land involved in harvesting activities.

A potential increase in moneys from Impact and Benefit Agreement may result in the Band creating more opportunities for community members to engage in harvesting activities. However, the skills and knowledge passed on during these activities may be different than those passed on in the family.

Land Use

During the *Traditional Knowledge Study on Community Health (1997)*, elders described many different aspects of land use. Harvesting of traditional food in many ways, defined the relationship people had with the land. Elders spoke extensively about hunting, trapping, and fishing. Elders also spoke of traveling on the land, by food, by boat, dog team, sled and more recently by skidoo. Travel and harvesting in the area between Lutsel K'e, Fort Reliance, Artillery Lake and Clinton Colden Lake west to Yellowknife, south to Fort Resolution and east to Nanacho Lake and Lynx Lake. (It is important to note that this area does not represent the entirety of Lutsel K'e Dene Territory.)

Being knowledgeable and understanding the land was very important. For example, knowing where the caribou traveled, where to set a net for fish, where and when to trap for muskrat was critical. A lack of knowledge and understanding of the land meant a



Figure 25: Elder Maurice Lockhart Documenting Land Use Information (1998)

poor life and a quick demise. Elders who had spent many years on the land, watching, listening learning and understanding changes in the land were therefore highly respected and valued.

Knowing how to look after and respect the land (stewardship) was another aspect of land use, that elders talked about during the traditional knowledge study. Elders spoke of how people in the past would take care not to disrupt the land or leave garbage lying around. Paying the land (i.e. offering tobacco) was a way that they thanked the Creator for the land and the animals that they depended on for survival. Various elders expressed concerns about white people (exploration and mining companies) on the land who failed to care for the land and clean up after themselves. The elders emphasized the present need to protect the land from being spoiled for future generations.

During the *Community-Based Monitoring Pilot Project (1996)* people spoke often about spending time on the land. Many related stories about specific places on the land.² Twenty-seven people or twenty-seven percent (27%) of the people interviewed made an evaluative comment about land use in the past, their own land use, or that of future generations. Of those sixteen people or fifty-nine percent (59%) talked about enjoying their time on the land. Seven people or twenty-six (25 .9%) of the people raised concerns over the future of hunting, trapping and spending time on the land. Another three people made some comment about land use in the past.

During Cycle Four of the *Community-Based Monitoring Project* forty-four (44) interviews were completed regarding land use activities. The people's ages ranged from twenty to eighty years old. Out of 27 interviews, only one female was interviewed. Some people told stories as they drew their land use area. The trapping and hunting areas span as far east as Beaverhill Lake and Sid Lake, as far south as Talston Lake, as far west as MacKay Lake and as far north as Alymer Lake. (It is important to note that this area does not represent the entirety of Lutsel K'e Dene First Nation Territory.)

Increased employment opportunities and the resulting increase in individual and family income may result in changes in land use. More disposable income may increase the capacity of individuals and families to spend time on the land involved in cultural activities. It may also lead to families spending less time on the land. The increase in training and education opportunities may also lead to a decrease in the amount of time people spend on the land.

In response to the decrease in the amount of time families spend on the land and in the effort to offset perceived impacts on the traditional economy, the Band may offer more on the land activities. A potential increase in moneys from Impact and Benefit Agreement may result in an increase in opportunities for community members to develop and participate in on the land programs. However, the values, skills and knowledge passed on through the family may be different than those passed on during community activities.

Traditional Knowledge and Skills (Drumming)

During the *Traditional Knowledge Study on Community Health (1997)*, the elders talked very little about traditional knowledge and skills for drumming. Those stories that did make reference to drumming described how medicine men used drumming for healing. As one elder said, "People would all come to play the drums and sing and listen to spirits" (NA April 15, 1997) People also used drumming for dances and playing hand games in the olden days.

During the *Community-Based Monitoring Pilot Project (1996)*, people spoke specifically about the knowledge and skills they thought should be passed on as traditional knowledge. For the purposes of this analysis, traditional knowledge was defined as any knowledge or skill that has developed over generation and defined as something that

² Specific place name information is not included here because Lutsel K'e Dene First Nation is presently involved in Treaty Entitlement negotiations with the Federal Government.

needs to be passed on to future generations. Seventeen people talked specifically about the kinds of knowledge and skills that should be passed on as traditional knowledge. Two people made general references to drums or drumming. One person talked about the importance of learning about traditional medicine. Another person reflected on his/her grandfather's wisdom about the community. A third person spoke about learning traditional parenting skills. The traditional knowledge and skills that were mentioned most often were those need to survive on the land including knowledge about the wildlife, conditions on the land and water, hunting, trapping, making and setting nets, preparing meats, and sewing etc.



Figure 26: Elder Zepp Casaway with His Caribou Hide Drum (1998)

During Cycle Four of the project a set of interviews were conducted with elders known to have traditional knowledge and skills for drumming. The kinds of songs they play are Cree and Dogrib songs that they learned from other Dene during celebrations or feasts and dances. One elder suggested there may have been Chipewyan songs in earlier times, but they are not aware of any today.

Increased employment opportunities and the resulting increase in individual and family income may impact on the community's traditional knowledge and skills including that required for drumming. More disposable income may increase the capacity of individuals and families to spend time involved in traditional activities such as drumming. On the other hand, it could lead to families spending less time involved in traditional activities such as drumming. The potential increase in training and education

opportunities could also lead to a decrease in the amount of time people spend in the community engaged in traditional activities such as drumming.

Depending on how it is spent, a potential increase in moneys from Impact and Benefit Agreement could offset negative impacts if it is used to develop opportunities for community members, especially youth, to participate in cultural activities. However, the skills and knowledge passed on through the family may be different than that passed on during community organized activities.

Links with Parallel Studies

Community-Based Monitoring – Cycles Two – Four is part of an ongoing research project aimed at better understanding the potential impacts of increased mineral resource development on community health in Lutsel K'e.

The project began in 1996. The *Community-Based Monitoring Pilot Project (1996)* focused on developing indicators of community health. The *Traditional Knowledge Study on Community Health (1997)* involved gathering baseline information about community health issues in the past from Lutsel K'e Dene elders. The *Community-Based Monitoring Annual Report 1998* presented the results of the first cycle of monitoring.

The results documented in this report and future reports of *Community-Based Monitoring* will be integrated with the *Traditional Ecological Knowledge Research in the Kache Kue Study Region*.

Training Activities and Results

The *Community-Based Monitoring Project* is based in the community of Lutsel K'e and is conducted under the guidance of the Lutsel K'e Wildlife, Lands and Environment Committee and Project Directors Brenda Parlee and Evelyn Marlowe.

Community Researchers involved in the project for Cycles Two, Three and Four were Evelyn Marlowe, Bertha Catholique and Marie Catholique. Their training revolved around the objectives of the project including:

- Gathering of information,
- Summarizing Information,
- Evaluation of Results.
- Reporting.

Specifically, community researchers worked on developing questionnaires, documenting and organizing the results of home-visits with community members, recording those results in Microsoft Word. Summarizing and analyzing the results in a form useful for reporting to the community was an important yet time consuming task.

Developing reports for the West Kitikmeot Slave Study Society (WKSS) was another aspect of training important to the project. Presenting results and conclusions in meaningful and concise fashion and ensuring the report conformed to the WKSS reporting format was time consuming however, provided useful experience for researchers attempting to develop their English writing skills.

Schedule and Any Changes

One important noted change in the project is the adaptation of the measures defined during the pilot project during Cycle Three and Four.

While some of the measures in Cycle Three-Four do not necessarily correspond neatly with the indicators that were developed during the pilot project, the set of indicators developed during the pilot project were not set in stone. No set of indicators should be considered static. The community is dynamic, the environment is changing. We feel that it is more appropriate to view the Committee's selection of indicators and the development of measures as evolving from what was developed during the pilot project. On a somewhat smaller scale than the pilot project, the Committees' selection of indicators and the development of measures can provide us with insight into the nature of community health in Lutsel K'e. If there had been some great deviation away from the pilot project results in what the Committee directed be monitored, we may have decided to take the process of indicator selection to a large workshop or community meeting format.

The second change to note is a change in the schedule for sampling in Cycle Two and Three. The project experienced staff turnover during Cycle Two when Ms. Marlowe left the project on maternity leave. Ms. Parlee was also away during Cycle Two completing her thesis in Waterloo. This may have affected the consistency of aspects of data gathering methods to a certain degree detailed in the methods section of this report.

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BACK TO RESULTS
BACK TO BEGINNING OF REPORT (INTRODUCTION)