A Ghost Town in the Making? Young adult perspectives of the economic future of Sparwood, BC

By Rachel Chapman





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University of the Fraser Valley Abbotsford, B.C.

A Ghost Town in the Making? Young adult perspectives of the economic future of Sparwood, BC

By

Rachel E. Chapman

PAPER SUBMITTED AS AN HONORS ESSAY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE HONORS DEGREE OF BACHELOR OF ARTS

In

The Department of Geography

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Chapter 1: Introduction

Coal mining has a history in British Columbia that is older than the province itself. From its discovery in Vancouver Island in the 1840s up to the late twentieth century, coal has defined the existence of many of BC's communities, both past and present. Some of these communities have maintained other economic activities once the production of coal has ended, while others suffered economic setbacks too severe to recover. For other communities, the end of their resource dependency is foreseeable within the next few generations and decisions made now about these towns' economic future are critical to their survival.

One such community is the District Municipality of Sparwood, in the East Kootenays of southeastern BC (Figure 1). The town's economy is dominated by the production from five surrounding coal mines, all of which are estimated to cease production by 2052 (Teck 2011). Previously, the construction and operation of a coal mine in the Flathead Valley offered the potential of extending and expanding coal production in the region. The Flathead is immediately south of the Elk Valley, where Sparwood and the five mines are located (Figure 2). Pressure to protect the international Flathead River drainage basin, a cross-border watershed shared with the state of Montana, has, however, resulted in a ban on mining in the sensitive ecosystem. This mine, had it been built, could have potentially served as an alternative economic option for miners who wanted to remain in the community as existing operations begin to wind down.

The Rocky Mountains is a prized region for aesthetic values, but one that is exploited and abused for jobs and profits (Schwantes 1996). In much of the province,



Figure 1: Sparwood is located in the East Kootenay region of BC, close to the Alberta border. *Image from GoogleEarth 2011.*

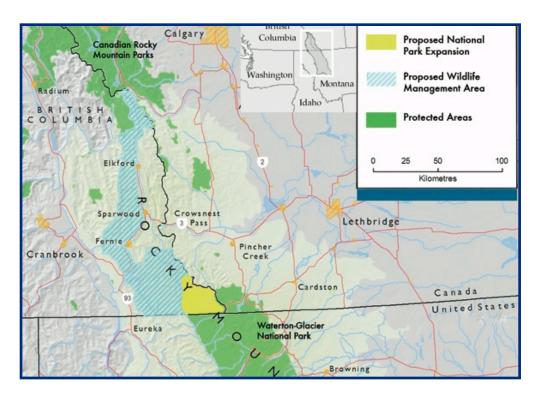


Figure 2: The Flathead River basin, outlined in blue, is in close proximity to Sparwood and the Elk Valley. *Image from Flathead Wild 2011.*

Fordist production defined the resource sector for the past century, and this meant an almost 'guaranteed' job for young adults entering the workforce. In many cases, the multiplier effect of these 'basic' industries generated job growth and economic development associated with the industry and little development outside the resource sector; however, multiple generations could make a living off the local resource operations until the supply was exhausted. For much of BC's history, there was no friction between the resources and jobs because the supplies of both were perceived as endless. Now, however, the patterns of resource extraction that has met or exceeded the natural resource's limits have created ghost towns throughout the province (Schwantes 1996).

Opening a new mine in the Flathead could have provided jobs for the next generation in Sparwood. The objective of this project is to find out how young adults within the community see the economic future of Sparwood, as it reaches the limits of its resource base. Residents of Sparwood between 18 and 25 years of age were invited to participate in focus group discussions on how they view their economic options and those of the town. In total, 13 young adults participated in the project. A large number of these participants have chosen careers that will take them outside of Sparwood, as they see career options in the town as very limited. Many do not desire to work at the mine and, therefore, do not see themselves as settling down in Sparwood. Those who do plan on staying in town for the long-term have careers within the mining sector. They foresee Sparwood as a place that they can remain their whole lives while making the high wages which characterize the resource economy. This perception is one that many of the young adult participants claim is prevalent among many in their community. It is one of many

factors identified by participants as a hinderance to the economic diversification of the community. Other perceived obstacles include the town's local governance, its geographic location and general lack of appeal to young adults.

Sparwood's young adult population, then, plays a critical role in envisioning alternative economic pathways for the community. Due to the projected reduction in mine operations over the coming decades, and limited alternatives for new mine development in the adjacent Flathead Valley, Sparwood is at a critical juncture, in that is must be planning for economic alternatives, while continuing to rely on mining as its largest basic industry. Residents, businesses and local government are faced with making decisions that will prove crucial to the town's resilience through a time of economic transition. The young adults of Sparwood are divided in their views of the economic future of the town. Most study participants suggested developing the tourism industry, although other ideas were also raised. Although they offer alternative economic options for the town, participants generally did not seem optimistic about the ability or desire of the locals to pursue those options. Yet, those that have a stake in making decisions about the future of Sparwood-the next generation of Sparwood's workers-- are often leaving town for other opportunities. The inability of those leaving the community, as well as those who perceive a long future surrounding the mine, to address and actively prepare for an alternative economic future of the town will lead to the town becoming yet another resource ghost town in BC. This could be prevented if the vulnerability of the town were addressed and those who recognize it, rather than leaving town, work to create a more diversified and sustainable economy.

This paper will begin with a general history of coal exploration in BC in general and the Kootenays specifically, and how this development shaped the establishment of communities in the Kootenays. It will give a brief overview of selected development models that describe resource town development before introducing the community of Sparwood. This will be followed by a discussion on possible alternative economic futures for BC's resource towns, with profiles of two communities--- Silver Valley, Idaho and Tumbler Ridge, BC, that have successfully transitioned away from economies solely dependent on mining. After a brief introduction to focus group techniques and the methodology of the project, discussion will then turn to the findings of the research. These findings will inform a discussion on the potential implications for the future of Sparwood.

This research examines the social implications of transitioning out of a resource dependent economy. The example of Sparwood can serve to illustrate many of the concerns young adults in a transitioning resource economies have, and can be used elsewhere to ensure that other resource communities in BC successfully make the transition out of being dependent on the provinces limited resources.

Chapter 2: Coal Mining and Community Development in Southeastern BC

A History of BC's Coal Industry

Coal is a very important component of BC's economy. It provides thousands of jobs and billions of dollars every year and serves as the impetus for the establishment of many communities throughout the province. It has been particularly important in the eastern stretches of the province, in the Peace District and the East Kootenays.

Coal on Vancouver Island

Anecdotal accounts from the mid-19th century relate how workers of the Hudson's Bay Company (HBC) on Vancouver Island saw an indigenous woman with a piece of coal on a necklace and persuaded the natives to show where the known coal reserves were located (Newsome 1989). Commercial coal extraction got off to a slow start on Vancouver Island in the mid-1840s, as steamships at the time ran off the lumber that was abundantly available along the coast (Newsome 1989). As the use of steam to power ships in the Navy increased, however, so did the demand for coal. Although the coal was property of the Crown, the Hudson's Bay Company was able to avoid many of the fees and taxes associated with coal extraction by promising that profits from the industry would go toward colonization and development of the region (Newsome 1989).

This arrangement between HBC and the Crown allowed for inexpensive development of the coal market, although it was subject to periods of incredibly low demand and extremely dangerous working conditions (Newsome 1989). The center of

mining operations shifted to various places around Vancouver Island, helping to establish many communities such as the current city of Nanaimo (Newsome 1989). By 1862, the dangerous conditions and almost constant strikes by workers had influenced the Hudson's Bay Company to sell their coal mining operations to the Vancouver Coal Mining and Land Company (Newsome 1989). Within two years, coal output had doubled and the sale of company land in Nanaimo made it a very profitable venture for the company.

The development of the coal industry occurred later in the East Kootenays than on Vancouver Island. HBC employee Michael Phillips arrived in the Kootenays in 1864. In 1873, while exploring tributaries of the Elk River with a group of men in search of gold, he discovered abundant coal deposits along what is now called Coal Creek (Ramsey 1997; Turnbull 1979). Despite the immense coal deposits they discovered, the target of their expeditions was still gold, so they only extracted a small coal sample and continued to prospect throughout the region (Ramsey 1997).

Not much became of that discovery until 1887, when William Fernie applied for a coal prospecting permit. The years following were characterized by coal exploration and campaigns to get railway service to the area, which would be vital for the industry to take off (Ramsey 1997). By 1896 Fernie, along with Colonel James Baker, a landowner from Cranbrook, had acquired coal lands. In the West Kootenays, the discovery of minerals that required coal for smelting, along with the desire to prevent a loss of business to American railroads, convinced the government to continue the Canadian Pacific Railway (CPR) westward, through Crows Nest Pass and beyond (City of Fernie 2011; Ramsey 1997; Turnbull 1979). Railway construction began in 1897 and coking ovens were constructed

simultaneously so that coal shipments could begin to go out as soon as the first train arrived (Figure 3)(Ramsey 1997). By July 1898, the rail line was complete, the coal mines were in production and the new town of Fernie was home to 1500 residents (City of Fernie 2011).



Figure 3: Coking ovens, such as the ones visible on the left, and load out facilities were constructed in Fernie along the tracks in preparation for the arrival of the trains in 1989. *Photo by Rachel Chapman 2011.*

The arrival of rail service triggered a construction boom in and around Fernie. Although the exact dates that some of the surrounding townsites, such as Elko, Sparwood, Michel and Crowsnest, were established were not recorded, it is around this time that mention of the town of Elko begins to appear in records. An 1899 mine report also mentions that coal was being shipped from the Fernie, Sparwood and Michel stations (Ramsey 1997). The towns throughout the Elk Valley were solely dependent on coal and problems within the companies affected the economy of the entire region (Ramsey 1997). The mining companies held tight control over many aspects

of town life, resulting in a high level of dissatisfaction within the communities. High prices in the company store, dangerous working conditions, poor wages and long work days led to a series of strikes in 1902. Generally, however, the coal industry in the Elk Valley was thriving (Ramsey 1997). Despite connections to the west coast and central North America via the Canadian Pacific Railway (CPR), Spokane International Railway, and other rail connections, the Kootenays remained relatively isolated from much for the rest of the province, a distance reinforced when labour turmoil or disaster struck. On April 4, 1903, for instance, the Fernie Free Press published an "obituary" for the town of Sparwood, after a widespread fire destroyed much of Fernie, Michel and Sparwood (Ramsey 1997).

The town of Fernie was officially incorporated in 1905. This incorporation was aided by the release of company land to the public, and thus began the process from a company town to an independent community (Ramsey 1997). In 1907, the Crow's Nest Pass Electric Light and Power Company Ltd. sold off an additional twenty blocks of lots. This new settlement was officially called "New Michel", but the CPR used the name Natal to differentiate from the original Michel and eventually the name stuck (Ramsey 1997).

The industry persisted through periods of boom and bust over the following decades, including the Great Depression during which time wages were at an all-time low and unemployment at a record high (Ramsey 1997). More efficient technologies and the switch to alternate energy sources in the 1950s and 1960s caused an economic downturn once again in Canada's coal industry (Anton 1981; Ramsey 1997). Diesel engines replaced coal burning locomotives and cheap domestic and imported oil and gas became the desired form of energy for everyday use (Anton 1981; Ramsey 1997). Surface-mining replaced underground mining for

most coal used in electrical generation, a cost-saving move that became crucial to the industry's survival. In the 1970s, however, Japan's increasing demand for metallurgical coal, along with a fivefold increase in international oil prices in 1973 and 1974, created an unprecedented increase in extraction activities (Anton 1981; Ramsey 1997). The 11.0 million tonnes of coal produced by Canada in 1968 escalated to 33.5 million tonnes by 1978 (Anton 1981).

In 1950, Bruno Engler, a world-renowned skier, arrived in Fernie to examine the possibilities of turning the area into a destination ski resort (Ramsey 1997). The first ski hill in Fernie opened in 1962, divorcing the town's economy from sole dependence on the coal mining industry. Residents saw the new venture as a gamble. However, many residents recognized the importance of establishing a secondary industry (Ramsey 1997). This has, to date, been a gamble that has paid off. Fernie is now a top western Canadian ski destination (Figure 4).



Figure 4: Fernie has transitioned from a resource-based economy to a tourism-based economy and is now marketed as a destination ski resort. *Photo by Rachel Chapman 2011.*

Social Implications of Resource Town Development

Multiple models help explain the patterns of growth in resource towns. Baldwin (1956) identifies two primary types of towns: entrepreneurial and plantation communities. Entrepreneurial communities are common in the early stages of resource development and are dominated by small producers (Baldwin 1956; Hayter and Barnes 2001). Increasingly larger firms began to get involved in resource development, leading to plantation communities (Baldwin 1956; Hayter and Barnes 2001). This gave rise to Fordist methods of production, which emphasized mass production of standardized products on increasing economies of scale (Hayter and Barnes 2001). In BC's periphery, Fordist production meant long-term contracts with labour, and reliable, plentiful job options within the resource industries (Behrisch 1993).

By the last 1970s, industries had begun to shift towards post-Fordist production.

This movement towards greater production flexibility meant an intensification of the workforce, therefore fewer workers, and valued the ability of workers to adjust to changing conditions (Behrisch 1993; Hayter 2000). The generation growing up after the shift to "post-Fordist" production did not follow in the steps of generations before them by going into resource production, but instead followed alternative goals (Behrisch 1993). During the transition between these two periods of the dominant mode of production, however, a "lost generation" emerged, as their expectation of employment in the resource sector did not align with the reality of the limited job opportunities created by post-Fordist production (Behrisch 1993).

Lucas' Model

Lucas (1971) describes the economic growth of resource towns in four stages. The first of these is the 'construction' stage, as the town is being built. During this time, there is high population turnover and the vast majority of the population is male. Clapp (1998) also associates the initial period of development, which he labelled as the "boom" period, with high government subsidies in transportation network development. This period is followed by the 'recruitment' stage (Lucas 1971; Bradbury and St. Martin 1983). Resource towns are often established in isolated areas and it is necessary to build up a population base that can supply workers. There are often many young families and a strong ethnic mix in town at this stage (Lucas 1971; Bradbury and St. Martin 1983). These two stages are very dependent on company control and investment. The subsequent 'transition' stage is characterized by a weaning of the company's support to the community. At this time, there is a stable workforce employed by the resource industry (Lucas 1971). Operations continue to expand and capital intensity increases (Clapp 1998). The final stage, which Lucas (1971) titles the 'maturity' stage is characterized by a lack of job mobility and high rates of youth outmigration.

Lucas' model does not model the lifespan of a town in its entirety, however.

Bradbury and St. Martin (1983) proposed two alternatives for resource towns beyond the stage of 'maturity'. Clapp (1998) suggests that the end of this period is demarcated by a decrease in resource related jobs as the resource supply is depleted. The possibilities that follow include first, a 'winding down' stage, during which there would be large-scale outmigration paired with high job losses, or second, 'alternative futures'. The latter begins

with a time of economic transition, when a town begins to depend on economic options other than resource development. It creates a sustainable community, which endures beyond the lifespan of the resource (Bradbury and St. Martin 1983).

The Instant Towns Act

Recognizing the problems inherent with 'plantation'-model communities, the BC Government's Department of Municipal Affairs implemented the *Instant Towns Act* in 1965 (CSCD 2010). This act dramatically altered the development of the Elk Valley (Bradbury 1980). The act was designed to help deal with many issues that resource towns in BC face, namely high labour turnover, community instability and isolation (Bradbury 1980). In company towns, one resource company not only made all of the decisions regarding levels of production, they also controlled housing and stores in the community, and by default, the labor supply (Bradbury 1980; CSCD 2010). This type of paternalistic relationship led to abuse by the company and labour unrest among the workers, as was seen early in the Kootenays' coal industry. Furthermore, companies created communities that had uncertain futures. When industry was booming, companies could afford these large town-buildings expenditures; however when the industry died down, the company could shut down operations and vacate the community, leaving residents without an economic future (CSCD 2010).

Throughout the 1950s and 1960s, the resource companies operating in BC were increasingly multinational corporations that aimed to maximize profit through increasing economies of scale in production (Bradbury 1980). With the introduction of the *Instant Towns Act*, the government theoretically passed control of the town to the residents and not to the

company by allowing them to quickly pass through the process of becoming an incorporated town (Bradbury 1980; CSCD 2010). The government planned and sponsored the development of towns in hopes the communities would attract a more stable and less strike-prone workforce, in part through providing homeownership opportunities often absent in company towns. The government also hoped to decrease high turnover rates and to have a more balanced sex ratio in the population, which also would contribute to stability and homeownership, and would help foster a sense of community (CSCD 2010). The companies hoped to free themselves from the trouble and expenses of providing housing and stores (Bradbury 1980).

Despite good intentions, the *Act* was unsuccessful in achieving many of its goals. As Brett McGillvray (2005) states, "Governmental policy in the 1960s did not address the fundamental vulnerability of single-resource communities. Rather, by encouraging the construction of instant towns the provincial government gave these communities the illusion that they were permanent." Towns still experienced high turnover in their population, isolation and an unbalanced demographic and many of the problems with housing were merely passed on to the residents (Bradbury 1980). Townspeople now owned homes and businesses in the newly created municipalities, fixing them to the location. When the industry was no longer profitable, the company had the ability to move elsewhere, leaving the people behind with the same housing and living expenses, but limited income. Homeowners now had to decide what to do with the real estate that was very depreciated in these isolated communities. The resource company often dominated town councils and continued to be the principal source of income for the community (Bradbury 1980). The dependence on the industry frequently caused the town to be subservient

to the company's needs. Eleven towns were created under this act, one of which was Sparwood (CSCD 2010).

The Creation of Sparwood

As part of the *Instant Towns Act*, it was declared that the homes and residents of Michel and Natal would be relocated to Sparwood, creating one municipality (Ramsey 1997). Despite their longstanding history in the region, the many small communities were not officially incorporated. Relocating the towns of Michel and Natal would allow the coal industry, which had been encroaching on the boundaries of the cities, to expand further (Ramsey 1997). On May 12, 1966, the District Municipality of Sparwood was officially named, and the new district recognized the incorporation of Elk Valley, Crowsnest, Old Sparwood, Natal and Michel into one community by including five stars on the city's logo (Figure 5) (City of Sparwood 2011). The official naming of the municipality, however, initially had little effect on the residents of Michel

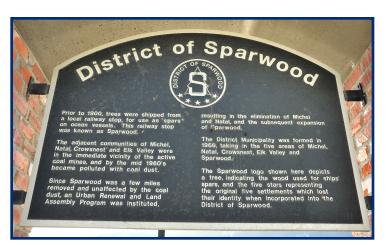


Figure 5: The logo of Sparwood contains 5 stars, commemorating the 5 communities that were merged during the creation of the present town of Sparwood. *Photo by Rachel Chapman 2011.*

and Natal, who were still waiting to be relocated. Although Sparwood was officially opened in 1970, the post office opened in 1971 and numerous development projects were taking place, it took until 1978 before all Natal residents were relocated (Ramsey 1997).

The town of Sparwood thrived in the 1970s. The million-dollar Greenwood Mall opened in November 1971, and plans began for the construction of Centennial Square, the proposed commercial center (Ramsey 1997). The city had sports programs and a recreation field. The first elementary school built filled so fast, more rooms were added and the children attended in double shifts and it still was not enough (Ramsey 1997). Growth was not limited to Sparwood alone. The ski resort in Fernie was expanding and the nearby town of Elkford was incorporated in 1971 (Ramsey 1997). The platting of these towns were poor, as the agency charged with Sparwood construction—the Department of Municipal Affairs, as well as the cities themselves,

had not foreseen the rapid expansion, and mobile homes were soon used to create new subdivisions (Figure 6) (Ramsey 1997).

The development and growth patterns of Sparwood are still apparent though the municipality today. Little evidence remains of the former towns that compose Sparwood, with only the Michel Hotel marking the location of a past community (Figure 7a, b). It was the only building that had not been owned by the mine and, consequently, the



Figure 6: Entire subdivisions of mobile homes in Sparwood serve as evidence to the unanticipated, rapid expansion of the community. *Photo by Rachel Chapman 2011.*



Figure 7a: The Michel Hotel marks the former townsite of Michel. *Photo by Rachel Chapman 2011.*



Figure 7b: The Michel Hotel was the only building of the old town that was not destroyed when the residents relocated to Sparwood. *Photo by Rachel Chapman 2011.*

only building that was not torn down when the residents relocated to Sparwood. Many of the neighbourhoods of the town are easily distinguishable and detached from Sparwood proper. Some of these neighbourhoods are composed entirely of mobile homes. These areas represent past spurts of growth in the coal industry, when housing needed to be constructed rapidly to facilitate an influx of workers.

The "downtown" area of Sparwood is small and has limited businesses outside of those related to the industrial sector. The Greenwood Mall has many empty businesses, as does Centennial Square behind it (Figure 8). The Causeway Bay Hotel is located immediately west upon entering the town from the south off of Highway 3, with a parking lot full of the trucks of out-of-town mine workers who stay there during their 4 day shifts. Restaurant options, other than pubs or the hotel diner, are incredibly limited. Of five identified in an online directory in Winter 2011, at least one of these was not in operation at the time of study. It was observed that a large



Figure 8: The Greenwood Mall was a huge investment for the city when it was built, but now houses may empty businesses. *Photo by Rachel Chapman 2011.*

portion of the patrons at these establishments, specifically at the A&W, are mine workers.

Mining related businesses, such as heavy equipment companies and truck service companies, line Highway 3.

The main road through town is directly off the highway, under a large welcoming sign (Figure 9a). The sign is attached to what is known as the "Community Arch", which is dedicated to the coal workers of the Elk Valley (Figure 10). The structure is a brick archway made of bricks from the Michel powerhouse and houses an old mine car locomotive used in the mines of Michel from the 1950s to the 1970s. The back of this welcome sign reads "Modern Mining Benefits All of Us" and one of many reminders throughout the town of the community's reliance on the industry (Figure 9b).

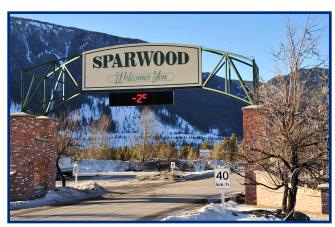


Figure 9a: The main route into Sparwood runs directly off Highway 3 into the downtown area, beneath the town's 'Welcome' sign. *Photo by Rachel Chapman 2011.*

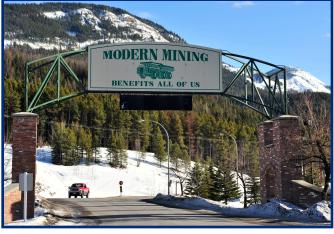


Figure 9b: The back of the sign welcoming people to town reinforces the identity of Sparwood as a 'mining town'. *Photo by Rachel Chapman 2011.*



Figure 10: The community arch adorns the entrance of Sparwood and is a large visual reminder of the town's dependence on the mining industry. *Photo by Rachel Chapman 2011.*

Visual representations of the town's dependence on the mining industry are apparent throughout the community. Directly behind the Chamber of Commerce/Visitor's Center is the Terex Titan, one of Sparwood's most highly advertised tourist attractions (Figure 11). The truck holds claim as "one of the world's largest trucks" and has prominent placing on many of the signs and promotional material for the town. It is the largest of many retired mining artifacts that are placed throughout the town, many of which are paired with an informational plaque describing the mining history of the town. The most numerous artifacts throughout the town are coal carts from the days of underground mining; these were located at the most important localities throughout the city, such as in front of the Municipal Hall, at the sign marking the boundaries of the municipality and outside the Chamber of Commerce (Figure 12). Many of the buildings in town have large-scale murals on their sides that depict the mining heritage of the town. Despite the prominence of many of these tributes to the mining industry, the majority of

them display signs of neglect. The murals are faded, the plastic of the information plaques is discoloured and broken and many of the coal carts contain weeds.



Figure 11: The Terex "Titan", one of Sparwood's main tourist attractions, sits directly behind the Visitor's Center/Chamber of Commerce. *Photo by Rachel Chapman 2011.*

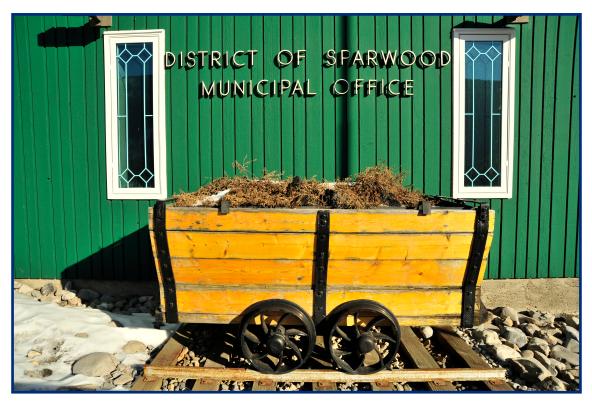


Figure 12: Retired mining artifacts, such as coal boxes, are placed all over town, supporting the identity of Sparwood as a mining town. *Photo by Rachel Chapman 2011.*

The Coal Industry

Since the formation of the initial Crow's Nest Coal and Mineral Company in the 1880s to the dominance of Teck in the Elk Valley, control of the valley's resources has passed through the hands of many different companies and consortiums (Ramsey 1997). Through the mid to late twentieth century, multiple companies operated in the valley. These included the Fording Coal Company, which opened the Fording River mine in 1971, and Kaiser Coal Ltd., which opened the Balmer pit and underground mine, also known as Harmer Ridge, in 1969 (Scales 2006). Kaiser Coal had been involved in operations in the valley since 1967 and was very involved in community life. The owner's family would often be seen in town, interacting with the residents and participating in community events (Ramsey 1997). In 1980, the British Columbia Resources Investment Corporation ("Brick") bought all the shares from Kaiser Resources, dramatically changing the relationship between the industry and the town (Ramsey 1997). The new company, which evolved into BC Coal Company and Westar shortly after, was based in Vancouver and the executives were seldom seen around town (Ramsey 1997).

This transition also reflected other changes in the industry in the province, and for Sparwood in particular. The demand for metallurgical coal was decreasing and competition from places such as Tumbler Ridge-- another instant town, located in Peace District of northeastern BC and Australia made winning Japanese contracts more difficult (Ramsey 1997). Nonetheless, production continued to expand, operating mines continued to change hands and new mines continued to be opened. The Greenhills Mine, operated by Westar, and Line Creek, opened by a subsidiary of Shell Canada, opened in 1981 (Scales 2006).

It was at this time that the Elk River Colliery at Coal Creek, Fernie's last colliery, closed, causing Fernie to lose its industrial tax base. Sparwood and Elkford had a huge industrial tax base without the infrastructure maintenance problems of an older city, so in 1981, the three towns banded together for a tax-sharing program to help relieve the older city of Fernie (Ramsey 1997). With the decrease in export markets, the coal companies tried to sell to steel mills in Ontario, which used coal imported from the United States, but many companies operating in BC still suffered (Ramsey 1997). In August 1992 Westar declared bankruptcy and there was great uncertainty about the future of their two mining properties (Ramsey 1997).

Westar's Harmer Ridge mine shut down, but was re-opened the following year after Teck-Cominco took over the property and re-named it Elkview, while Fording Coal acquired Westar's 80% interest in the Greenhills mine (Ramsey 1997; Scales 2006; Teck 2011). Shortly after, Fording also purchased the Coal Mountain Mine at Corbin (Ramsey 1997). In 2003, Fording's ownership stakes of the Coal Mountain, Greenhills, and Fording River mines were transferred to the Elk Valley Coal Partnership (Mining Technology 2011). At the time, Fording Canadian Coal Trust owned 60% of the partnership, while Teck-Cominco owned the other 40%. Shell sold the Line Creek mine in 1991 and it was bought and sold many times before being acquired by Elk Valley Coal (Scales 2006). Teck Resources bought all of the stakes of the partnership in 2008 and renamed the company Teck Coal, solidifying their dominance over the coal industry in the Elk Valley (Figure 13) (Mining Technology 2011; Scales 2006).



Figure 13: Teck's dominance over the industry in valley is evident through road-side signs, such as this. *Photo by Rachel Chapman 2011.*

Elk Valley Coal Today

Most coal mined in BC is exported, including all of the coal from the five mines in the Elk Valley (Figure 14) (EMPR 2011). The high production for export remains an important aspect of the industry today. British Columbia is the second largest coal-producing province after Alberta. However, Alberta consumes much of what they produce for use in thermal electricity generation, while BC exports the majority of their coal to Japan (Anton 1981; NRCAN 2010). Prices per tonne reached a high in the early 1980s and steadily decreased until the turn of the century (Figure 15) (MEMPR 2007). From 2000 to present, value has increased dramatically, particularly after 2004; however production has remained at approximately the same level (Figure 16) (MEMPR 2010).

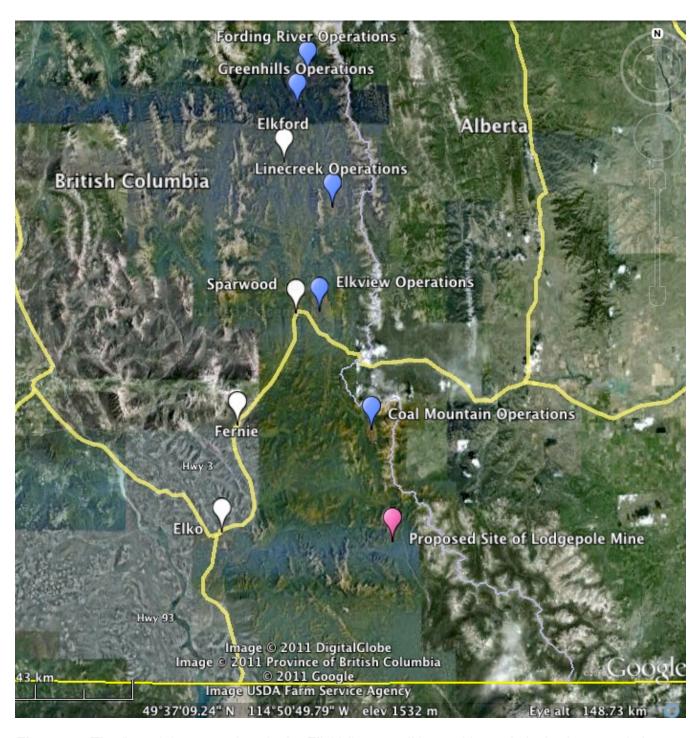


Figure 14: The five mining operations in the Elk Valley are all located in a relatively close proximity to Sparwood. *Image from GoogleEarth 2011.*

#60.00 (Average Mine Gate Price - C\$/tonne) \$50.00 \$40.00 \$20.00

Figure 15: Prices for both metallurgical and thermal coal reached a high in the 1980s. *Image from MEMPR 2007.*

--- Thermal - C\$/tonne

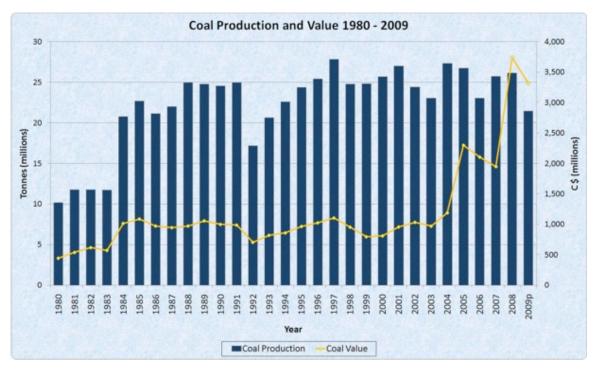


Figure 16: The value of coal increased dramatically after 2007, however production levels have remained relatively constant. *Image from MEMPR 2010.*

Elkview Mine

The Elkview Mine, formerly the Balmer Mine, was opened in 1969 by Kaiser Resources and is the mine closest to Sparwood (Figure 16) (Scales 2006). It is currently 95% owned by Teck, 2.5% by the Japanese Nippons Steel Corporation, and 2.5% by the Canadian affiliate of South Korean Pohang Iron and Steel Company (POSCAN). The mine employs approximately 700 people and produces up to 7.0 million tonnes of coal annually (Scales 2006; InfoMine 2011). At 2009 production levels, the minelife is estimated to last until 2044 (InfoMine 2011), however at 2010 production rates, the reserve was only expected to last until 2042 (Table 1) (Teck 2011).

Fording River Mine

Fording River is located 29 km from Elkford (Teck 2011). It is owned 100% by Elk Valley Coal (InfoMine 2011). It has the greatest production of the five mines at 8.0 million tonnes of coal per year in 2009 (InfoMine 2011) and 8.7 million tonnes of coal in 2010 (Teck 2011). The mine employs almost 900 people (InfoMine 2011) and is estimated to be in production until 2044 at 2010 production rates (Teck 2011).

Greenhills Mine

The Greenhills mine was opened in 1981 by Westar and POSCAN (Scales 2006). Westar's 80% share in the mine was bought by Fording and became a part of Elk Valley Coal, owned by Teck, in 1992 (Scales 2006). POSCAN continues to own 20% (InfoMine 2011; Scales 2006). It is located near the town of Elkford and employs approximately 460 people (Profile Canada 2011). The mine produces approximately 4 - 4.5 million tonnes annually an at 2009 production rates, the minelife is expected to last until 2024 (InfoMine 2011).

Line Creek Mine

The Line Creek mine is owned 100% by Teck. It currently produces approximately 2.5 million tonnes per year (Scales 2006; InfoMine). The mine employs 370 people (Teck 2010) and, at 2009 production rates, will be in operation until approximately 2019 (InfoMine). Proposed expansion of this site would extend the minelife to approximately 2033 and, once in operation, would provide a total of 400 jobs (Teck 2010).

Coal Mountain

Coal Mountain was one of the first coal deposits to be mined in the Elk Valley (Ramsey 1997; Scales 2006). It has a very low strip ratio, making it the most productive of Elk Valley Coal's mines (Scales 2006). The mine employs approximately 175 people and produces approximately 2.7 million tonnes of coal annually (Scales 2006; InfoMine). The minelife, at 2010 production rates, is estimated to last until 2019 (Teck 2011).

Table 1: The five mines surrounding Sparwood have a different production rates and anticipated production life spans (*InfoMine 2011*; *Teck 2011*).

Name	Elkview	Fording River	Greenhills	Linecreek	Coal Mountain
Mining Type	Open Pit	Open Pit	Open Pit	Open Pit	Open Pit
Mine Life at 2009 production rates	To 2044	То 2050	To 2024	To 2019	To 2018
Mine Life at 2010 production rates	To 2052	To 2044	To 2029	To 2026	То 2020
# of Employees	approx. 700	approx. 880	approx. 460	approx. 400	approx. 175
2009 Production Rates	5.6 mtpa	8 mtpa	4 mtpa	2.5 mtpa	2.7 mtpa
Owners	Teck (95%), Nippon Steel Corp (2.5%), POSCO (2.5%)	Teck	Teck (80%), POSCO (20%)	Teck	Teck

Sparwood Today

Regardless of the poor upkeep of the mining artifacts, the industry is still a key component of the community. Resource-based industries in Sparwood employ over four times the number of people than any other industry (StatsCan 2006). Many of the other industries, such as construction and business services, are indirectly related to the mining industry, and those three industries alone employ 46.63% of the community's population (StatsCan 2006). To place this in perspective, those three industries only employ 32% of the provincial population.

The ability to get a job at the mine without post-secondary education is reflected in the education data of the town. A substantially lower percentage of the population over 24 years old has post-secondary education compared to the rest of the province, with the exception of those who have obtained an apprenticeship or trades certification, which is significantly higher than the rest of the province (Table 2). A much higher percentage of people have also either not completed high school or completed their education with a high school diploma.

A growing recognition of the importance of higher education shift in mentality can be seen in the same data for the younger population. Although a lower percentage of people in Sparwood pursue higher levels of education than in other parts of the province, the percentage of those who do is much closer to the provincial levels (Table 3). The increasing percentage of the people who attend university reflects the desire of many young adults to pursue jobs outside of the mining sector, for which post-secondary education is often needed.

Education is not the only indicator of the changing mentality of the town's youth. The town's population is aging, as young adults leave and the older mine workers remain in town. There is a significant decrease in the percentage of the population in the 20 to 24 year old age

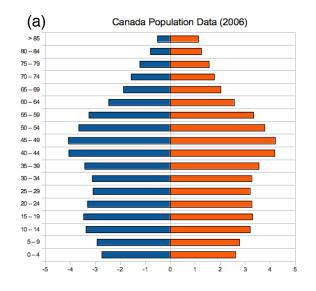
Table 2: Census data of the older populations of Sparwood and BC reveal a lack of necessity for higher education in Sparwood (*StatsCan 2002*).

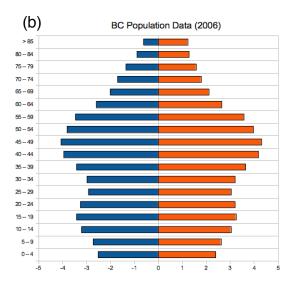
	Percentage of population > 24 years old (Sparwood)	Percentage of population > 24 years old (BC)
No certificate, diploma or degree	17.70	12.35
High school certificate or equivalent	33.25	25.88
Apprenticeship or trades certificate or diploma	23.44	11.96
Non-university certificate or diploma	17.22	19.57
University certificate or diploma below the bachelor level	1.20	6.09
University certificate, diploma or degree	7.17	24.15

Table 3: The percentage of people who continue on to post-secondary education is higher in the younger population of Sparwood, indicating a shift in mentality regarding the need for higher education (StatsCan 2002).

	Percentage of population 15 - 24 years (Sparwood)	Percentage of population 15 -24 years (BC)
No certificate, diploma or degree	52.38	37.34
High school certificate or equivalent	33.33	41.27
Apprenticeship or trades certificate or diploma	2.38	3.86
Non-university certificate or diploma	7.14	8.11
University certificate or diploma below the bachelor level	0	3.02
University certificate, diploma or degree	4.76	6.38

range relative to the Canadian and provincial averages (Figure 17 a, b, c). There is also a dramatic drop in the population in the 60 to 64 year age range, as many people leave town after retirement. While the bulge of the population pyramid during this working age caused by "baby boomers" is typical, the variations in Sparwood are much more pronounced. This is because the natural bulge of the "Baby Boomers" is amplified by the age of the people who choose to remain in Sparwood. There is also a sharp decrease after the age of 60 in the population in Sparwood, indicating that many people leave the community once they have retired from the mine.





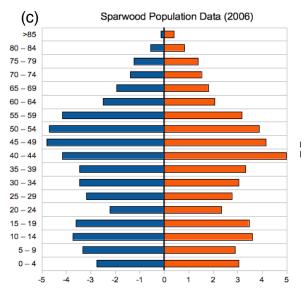


Figure 17: Relative to both the rest of Canada (a) and BC (b), there is a significant decrease in the population of Sparwood (c) after ages 20 and 60, indicating that people leave the community as you adults and after retirement (StatsCan 2002).

Sparwood's history demonstrates that it has always been able to adapt when necessary.

From the time of its establishment these changes have always been to accommodate changes in the coal industry or in government policy to aid resource development. The town is now facing a time, however, when legislation is put in place to protect the environment, at industry's expense, and the limitations of the resources available are being reached. Sparwood is now facing a new stage in the town's development, one in which it must transition away from its heavy dependence on mining.

Chapter 3: The Flathead Valley and Moratorium

The Flathead Valley and the International Joint Commission

The Flathead Valley is in the southeastern-most corner of BC, southeast of the Elk Valley and Sparwood. The area is ecologically sensitive, critical grizzly bear habitat, the headwaters to an international watershed and the location of potentially profitable coal, coalbed methane, and oil and gas reserves (Figure 2). Any mineral or energy development in the area has the potential for severe ecological consequences.

The Flathead Valley is the only low elevation valley in southern Canada that remains unsettled (Sierra Club 2011). It is home to the highest concentration of grizzly bears in the North American interior and serves as an important migration corridor for these, and many other, large mammals (Figure 18) (Flathead Wild 2011; Sax and Keiter 2007). The area has supreme water and air quality (Sax and Keiter 2007). To the east of the Flathead drainage basin is the Alberta's Waterton Lakes National Park and to the south lies Glacier National Park in Montana. Together, these two parks make up the Waterton-Glacier International Peace Park, the world's first



Figure 18: The Flathead River Valley is an integral part in the north-south migration corridor of many large animals. *Image from Slerra Club 2011*.

international peace park (UNESCO 2011). In 1995, the park was declared a United Nations Educational, Scientific and Cultural Organizations (UNESCO) World Heritage Site because of its exceptional physiographic setting and important biodiversity (UNESCO 2011). Despite the close proximity and shared ecological importance of these parks with the Flathead Valley, only a small portion of the Flathead basin is protected by parkland. The Akamina-Kishenena Provincial Park was established in 1995, but constitutes only 10 921 hectares of the 156 707 hectares of the Flathead basin (BC Parks 2011; Ministry of the Environment 2010).

Tributaries throughout the Flathead drainage basin feed into the Flathead River, which flows south into the state of Montana. At the border, the name changes to the North Fork of the Flathead, differentiating it from the Middle and South Forks, both of which originate south of the border (Gildart 1986). The North Fork forms the western border of Glacier National Park, and the main stem forms the southern border. Energy exploration, timber harvesting, road construction and other development in land adjacent to Glacier National Park led to the National Park Service declaring Glacier as the most threatened major park in the US in 1980 (Sax and Keiter 2007).

Population growth in Flathead county immediately west of the park in the late 1980s and 1990s increased pressure to develop the parkland. The public, however, valued its recreation, aesthetic and environmental value. This led to administrative changes which reflected the sentiment of the public and the subsequent legislation protecting the forests from logging and the land from oil and gas exploration (Sax and Keiter 2007). Public and politicians are now very protective of this area and continue to defend it from the threats associated with development.

Twenty-eight percent of the total volume of the Flathead River comes from the Canadian portion

of the river (Gildart 1986). Thus activities upriver directly impact water quality, fisheries, and biodiversity in the park. Any pollution from mine development within the drainage basin would adversely affect the water quality of the river downstream, damaging a national park and breaching the conditions of the Boundary Waters Treaty between Canada and the US (Gildart 1986).

Cross-border water issues are governed by the International Joint Commission, under the Boundary Waters Treaty. The Boundary Waters Treaty was signed in 1909 between Canada and the United States. Its purpose was to prevent conflict between the two countries, and it explicitly states that "waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other" (IJC 1909, article IV). It has now been in place for over one hundred years and is still crucial agreement regarding transboundary water bodies.

Although the International Joint Commission (IJC), which makes decisions on boundary waters issues, has boards within it to address the needs of individual watersheds, there is not one specifically designed for the Flathead basin. The issue of development of the Flathead River basin has, in fact, been examined by the IJC, however. In 1974, the Sage Creek Coal Company proposed a mine along Cabin Creek, a small tributary of the Flathead River (Jamison 2010). This mine would have used mountaintop removal to access the coal (Boundary Waters Treaty 2011). The application for the project proceeded relatively unnoticed in BC until then Representative Max Baucus (D-MT), raised concerns over the project (Jamison 2010). Awareness of the issue quickly rose and numerous environmental and citizen groups organized in opposition to the mine. Petitions opposing the mine were signed by tens of thousands of people from both sides of the border (Jamison 2010).

In 1985, the International Joint Committee (IJC) was called upon to help resolve the issue. In order for the IJC to get involved, both parties must request their help and agree to their recommendation (IJC 1909). The mine was already in the last stages of the approval process, but in 1988 the IJC recommended that the project be abandoned and a land use plan for the region be established by the two countries (Jamison 2010). The IJC found the risks to the Flathead River and the Trout fishery too great to allow the projects to continue as had been proposed (IJC 1985; Sax and Keiter 2007). They recommended that trans-boundary impacts be determined and that the level of risk be acceptable to both governments before allowing the mine proposals to go forward; however this recommendation was never followed (Sax and Keiter 2007). More recently, renewed interest in mineral resources of the Flathead, prompted by new demand by China and new technologies for developing coalbed methane, lead to renewed calls for protection of the valley (Ebner 2011). Although the proposal had already been shut down, resource exploration was occurring around the Sagecreek site and other new mines were being proposed in the Flathead Valley (Sax and Keiter 2007). The negative result for BC's industry in the 1985 IJC recommendation makes it unlikely that the province would agree to another review to assess more recent risks (Sax and Keiter 2007).

Mining Methods and the Moratorium in the Flathead

Open pit mining is a surface mining method where the material above a coal seam, called overburden, is removed (Carter et al 1992; Gardner et al 2007). The overburden is transported from the minesite and deposited on an embankment, in a valley or in a previously mined-out pit and reclamation is often deferred until nearly all the economically viable deposits are removed

(Carter et al 1992; Garner et al 2007). As coal seams are often horizontal across the landscape, mountaintop removal is a more practical method of mining (Cline et al 1992). Permits in the US are issued for valley fills, as well as for a mine itself, and it is these permits that are most used as a measure of government control over the industry. In BC, however, permits do not differentiate between mountaintop removal and open pit (EMPR 2011). There is a rising awareness of mountaintop removal mining and its severe detrimental impacts. Because of this awareness, and the negative connotations associated with it, the term mountaintop removal is not used in the Cline's Lodgepole Project Proposal (2005), nor do they use the term "valley fill".

This form of mining permanently affects the landscape and water regime of a region, as well as the plants and animals within that region (Gardner et al 2007; Harman et al 2005). Even after reclamation, the topography is never returned to its original state. Hilly landscapes are leveled off as the tops are removed and the valleys are filled. While this does provide opportunities for alternative land use, the intense modification of the landscape is ecologically detrimental (Gardner et al 2007).

In February 2010, the BC government announced a moratorium on mining, oil and gas, and coalbed methane development in the Flathead Valley. The legislation limits commercial activity, suspending current mining and exploration activities and limiting logging (Bickis 2010). The moratorium on future mining projects applies only to the Flathead Valley, not the Elk Valley. Nonetheless, the close proximity of the Sparwood to the Flathead Valley means that residents could live in Sparwood and be employed in the Flathead, if there were development in the area.

Support for conservation came from a variety of sources. UNESCO urged the government for conservation after sending a group of scientists to the area, noting "with concern

the potential threat to the Outstanding Universal Value of the property from potential mining and energy development within the Flathead Valley and, in particular, to the continued quantity and quality of water supplies and ecosystem connectivity between the property and important habitats outside its boundaries" as well as the "high levels of public concern regarding this potential threat" (UNESCO 2009a). The state of Montana expressed similar concerns, with support from both the government and local residents. Senator Max Baucus was vocal in his opposition to mining and development within the valley, on both sides of the border (Baucus 2010). At information meetings held in Fernie during the Lodgepole proposal process, Montana residents constituted the second largest contingent of participants after Fernie itself, all of whom were opposed to resource development within the valley (Lodgepole 2005). Numerous organizations also got involved in the fight for conservation, such as the Canadian Parks and Wilderness Society (CPAWS), Wildsight, and the Sierra Club of BC. They campaigned for the moratorium and continue to fight for the permanent protection that park status would provide for the Flathead Valley in BC.

The mining industry was surprised by the ban. The president and CEO of the Association for Mineral Exploration British Columbia (AME BC), Gavin Dirom, argues that there was a lack of consultation with the public or industry and "very little science applied in the decision-making process" (Bickis 2010). The BC government was still issuing permits to drill and explore until the ban was enacted (Bickis 2010). Industry representatives are opposed to the ban, as producers had been anticipating an increase in demand after a slump in 2009 prices (CMJ 2010). They feel BC should allow its

environmental processes and a land use planning process, called the Commission on Resources and the Environment (CORE), to work (CMJ 2010; McKay 2011).

The East Kootenay Land Use Plan, a publication that derives from the CORE process, categorizes the Flathead River valley as a Coal Enhanced Resource Development Zone (ERDZ) (ILMB 1997). For this sub-category, the Elk Valley and Flathead Valley are grouped together and the classification is based on the fact that they are areas of known coal reserves, contain existing coal mining facilities and infrastructure and have the potential to expand (ILMB 1997). The designation would allow for coal development within the zone, but recognizes that ecosystems within the zone would be compromised (ILMB 1997). The development of resource extraction operations in the Flathead Valley would require infrastructure, roads and pipelines which would severely disrupt the important wildlife habitat (Sax and Keiter 2007). Animal migration routes would be severed and the water and air quality of the valley would be compromised (Sax and Keiter 2007). The moratorium contradicts this designation and the mining industry feels development should still be allowed in the Flathead Valley under this classification. Mining industry representatives feel that decisions such as these will detract from new mining investment in the province in the future (McKay 2011).

The Lodgepole Project

Cline Mining Corp. had already spent millions of dollars on feasibility studies at the Lodgepole site and studies to define the resource at the Sagecreek location when the mining moratorium was enacted (Bickis 2010). The Lodgepole Mine proposal was in the pre-application phase and it was anticipated that the process would be completed by November 2006

(Environmental Assessment Office 2011; Cline Mining 2005). The area that Cline was hoping to develop lies within the Flathead drainage basin and is currently used primarily for recreational purposes, such as hunting, hiking, snowmobiling or ATVing and cross-country skiing (Cline 2005). The mine site and processing plant would be accessed through improved existing Forest Service Roads as well as a new road constructed from the plant site to the mine area (Cline 2005). Ditches and sediment control ponds were proposed to control drainage through the disturbed areas and keep water away from the site (Cline 2005). Cline (2005) claimed that their process plant would not discharge water; however it would depend on local groundwater to supply make up water to the plant.

Cline was applying for a small mines permit, which does not require a full environmental assessment under the Environmental Assessment Act (Cline 2005). In order to be considered for a "small mine" permit, production would need to be less than 250 000 tonnes per year (Cline 2005). This rate, however, would only be for the initial year of production (Cline 2005). The following year, production would increase to 1 million tonnes per year, a rate which requires a more stringent environmental assessment. The plans indicated that the mine would potentially increase production to 2 million tonnes annually (Cline 2005).

In the Project Description Document (2005), Cline indicates that at a production rate of 250 000 tonnes per year, the mine would provide 66 direct jobs. At 1 million tonnes per year, the mine would create 145 direct jobs and 252 jobs at two million tonnes per year (Cline 2005). This is relatively few people compared to the current mine operations in the Elk Valley, which employ approximately 2,615 people. Cline intended to use open pit surface mining for the Lodgepole Porject (Cline 2005). This is the method used for the five mines surrounding Sparwood.

Environmental groups, such as the Sierra Club (2011), claim that Cline, in fact, intended to use mountain top removal. Although it is sometimes differentiated in literature, BC's Ministry of Energy and Mines does not distinguish between these two methods, allowing Cline Inc. to avoid using the term "mountaintop removal", as it has much more negative connotations (EMPR 2011).

As part of the application process, Cline Mining consulted with local communities through open houses and information sessions, and they provided a Public Disclosure Document and Project Description Document (Cline 2005). On October 20, 2005, at an open house in Fernie, Cline Mining administered a survey to obtain public comments on the proposed mine. Of the 54 completed surveys, 79% were from Fernie residents, 9% from Sparwood, 2% from Cranbrook and 11% from Montana (Cline 2005). Approximately 60% of the participants felt that the project would benefit the community and 28% believed there would be no benefit (Cline 2005). The majority of people who suspected there would be no benefit to the community were primarily concerned with the environmental impacts and that few benefits would actually manifest within the community (Cline 2005).

Overall, 32% of respondents, drawn from each of the communities present at the meeting, did not support the project citing environmental impacts, water quality degradation, distrust of the application process, a need for more strict environmental standards and negative impacts on recreational tourism. Of the 52% that did support the project, no one was from the state of Montana. Eleven percent of respondents were undecided (Cline 2005). The lack of support from Montana is a key component in the issue, as they have been an integral part in pushing for the moratorium.

Chapter 4: Economic Alternatives

No matter which model of town and resource development is used or which adaptive strategy is adopted, a dependency on staples is always bound for failure because as the supply diminishes, the production costs rise (Hayter and Barnes 2001). Towns must develop an industry other than mining if they are to survive beyond the lifespan of their resource. The shift from old to new economic structures can sometimes be a source of tension within a community (Roney et al 2008). It divides the population between those who want to return to the old ways and those who accept the new changes to employment patterns, income sources and overall activity (Roney et al 2008). The lag time between the recognition of a forthcoming change and the acceptance of new economic conditions is what creates the "lost generation" to which Behrisch (1993) was referring (Roney et al 2008).

Roney et al (2008) believe this may be especially true when the community is transitioning into a tourism-based economy because of the perception that jobs are low paying, low quality and part-time or seasonal. Many towns turn to tourism after resource development, attempting to capitalize on their often remote and idyllic settings. However negative perceptions of tourism by the public hinder the development of it as an alternative industry. At the same time, a community may not recognize or have capacity to develop other alternatives, given their distance from markets, challenging infrastructure, and other barriers to growth. Thus, tourism in most cases becomes the likely 'fall-back' industry, the one communities turn to when their natural resource industries wane.

There are both costs and benefits to transitioning to a tourism-based economy. It creates jobs, both directly and indirectly, generates income and often contributes to the construction and maintenance of community infrastructure (Roney et al 2008). This transition can, however, have socio-cultural and environmental costs. The large influx of people and the tendency of people to spend money on vacation creates inflation within the community, raising the cost of living for locals (Roney et al 2008). Tourists also can create overcrowding of public spaces and recreational facilities, increase traffic congestion and contribute to both noise and environmental pollution (Roney et al 2008). An important lesson learned by many communities transitioning out of a staples-dependent economy is that tourism, or whatever other economic alternative they pursue, is only one part of a diversified economy (Roney et al 2008). After experiencing economic restructuring, many communities recognize the dangers of depending almost solely on one industry to support their town.

Other mining communities have made the successful transition into tourism, and have integrated it as part of a more diversified economy. The communities of Silver Valley, Idaho and Tumbler Ridge, BC are such places. Both communities were established in areas of rich resources and their economies were initially dominated by mining. When the mines that supported each of the communities suddenly closed, they were faced with initiating economic alternatives to prevent their towns from dying out. Both communities were able to develop their tourism industries to provide a further, more sustainable, source of income.

Case Study: Silver Valley, Idaho

For some communities, the transition out of a staples-dependent economy takes a considerable amount of time. The community of the Silver Valley in Idaho is one such place (Figure 19). The region was established around a mining and timber economy and was once the world's largest producer of silver. Gold, zinc and lead had also been mined in the area since deposits were discovered in 1883 (Roney et al 2008). Their mining era came to an end, however, when the Bunker Hill mine closed in 1981. This shut down caused the loss of more than 2000 jobs, a depressed economy with huge unemployment and outmigration (Johansen 1998).



Figure 19: Silver Valley is located in the panhandle of Idaho, USA. *Image from United Mining Group 2011.*

Money from the environmental protection agency (EPA) to clean up contamination provided a substantially smaller, but steady, source of income for the community (Johansen 1998; Roney et al 2008). This allowed them to develop ski areas and biking and hiking trails while concurrently cleaning up contamination. They held meetings to educate the public on the opportunities that tourism would bring to their community and many people found that the increase in tourism allowed for more diverse economic opportunities (Roney et al 2008). The retail and service industries increased and offered more variety, as a higher number of people in the area allowed for more indirect benefits of the tourism sector, including stable land value (Johansen 1998). Although the general economy is

smaller than during the region's mining era, the diversity it now possesses will make it more likely to be resilient to economic shocks in the future (Roney et al 2008).

The transition to tourism in Silver Valley created a more diversified economy for the community, but it has taken considerable time for the new economic structure to gain acceptance. After 20 years of development, residents are just starting to realize the long-term nature of the industry (Roney et al 2008). Almost half of the residents feel that the costs of living in a tourist area, such as increased housing costs, overcrowding public spaces, an pollution, outweigh the benefits and that locals suffer from living in a tourist area (Roney et al 2008). Positive opinions are generally increasing, but in a calculated way as residents realize tourism will never provide the economic income that mining and forestry did (Roney et al 2008). They value tourism for the diversification it has brought to their community and do not accept it as the town's total economic future.

Case Study: Tumbler Ridge, British Columbia

Tumbler Ridge serves as an example of a resource town successfully making the transition to the 'alternative futures' stage. The high price and demand of coal in the 1970s promoted speculative exploration and led to the development of two mines in northeastern BC (Halseth and Sullivan 2002). One of these was the Quintette Mine, operated by the Denison Corporation, with the other being the Bullmoose Mine, operated by Teck Corporation (Halseth and Sullivan 2002; Jackson et al 2006).

The town of Tumbler Ridge was incorporated in 1981 as mine production began (Figure 20). Although it was not an 'instant town', it did benefit from the use of the latest community planning principles and learned from the *Act*'s shortcomings (Jackson et al 2006). Tumbler Ridge was intentionally designed to avoid the sporadic growth that faces many resource towns and the problems associated with such growth, such as a lack of

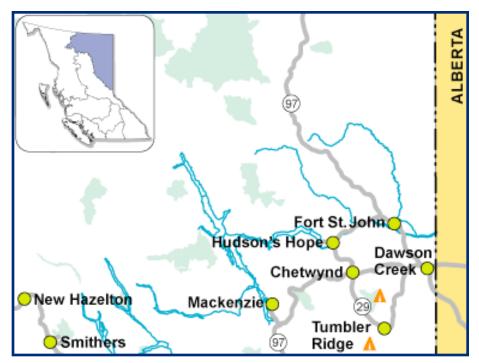


Figure 20: Tumbler Ridge, one of BC's instant towns, is located in the Peace District in northeast BC. *Image from CampingBC 2008.*

community identity among residents (Halseth and Sullivan 2002; Jackson et al 2006). The distinct residential and commercial zones were designed to facilitate interaction between community members (Halseth and Sullivan 2002; Jackson et al 2006). The goal was to quickly move the Tumbler Ridge through Lucas' developmental stages to reach the point of maturity, so they could create a stable, attractive and diverse community (Halseth and Sullivan 2002). This would allow it to pursue alternative futures and decrease the time the town was reliant on primary resource extraction.

Although much social and physical planning went into the construction of Tumbler Ridge, it was still essentially a resource town and subject to global prices. This is compounded by the fact that they were producing exclusively for Japanese steel mills who demanded price reduction in soft steel markets (Halseth and Sullivan 2002). In 1990 the Supreme Court ruled that the Quintette Mine had to reduce its coal prices and reimburse the Japanese steel industry \$4.6 million. This almost bankrupted the mine, but Teck assumed control of the mine, a move that was association with a high number of layoffs (Halseth and Sullivan 2002). It was thought that population of the town could potentially exceed 10 000 people, but the population peaked in 1993 at 4277 people and steadily decreased during the economic decline of the 1990s (Jackson et al2006). It had been projected that the Quintette Mine would be in production until 2003; however falling coal prices, decreased sales volume, increased competition, a strong Canadian dollar and a general surplus of coal worldwide were creating financial problems for the mine. In 2000 the Quintette Mine unexpectedly closed and it was announced that the Bullmoose Mine

would only be in operation for three more years (Halseth and Sullivan 2002; Jackson et al 2006).

These closures triggered massive outmigration. Between 1996 and 2001, the population of Tumbler Ridge decreased by 51% (Jackson et al 2006). It also expedited the transition from being a resource based community. The Community Revitalization Task Force was established and was crucial in identifying and developing economic opportunities for the town (Halseth and Sullivan 2002; Jackson et al 2006). They, along with the local government, developed a transition plan, hired experts to help diversify the economy and dealt with housing issues, which actually led to an increase in the number of owned houses, despite the uncertain economic future. The local government recognized the need to continue to support local services and organizations if they were to achieve their goal of a sustainable community, so they decided they would slowly withdraw support instead of simply cutting many groups off.

The town gained control of a community forest, which allows them to exercise stewardship over a public asset (Jackson et al 2006). The 10 year agreements showed commitment to a sustainable community and allowed for economic diversification. Logs were processed at local mills and manufacturers and the surplus revenue went back into the community (Jackson et al 2006). The town also began to promote itself as a wilderness recreation destination, which was made easier by local paleontological finds (Jackson et al 2006). These initiatives were sufficient in helping Tumbler Ridge sustain through the initial mining bust and prepare it for an upcoming boom period.

From 2003 onward, coal prices increase dramatically (Ministry of Energy and Mines 2011). This increase allowed for mining to once again flourish in the area. The Bullmoose Mine closed in 2003, as was announced, but operations by two companies new to the area soon commenced. Peace River Coal opened the Trend Mine, 25 km south of Tumbler Ridge in 2005, with plans to open others in the region (Peace River Coal 2009). Wester Coal Corp. began production at the Wolverine Site. This site houses the Perry Creek mine, as well as coal processing and rail load-out facilities (Walter Energy Inc. 2011). The increase has also led Teck to consider re-opening the Quintette site, and feasibility studies are currently being carried out (Teck 2011). Despite the allure of mining being reintroduced to the local economy, the mayor of Tumbler Ridge declared that it would not suppress the economic diversification efforts of the city, saying "it would be short-sighted and shameful to place the future of this town back into the hands of a single industry again" (Jackson et al 2006).

Both of these communities serve as examples as to how communities can develop alternative industries and achieve economic diversification, which allow them to survive beyond the life of the resource industry on which they were founded.

Chapter 5: Data Collection

Methodology

This study used focus groups to gain insight into the perceptions of community futures among young adults in Sparwood. Given the time restraints of the research project and the desire for insight into first-hand observations and personal opinions, focus groups were the most viable option. This qualitative technique allows investigator to guide discussions and address the areas of interest, while allowing participants the freedom to discuss these topics as in depth as they are willing. The group dynamic allowed for participants to interact with each other, both in support and in disagreement, with each other.

Sample Demographic

The study demographic included both males and females between 18 and 25 years of age who live in Sparwood. Sampling from this specific population allowed the project to be kept to a manageable and appropriate scale. This particular demographic was selected because they have recently completed secondary school and have, therefore, had to consider their future career and economic options. Many of those who have decided to leave the community to pursue options elsewhere have already done so, leaving behind a group that potentially sees some economic options available within the community. Furthermore, the investigator belongs to the demographic as well, and it was anticipated that the investigator's positionality would enhance the level of communication with the participants. This project aimed to determine what those options are perceived to be, particularly in light of the recent ban on mining in the nearby Flathead Valley.

The investigator hoped for 12 to 16 participants, with a wide range of education levels, occupations, and income levels. The total number of participants came to 13, the majority of which had at least some university, college or trade school education. The study was limited to Sparwood, rather than including Fernie, as coal mining is a more substantial part of the Sparwood's history and remains the driving force in the local economy. Many who live in the community in all likelihood would have experienced direct or indirect economic benefits from the proposed mine. While the nearby towns of Fernie and Elkford could have also benefitted, Fernie is more economically diverse and will not be as adversely affected by the moratorium on mining in the Flathead Valley or shifts within the mining sector more generally. If anything, Fernie will benefit in part from the proposed moratorium. As the town's economy is now squarly focused on tourism, more protected lands in adjacent areas will open up additional opportunities. The town of Elkford was not selected, as it has a very limited population base from which a sample could be drawn.

Contact

Initial contact was made with community groups using e-mail, fax and phone calls. Sparwood Fellowship Baptist Church, Sparwood Christian Centre, St. Michael's Parish, Sparwood Secondary School and organizers of the town's annual Coal Miner Days festival were contacted through e-mail or fax and asked to help establish a line of communication between the investigators and potential participants who fall within the study's desired demographic. All written communications were followed up with a phone call. The local contacts were given a brief outline of the study and asked to speak with their peer networks to spread the word and

garner interest for the focus group discussions. Once the investigator arrived in town, a radio interview was also conducted in an attempt to gain further participation. The majority of contacts were unsuccessful in yielding participants, as persons contacted did not know anyone who fit the demographic. The only contact that was successful was through the Sparwood Fellowship Baptist Church. Someone there provided the contact information for the manager of the Sparwood Chamber of Commerce who fit into the demographic himself and was able to recruit additional participants. All participants were invited by him personally. Ultimately, four meetings were organized with a total of thirteen participants, five males and eight females. One of the meeting was subsequently cancelled because of a lack of participants, as a result of poor weather conditions.

Focus Group Meetings

The investigator travelled to the community of Sparwood from February 20 to February 24, 2011, to conduct the focus groups. These dates were chosen because they suited the investigator's schedule and fit well within the semester time restraints of the research project.

The meetings were held at 7 pm Sunday through Wednesday evening at the Chamber of Commerce building. At each of the meetings, muffins, coffee and tea from a local coffee shop were provided. Participants were informed in advance that each focus group would take upwards of an hour.

Procedure

Upon arriving at the meeting, participants were given a short time to socialize before discussions began. At each of the meetings, after introducing herself, the investigator gave a brief description the purpose and methodology of the project. They were informed that the meeting would be recorded, and the consent forms were reviewed and signed. The discussion questions were then asked, with participants given as much time as needed to respond to each question and any ensuing related dialogue.

Participation

The duration of the meetings varied according to the number of participants and the level to which they engaged in the conversation (Table 4). The first meeting had the highest number of participants (6) and the most active participants. It lasted longer than anticipated, ending at the 1 hour, 45 minute mark. At the second meeting, participants gave brief answers and engaged in minimal extraneous conversation. This meeting also had the fewest number of participants (3) and was the shorted of the three meeting, lasting only 25 minutes. The third meeting was 50 minutes long and had four participants. Some participants were very active in this discussion, while others engaged minimally.

Focus Group Questions

The questions began with participants introducing themselves and saying how long they have lived in Sparwood. This was done for the investigator's information and to create a sense of familiarity between participants. According to Kruger (1998), asking a question that shows what

Table 4: Meeting lengths varied from 25 minutes to 1 hour 45 min depending on the level of involvement of participants.

Meeting Date	Duration	Number of Participants
Sunday February 20, 2011	1h 45 min	3 males 3 females
Monday February 21, 2011	25 min	1 male 2 females
Tuesday February 22, 2011	50 min	1 male 3 females
Wednesday February 23, 2011	cancelled due to lack of participants	

participants have in common makes them feel like they are part of a group, whereas later in the discussion their views may differ from others and they may feel excluded. After the first meeting, a question of whether or not the participants had any college education was added to help determine how representative the sample was of the general population within that age range.

The next group of questions concerned whether the participants envisioned themselves living in Sparwood long-term and whether they believe it is a good place to live. These questions were asked to get the participants to begin considering their potential future in the town and what it had to offer. It was anticipated that most participants would remain in town to work for the mine; however the majority of participants were attending university so that they could pursue economic options elsewhere.

The next few questions dealt with the mining industry. To gain insight into how the point of view on the industry many be influenced (i.e. through their employment at a mine), participants were asked how the mine directly affected their life, through current or past employment or employment of an immediate family member. When asked whether the mining

companies did a good job of protecting and restoring the environment, there was a wide array of opinions.

Participants were asked how much they knew about the mining ban in the Flathead Valley and the investigator was surprised at how few people knew about it. From an outsider's view, it was previously thought that since such legislation would directly prohibit the growth of the industry, many people would be aware of it, and would have formulated opinions either in favour of or in opposition to it. After being given a brief summary of the ban, participants were then asked if they felt that this ban would affect their community directly. This was done to gain an understanding of how participants view potential expansion of the industry and to direct the conversation back to Sparwood's economic future specifically. The questions that followed were aimed at learning participants' ideas for other industries that could be developed in Sparwood to sustain it once the mines begin to close.

To conclude the discussion, participants were asked if they felt the discussion was relevant to issues that their town and age group faced. This was done to determine whether the issues raised were something that young adults in the community considered when deciding on their own personal economic futures. Most felt that it was relevant, however the degree or enthusiasm with which they agreed seemed to vary.

Limitation of Study

This study was subject to many limitations. As a non-resident of Sparwood, the investigator had no prior social contacts within the community. Recruitment of participants was done through a social networking website, a radio interview and direct contact with local groups

and associations. The initial attempts of contacting church young adult ministries were unsuccessful because the churches contacted currently do not have such programs in place. Contact was also made with the local high school in hopes that they would have some contact with recent graduates; however this also yielded no response. A contact made at the Sparwood Chamber of Commerce was successful in that the manager of the Chamber became the point person for recruiting participants. This was the only successful contact and, despite encouraging participants to invite others, all participants were invited to participate through this single individual, limiting the efficacy of the snowball effect. Most of these individuals, including the Chamber contact himself, had at least some university education and had limited contact with people who currently work directly for the mine in entry level positions. The clustering (four days in a row) and timing of the meetings, at 7 pm, also limited participation from mine employees, as many work from 8am to 8pm, and work 4-on, 4-off shift.

The limitations of participant recruitment were both a result of and were compounded by the limited budget and time allotted for data collection to take place. Had time and budget permitted, a longer period of time could have been spent in the community, which would allow for more social contacts to have been made. This would have also allowed for more options for times in which these participants could be involved in the discussions and would have minimized the effect of the seasonality of the study. On the fourth night of focus group meetings, severe snowfall limited the number of participants that were expected to attend. The timing of the study also prevented the investigator from being able to make first-hand observations at the mine site, as access is only granted to the public during July and August.

However, the timeline for research collection was advantageous in one respect. The week during which data collection took place was reading break for many universities. This allowed some participants to be in town who may have normally been elsewhere to attend school. At the same time, the availability of college students relative to mine workers is reflected in the selection bias of the sample.

Chapter 6: Findings

Questions

For the most part, people were very active in discussions, giving their opinion or at least agreeing or disagreeing with what was said by others (Table 5). For some questions, the responses were very similar amongst all participants and for other questions, responses varied greatly. The general answers are provided below along with statements that summarize the feelings of the group or differ greatly from the other responses.

Table 5: The number of respondents for each question helps indicate how familiar or comfortable participants were with addressing the topic of discussion and show how involved participants were in the discussion.

Question	Number of Respondents February 20	Number of Respondents February 21	Number of Respondents February 22
"Could you say your name and how long you've lived in Sparwood?"	6	3	4
"Do you see yourself living in Sparwood long-term?"	6	3	4
"Do you think Sparwood is a good place to live?"	6	3	4
"Have you attended university? If so, what is your degree in?"	not asked at first meeting	3	4
"How does mining affect your lives personally?"	not asked at first meeting	3	4
"Do you feel that the mining companies do a good job of protecting and restoring the environment?"	5	3	3

Question	Number of Respondents February 20	Number of Respondents February 21	Number of Respondents February 22
"Do you think environmental			
protection and mining can occur	5	3	3
simultaneously? Or are they totally	3	3	3
opposite ideas?"			
"Do you think the environmental			
degradation that mining causes is	4	3	4
worth the jobs that it provides and	т	3	7
sustaining the community?"			
"Do you guys know anything about the			
moratorium on mining in the Flathead	2	2	1
Valley in the Flathead Drainage	_	_	
Basin?"			
Follow up: "What do you know about it?"	2	1	1
"Do you think that ban, and the limits			
that places on growth of the industry,	4	1	2
will affect this town?"			
"Other than mining, what industries do			
you think could be developed in	5	2	4
Sparwood?"			
"After the mine life is over, what will			
happen to Sparwood? What will the	5	2	4
next generation do?"			
"Do you think that these discussions			
and these questions are relevant to	5	2	4
people in your age group and in this town?"			

Could you say your name and how long you've lived in Sparwood?

The amount of time that participants had lived in Sparwood ranged from a few days to over 20 years. Most had lived in Sparwood since childhood, with the median length of time being 20 years. One participant had moved to town only a few days prior to settle down with her boyfriend. Other than her, the shortest length of time any of the participants had lived in town was 4 years.

Table 6: A summary of how long participants have lived in Sparwood and key information is listed. Some names have been changed and information about participants has been generalized to conceal the identity of those who did not want to be identified.

Name	Length of Residence in Sparwood	Key Details
Ashley	A few days	-moved to Sparwood a few days ago to settle down with her boyfriend -did not live in Sparwood prior to attending university
Cailey	20 years	-has attended post-secondary schooling in Alberta
Chelsea	4 years	-has not attended university, but plans to leave within a few months to do so
Jaclyn	23 years	-attended post-secondary schooling in Alberta -lives in Fernie, but works in Sparwood
Jeff	20 years	-moved to Sparwood with his family -attends post-secondary schooling in Alberta

Name	Length of Residence in Sparwood	Key Details
Jordan	20 years	-moved to Sparwood with his family -attended post-secondary training in Alberta
Kaethel	10 years	-moved to Sparwood from Tumbler Ridge after the mine there closed -attends post-secondary schooling in Alberta
Kelsie	20 years	-attended post-secondary school in Langley, BC, where she trained in equipment parts -works as a contractor to the mine
Nadia	21 years	-attends post-secondary schooling in Alberta
Robert	18 years	-attends post-secondary schooling in Alberta
Sarah	10 years	-moved to Sparwood from Tumbler Ridge after the mine there closed -attends post-secondary schooling in Alberta
Scott	6 years	-has not attended university, but plans to leave for Alberta within a few months to do so
Tyler	23 years	-recently returned to Sparwood to settle down with his girlfriend -got his engineering degree at university in Alberta -works at the mine

Do you see yourself living in Sparwood long-term?

Of the 13 participants, 7 said they did not see themselves living in Sparwood long-term. One participant said "Maybe, but probably not", while another said that "they hoped not". Jeff replied that they would maybe live *near* Sparwood, but not necessarily *in* Sparwood. Tyler and Ashley, a young couple, had just moved to Sparwood, where Tyler grew up, a few days prior. They plan on remaining in Sparwood long-term and referred to themselves as "lifers". Kelsie, who had lived in Sparwood for 20 years, said that she didn't have a choice. It is inferred that this is due to her job, which contracts out to the mine.

Do you think Sparwood is a good place to live?

All 13 participants agree that Sparwood is a good place to live, but the majority emphasized that it is more oriented toward families with young children. They said it was a great place for young families, but there is little for teenagers and young adults to do in town. In the first meeting, participants also mentioned that, in addition to being a great place to raise kids, Sparwood is in a good location for people who enjoy outdoor activities. They listed hunting, fishing, ATV'ing and mountain biking as examples. Some activities of city life, however, such as going to the movies or the mall, are not options in Sparwood and selection in Fernie, 20 minutes away, is limited.

In the first meeting, discussions went beyond just activities and things to do, and involved discussion of the social culture of the town. As someone who moved to the town 10 years ago, Sarah noticed that newcomers or people who are individualistic have difficulty fitting into the small community. In a city, however, there are enough different groups of people that it is easier

for individuals to find a group in which they fit. Participants did mention a benefit of living in Sparwood being its relative affordability compared to Calgary or Fernie. Some of the participants felt that the higher cost of living in the city was worth the entertainment options available there, while others raised the point that it would take just as long to drive somewhere within a city as it would to drive from Sparwood to Fernie.

The issue of job availability and opportunity was also raised in response to this question. Participants said that for those with post-secondary education unrelated to mining, or for those who do not desire to work at the mine, job options are incredibly limited.

Have you attended university? If so, what is your degree in?

This question was added after the first meeting, because of the high number of participants with post-secondary education in the initial discussion. The investigator felt that it might be relevant when analyzing results.

The majority of participants had either attended or were attending a university, college or trades school. Eleven of the 13 participants had degrees, or were attaining degree, and the majority of programs in which participants were enrolled were unrelated to mining. The two participants that had not yet attended university had plans to do within the next few months. Kelsie, who felt she did not have a choice but to remain in the community, returned to Sparwood after after doing her apprenticeships as a parts person and now works as a contractor for the mine. This high rate of post-secondary education is not representative of this age group for this town, but is the result of how sampling was carried out.

How does mining affect your lives personally?

This question was also added after the first session. Participants feelings on this issue became apparent in the first meeting through the lengthy discussions; however the brevity of answers in the subsequent discussions prompted the investigator to ask this question outright to ensure that each individual's relationship to the mining industry became known.

The majority of participants had some connection to Teck Resources. At least four of the participants had worked for the mine at some point as summer students. One or both parents of eight participants were employed by Teck, either directly or as contractors to the mines. Two of the participants were employed by Teck, one as a contractor and one directly for the company.

Participants who were not directly employed by the mine did not feel that the industry affected them. Scott, for example, works at a local fast food restaurant and his parents are not employed by the mine. He did not feel that mining affected his life personally.

Do you feel that the mining companies do a good job of protecting and restoring the environment?

It was expected that company rhetoric would prevail on how ecologically sustainable extraction practices are here, particularly in comparison to other energy sources, such as the tar sands, and how remediation will restore the landscape. This is, in fact, the view that many people held; However some people did acknowledged that a lot of their information came from Teck, the mine operator, itself.

This question received very mixed responses from participants. Many were unsure of the measures being taken by the mine to protect the environment, but stated that although Teck says

that they are taking precautions to protect the environment, there really is no way for the public to know for sure. Kaethel, who has conducted mine tours in the past, said that they are doing some things to protect the environment; however he? acknowledged that the company told tour guides what to say. Participants claim that the company tries to keep information, such as pollution of the Elk River, from becoming widespread public knowledge and almost everyone recognized that despite reclamation activities, the environment can never be fully restored to its previous state. Numerous people mentioned a layer of coal dust that blankets the city after large explosions. Those who were currently employed by the mine felt more positively about the mine's environmental impact and impact mitigation than those who did not.

Tyler, who recently moved back to Sparwood to work in the mine, felt that scale needed to be a big consideration when thinking about the environmental implications of the mining industry. Relative to the pollution that cities or other resource extraction operations create, he felt the mining operations around Sparwood were having a minimal impact on the environment. He used the presence of wildlife and the planting of trees in reclaimed areas as evidence that mining is not hurting the environment. When someone mentioned damage the mines caused, Tyler stated,

"Do you know how many animals go over there all the time though? Like, it's not hurting the environment. How many fish as just down the stream?"

Other participants felt strongly that although they are taking measure to mitigate environmental impact, the mining operations are not doing enough to protect the environment. Jordan pointed out that despite the reclamation plans, once a mountain has been destroyed, it cannot be rebuilt. He believed the mines should slow down production to make the operations

more sustainable and do more to mitigate their environmental impact. In response to one of Tyler's comments, he said,

"I'm not disagreeing with you, I'm just saying they could do more.... Slow down production."

Do you think environmental protection and mining can occur simultaneously? Or are they totally opposite ideas?

Responses were mixed as to whether or not people felt mining and environmental protection could occur simultaneously. Most felt that there were ways to carry out mining which would minimize the negative environmental impacts, but that there would still be serious implications. Participants believe that Teck is doing a good job in doing what they can to protect the environment, but that the act of mining itself is detrimental to the environment. The destruction of mountains was the most cited example of environmental degradation and people recognized that no amount of reclamation would be able to completely restore that landscape. One of the participants who felt Teck was doing a good job to minimize damage was the one who responded for the previous question that the mines are not doing enough to protect the environment, and it was suggested by someone that there are *always* going to be things that the company can improve.

Kelsie, who is involved in the industry, feels that they can occur simultaneously because otherwise the mine would face large fines. The topic of scale also came up again, comparing the Elk Valley operations to the oil sands. Participants felt that environmental degradation in the Elk Valley is significantly less than in the Alberta oil sands.

Do you think the environmental degradation that mining causes is worth the jobs that it provides and sustaining the community?

All of the participants that answered felt that the jobs the mines provided were worth the environmental degradation that it causes. Robert displayed a bit of uncertainty because of the lack of knowledge about the long-term environmental effects; however he did believe that generally the number of people the industry employed was worth it. Another participant said that although they supported sustainable development and environmental protection, they would rather not have high rates of unemployment.

Participants felt that mining keeps the town going and that there is no secondary option to sustain the town's economy. Despite Fernie's tourism industry, one person said that they felt that there is nowhere else to work in the entire valley other than in the mines. They said that the majority of people that live in the area work in the mines and without these operations the towns would not be there.

Some discussion occurred as to what other economic options could be developed. One participant felt that Teck could be doing more to provide job opportunities in the valley, such as moving their head offices to Sparwood. However, he was frustrated with the town council over the difficulty of starting a new business in town. He feels the town council moves too slowly, is not supportive of new businesses and wants to maintain the status quo. Another participant cautioned that although the town does need other economic options, development would need to be closely monitored to ensure that it did not get out of control and disrupt the wildlife and environment that attracts many people to live in Sparwood in the first place.

Do you guys know anything about the moratorium on mining in the Flathead Valley in the Flathead Drainage Basin?

Only 3 of the 13 participants had heard of the ban on mining in the Flathead Valley. As this legislation affects the area and the dominant industry significantly, the limited number of participants who were aware of it surprised the investigator.

What do you know about it?

Among the three participants that had heard of the moratorium, there were very different levels of knowledge about it. Kelsie had simply heard about it and knew that there was a big fight over the issue.

Another participant had taken part in an awareness campaign organized by the International League of Conservation Photographers (ILCP). She was more informed on the issue and knew that the area was not permanently protected. She said there were a lot of loopholes in the wording of the moratorium and pointed out that their MLA and MP were both opposed to the moratorium.

Jordan had some information about the ban, but had a very politicized view of the issue. He referred to the Yellowstone to Yukon initiative and pointed out that if it became a reality, not only would mining be disallowed, but hunting and other recreational activities as well. He knew that there were proposals for resource development, but said that an American company paid \$9.2 million for these resource companies not to drill. He viewed this as American companies dictating Canadian land use and, although he did no support resource development in the area, he did not feel it was right that Canadians lose power over their own land.

Do you think that ban, and the limits that places on growth of the industry, will affect this town?

The investigator believed that participants would feel the ban would negatively affect the expansion of the industry. Most participants, however, did not feel that the ban would negatively affect the town. Kelsie pointed to the fact that Fording River is in the middle of expanding and feels the town is self-sufficient enough that more mines are unnecessary. Others agreed that the amount of coal they are currently producing is sufficient to continue supporting the entire valley. They felt that if those mines were to shut down, Sparwood would be a ghost town. Yet, they did not feel that failing to start a new coal development would affect the town. Some participants acknowledged the changes that would be necessary if mining were to expand in the region. They discussed the expansion of housing and infrastructure that would be needed and pointed out that whether the land is mined or turned into a park, the loss of recreational use of the land is the same. Locals would lose hunting ground and areas to ride recreational vehicles in either case.

Other than mining, what industries do you think could be developed in Sparwood?

There were a few ideas of industries that could be developed in Sparwood, but participants did not seem incredibly optimistic about seeing them actually develop. It had been predicted that many of the ideas had to do with developing the tourism industry, as tourism has proven successful for helping Fernie transition out of being a mining town, or to do with mining. The general consensus was, in fact, that new industries had to be somewhat related to the mine or have a contract with the mine to be successful. Some felt that nothing else could be developed because there because the town evolved around mining and there is very little else in the area. One participant suggested various forms of renewable power, such as water-based power or

wind, but pointed out that those have high start-up costs that could "be scary for a community" such as Sparwood. Another suggestion was to develop a technology park, where various operations related to computers could be centralized. It was brought up, however, that they would need to get a contract with the mine to be successful. The issue of town council arose again, in that the city does not put sufficient monetary support into certain things, such as a ski hill that once operated in the area. There are places within the city that companies want to develop, however the city will not pay to put in the sewer and water, hindering the development.

Another issue that came up as being an obstacle to the economic development of the town is the four days on/four days off shift work of the mines. Participants feel that because of this shift work, mine workers do not necessarily have to live in town and, therefore, are not spending their money or investing in the town. In addition to shift work, participants felt that the location of the town was not beneficial to its development, particularly with the harmonized sales tax (HST), which had been introduced to the province the year prior. Being close to the Canada/US border, as well as the BC/Alberta border made it far less expensive to go elsewhere for shopping, thus money was not being spent in Sparwood.

After the mine life is over, what will happen to Sparwood? What will the next generation do?

Many of the participants felt that Sparwood could potentially turn into a ghost town if no other industries are developed. They said that if the Elk Valley mines shut down, people will just move somewhere else to find another mine to work in and the population of all the towns in the valley, including Fernie, would shrink dramatically. Some of the participants still did not feel that the town could survive independent of mining, even if the tourism industry were more

developed. Others were more optimistic, and felt that Sparwood and Elkford offered good, quieter alternatives to Fernie for a destination for tourists. Even the participants that felt this way, however, said that once the mines are shut down, everyone would move somewhere else looking for work. They equated it to when an auto plant shuts down in some places in the United States and an entire city is a ghost town until the plant starts back up again. Kaethel and Sarah, both of whom have lived in Sparwood for 10 years, mentioned they came to Sparwood when a mine in Tumbler Ridge, where they had lived previously, shut down. They felt that once the mines surrounding Sparwood shut down, everyone would relocate to find jobs elsewhere. One participant felt the only way the town could survive was if the current population was replaced by a new generation of people who did not depend on mining to make a living.

One of the participant groups discussed how, even though those in attendance had a postsecondary education, they could make more money driving a truck at the mine than they could at
many jobs that would be available to them once they finished their degrees. When asked why
they did not want to work at the mine themselves, some participants said that they did not want
to get stuck in that town. They stressed that they have a secondary education and have more
career options and said that the mine accepts people right out of high school, so many people
who work there have fewer job options. They said to increase the appeal to young adults to stay
in town, it had to be easier to get a good job in a field other than in mining. Many feel that the
job market is limited and one's only options are nursing, teaching or mining. A number of
participants pointed out that with the high number of teachers that live in the Elk Valley, it could
take years before one finds a steady job.

The majority of participants want to move to a bigger city where there are not only more diverse job opportunities, but also nightlife. They think of Sparwood as a place that one could live at home and save up enough money to move somewhere else. The female participants in one session also mentioned that if they were working long days for the mine, it would make it incredibly difficult to start a family.

Numerous participants pointed out that right now, Sparwood is very appealing to young families. Jaclyn felt that having fewer people made Sparwood safer for residents and that there was less danger to children walking to school. Tyler felt that he could work until retirement in Sparwood and his children could potentially do the same. He acknowledged that the mine lifespan is 50 years, which will provide work until he is 70, and mentioned that the mine life may be extended because of the recent discovery of a new coal seam. He pointed out that the 50 year lifespan is for only one of the mines and that there are four others. Someone suggested that Teck could slow down production and extend the lifespan of the mines even longer, but Tyler replied that wages would then go down and then "what's the point of living here?" The general sentiment amongst all participants was that as the town is now, there is little or no incentive to remain in Sparwood without the high wages that the mine provides.

Do you think that these discussions and these questions are relevant to people in your age group and in this town?

All of the participants felt that the economic future of the town was something that is an important thing to think about. One group did acknowledge the fact that they had all been to university and were more aware of some of the issues than other local residents may be. Jaclyn

felt a lot of people have the mindset that if they do not think about, everything will be okay. Someone mentioned that people do not seem to understand the fact that coal is a non-renewable resource. Participants said many people feel that there will always be a supply of coal that can be mined and that that mentality is getting passed down to the younger generations that have grown up in the town. Ashley, who just moved to Sparwood with Tyler, was not even aware of the 50-year limit of the mine.

Participants felt that there is so much emphasis on focusing on this current generation, that when thinking about the lifespan of a mine and reclamation, which could decades, it is difficult for people to consider the fact that eventually the town's economy is going to have to change. One participant said that people in the town do not care about what Teck is going to in 40 or 50 years because life is good now. Kelsie pointed out that the population of the mine workforce is aging because no one wants to stay in Sparwood, and she feels the town will not be able to survive beyond this generation. If there is anyone from town that does want to do a job like that, she says they go to Fort McMurray, because one can make even more money working there than staying in Sparwood. She feels Teck should be providing more apprenticeships and should realize that they need to do something to get younger people to come in as the older generation of miners starts to retire. They pointed out that a lot of effort is put into discovering ways to better mining, instead of trying to explore different economic options for the town.

Another group discussed how, because people do not want to stay in town, the number of kids in classrooms is decreasing and, as a result, the quality of education is lower. The schools are unable to offer as many electives because of there are not enough kids taking them to justify

the costs. They did point out that Teck does a good job of supporting the community, through summer employment and scholarships.

Generally, participants did not seem incredibly optimistic about the future of Sparwood. They felt that although the town provided a great environment for young families, there were limited economic and entertainment opportunities for teenagers and young adults which was contributing largely to the outmigration of young adults. Everyone agreed that the town was currently completely dependent on mining and expressed doubts in the town's ability to develop an alternative economic option.

Chapter 7: Discussion

Recognition of the limitations of Sparwood's resource based future must inspire action and change if the town is to survive beyond the life of its resources. Young adults' perceptions of the economic future of the town affect their decisions to either remain or move away from Sparwood. These views of the town's future are influenced by a variety of factors. The opportunities that post-secondary education and training provided, the perceived lack of appeal of Sparwood, problems with shift schedule, geographic location and lack of support for economic diversification by both town council and residents were all considered when discussing the future of the town. Many of the young adults were not optimistic about Sparwood's ability to survive without the mines and, as a result, were choosing to leave town to pursue economic options and settle down elsewhere. The exodus of young adults could be minimized by increasing the appeal and economic diversity of the community. However, these actions require the acceptance that they are necessary as Sparwood cannot survive off of its natural resources indefinitely.

Discussions with the young adults revealed that personal preferences played a significant role in determining whether or not they chose to remain in Sparwood. These personal preferences included the choice to pursue occupations outside of the mining sector, the type of lifestyle and activities one took part in and the desire to have a group of people with whom they could relate. The environment was not a deciding factor in anyone's decision of whether or not to remain in Sparwood, other than the limitations that its degradation would place on pursuing alternative economic options, although it was the basis of many alternative economic options that participants suggested. Many felt, however, that this in order for most new industries or

businesses to be successful, they would have to be somehow associated with the mining industry. Participants also felt that potential new businesses lacked municipal support, investment and a market in Sparwood. They saw Fernie as a more attractive option for businesses as it is already a community that is successful independent of mining.

The young adults discussed the mentality of many people in which they believed that the mines will always be there to provide for them. While participants consciously recognized that the mine will eventually cease production and be unable to support the community, many of their responses demonstrated the extent to which that prevailing mentality is engrained. As a result, respondents seemed to sometimes contradict themselves. In direct questions and responses about the future of the community, respondents acknowledged that the mines would not always be there, but many replies to more indirect questions revealed that when considering the future of Sparwood, they always perceived there to be mining contributing to the economy. Generally, they felt that without mining, Sparwood would become essentially a ghost town, perhaps with only a small population to support a minor outdoor recreation industry. The perceptions of the limited economic options, the lack of appeal of the town and the belief of a dismal future for Sparwood form the foundation of how the young adult of Sparwood view the economic future of their community.

Mining as an Identity

Throughout the town, there are reminders of Sparwood's dependence on mining. These visual reminders reinforce Sparwood's identity as a mining town and help to maintain that as the prevailing mindset of the town. The derelict state of many of the mining artifacts around town

reflect the loss of identity of the community and the dissociation between the community and the industry (Figure 21). This separation has occurred slowly since the industry shifted to be dominated by large, multinational companies. It has been exacerbated by the out of town workers who come in for their shift and have little connection with the community itself. The town is losing its mining identity, but does not have a new identity with which it can associate.



Figure 21: Faded murals depict the town's mining heritage and represent it's established identity as a mining town. *Photo by Rachel Chapman 2011.*

Influence of Post-Secondary Education

A high number of participants had some university or trade school education, which necessitated living out of town for at least part of the year, as there are no post-secondary institutes in Sparwood. The exposure to a variety of career and lifestyle choices that are unavailable in the community influenced the decision of many to leave Sparwood. While this

was true for many, it did not apply to all participants. Some had not yet attended university and there were participants who had attended post-secondary schooling with the intention of returning to Sparwood to pursue a career. The high percentage of participants who had attended university or trade school is not representative of the population and, while this does present a biased sample, it does compliment Lucas' model. It gives insight into the thoughts of those who are making a conscious decision about their future in the community, with many fitting into the demographic of "outmigrating" young adults associated with Lucas' "maturity" stage. The fact that some participants intend to return to town after receiving university or trade school education suggests that although the opportunity to receive post-secondary education heavily affected participants' views of Sparwood's economic longevity, it was not the only influence.

Personal Preference

Participants mentioned that attending university gave them the opportunity to live in other places and experience what life is like in larger cities. Ten of the thirteen participants did not see themselves living in Sparwood long-term because of their personal lifestyle and career preferences. The biggest of these was a lack of job opportunities. Although there are many jobs available within the town, most are related to the mining industry or are minimum wage service jobs. Having a university degree or trade school training presents them with a wider range of options to careers unrelated to mining, many of which are not available within such a small community. If they had wanted to remain in town, they most likely would have opted for degrees related to the mining industry, such as Tyler and Kelsie, or have applied for jobs at the mine immediately following high school. The only participants that do plan on remaining in town are

employed in the mining sector or, in Ashley's case, they are in a relationship with someone employed in the industry.

Another significant reason that participants did not foresee themselves remaining in Sparwood was the lack of establishments and activities for young adults. This, also, may have been affected by the exposure to the lifestyle of a larger city. Most who had gone away for school had attended either the University of Calgary or the University of Lethbridge. Both of these locations are significantly larger than Sparwood and would possess many entertainment, cultural and recreational options for young adults. Participants felt that Fernie had much greater appeal to young adults, as they has coffee shops, fine art exhibits, greater dining and shopping options and a nightlife. They felt their desired career, lifestyle and recreational activities were not provided for by Sparwood, contributing to their decision to live elsewhere.

In addition to these widespread sentiments, there were also more individual reasons for not wanting to remain in the community. Sarah felt it was difficult for newcomers or more individualistic people to fit into a town like Sparwood, whereas in a larger city, people can find cliques or groups into which they fit. Participants also joked that they wanted to move away from their parents and avoid the "Everybody Loves Raymond' scenario". As young adults who had lived in larger cities, away from their families, the majority of participants have had the opportunity to experience life outside of Sparwood and escape from the small resource town mentality that they have grown up with.

Although the majority of people do not intend to stay in Sparwood, some people felt it suited their desired lifestyle and career, and made the choice to return to Sparwood after completing their post secondary program. Of the thirteen participants, three intend to remain in

Sparwood long-term. Tyler had earned his engineering degree and had recently moved back to town with his girlfriend, Ashley. Tyler works at one of the mines and they intend to live and work in the Elk Valley for the foreseeable future. Kelsie had attended school to be trained with equipment parts and worked as a contractor to the mine. Those who work for the mining industry believe that there is potential for a lifetime career in the community.

While not all participants were not all considering living there, every single participant agreed that it is a great place for a family with young children. They felt the smaller population and lower seasonal influx of outsiders made the community safer than places such as Fernie.

They also said that for people who enjoy outdoor activities it is great location to live. For most of the young adults who participated, however, the perceived economic disadvantages of the community prevailed. The advantages that Sparwood offers for young families or active individuals were not enough to entice the majority of participants to remain in the community.

Shift Work and Geographic Location

The 4 days on, 4 days off (4 x 4) schedule allows for this flexibility in location. Many participants felt that the 4 x 4 schedule of the mines is detrimental to Sparwood's growth and development. Participants felt:

"Because of this 4 on, 4 off, you don't have to live in Sparwood. You can live in Fernie, you can live in Lethbridge, you can live in the Pass, you can live in Calgary... Get rid of 4 on, 4 off, and this place would boom."

The location of Sparwood, near a larger city and both provincial and international borders, allows for money being earned in the community to be spent elsewhere, through both cross-

border shopping and the ability of workers to live elsewhere and commute in for their shifts. Participants felt that this issue was intensified by Sparwood's lack of appeal to young adults. They felt workers would rather live in a town such as Fernie where there is nightlife, more culture, and more things for young adults to do. The building of a new hotel, as opposed to apartment buildings or trying to increase the appeal of the town, exacerbates the issue of people coming into town only to work. Although she agreed that the community needed to grow, Kaethel cautioned against *too* much development, as the reason people do like to live there is because of the wildlife and outdoor activities such as hiking. Losing this attraction could potentially further magnify the problem of getting people to live within the community.

Environmental Considerations

Participants expressed mixed views on the environmental impacts of the mining industry and how this activity would impact the future of the town. Generally, people felt that Teck is doing a good job mitigating environmental damage, considering that mining is inherently destructive to the environment (Figure 22). Many admitted, however, to not knowing exactly what measures were being taken. Some conceded that while leading mine tours, guides are told what say on the matter of being an ecologically friendly operation. Much of the information that gets passed onto the community comes from Teck itself, who would have a vested interest in ensuring their operations appear as blameless as possible for any environmental degradation in the area.



Figure 22: The presence of wildlife was perceived by may young adults as a sign of minimal environmental degradation. *Photo by Rachel Chapman 2011.*

Limited Support for Economic Diversification

Participants felt that a general lack of support by town council for pursuing other economic options made change difficult. The young adults of the town refer to the town council as "dinosaurs" and believe that they prefer to maintain the status quo. They feel that town council constantly turns down new proposals and ideas, making it incredibly difficult to start a new business in the community. Participants feel this has been detrimental to the town's development thus far and will continue to be so until, according to Jordan they:

"get a council that is... supportive of economic development, rather than a hindrance."

Another participant felt that:

"It's hard to start a new business [in Sparwood]... when there's already so many gates up in front of you."

He brought up the example of all the "red tape" surrounding the construction of a water park for kids, which took a considerable amount of time to be approved.

Currently, retail investment in the community is perceived as minimal. Centennial Square was originally designed to be the commercial center of town, but is now the location of a random assortment of small businesses and organizations, along with numerous unoccupied storefronts. Greenwood Mall, which opened in 1971, was a million dollar investment, designed to house banks, a drug store, sixteen retail outlets, a grocery store and a hardware store (Ramsey 1997). It is now similarly dismal compared to Centennial Square. One person referred to the "whole two stores" in the mall. Although this is an exaggeration of the poor variety of store options, it portrays young adults' views of the mall. The participants did not see the mall as adding any appeal to the town. One participant reminisced that when she was younger there was "so much more in the mall and the square." She felt that a lack of support for companies and a failure to look ahead into the community's future has led to the closure of many businesses. Attempts have been made to support local businesses through "shop local" campaigns, but participants felt the process of getting on the "local" list was intimidating for new business owners, particularly when Fernie, a larger market, is such a short distance away (Figure 23).

In addition, participants were also skeptical of the potential success of other types of industries in the town. They generally agreed that for the majority of businesses to be successful, they must be somehow associated with the mine.

Participants noted that government investment often goes toward improving



Figure 23: A sign along the road leaving Elkford reads "Stop: Why leave town? Shop local." *Photo by Rachel Chapman 2011.*

mining technologies and mine expansion, instead of other areas of need for the community.

"A lot of the energies are put towards mining and how to better mining, instead of other areas.

I found, when I left, that the education system in Sparwood is lower than other places." Participants continued on to discuss how they have limited course offerings in high school because of low enrollment due to their small population. They noted that this could potential create a positive feedback, as families want their children to have a good education, so they move elsewhere resulting in even fewer students and lower funding available at the school. One suggested reason as to why the quality of businesses in the town has diminished was because people are often concerned about the present and do not think of the legacy for future generations. Participants felt that this was especially true of young adults who do not have children yet. They felt in a mining community, where the lifespan of a mine, with reclamation, could be decades, it is difficult to think about planning for a future without the mine. This contributes to the mentality the lack of economic planning and foresight. It could also contribute to the reason that young adults feel town council maintains the status quo of the community. All but two of the Sparwood town council members have lived in the Elk Valley for almost their entire lives. There is also a limited turnover, with one member serving on council for 21 years (Sparwood 2011). The town council lacks representation by younger members as the community and thus were seen by Jordan as:

"loving the status quo [because] as long as [they] keep the status quo going, nothing can go wrong."

He felt that:

"We need to mix [the town council] up other there... We need younger people involved."

When Jordan mentioned a lack of youth as a hindrance to development, Tyler noted that it was "lack of youth influence. There's youth here, but... a lot of them don't care."

Resource Limitations

Participants repeatedly referred to just "the mine" without specifying to which they were referring. It was assumed by the researcher that they meant the Elkview mine, because that is the one closest to town and is the second largest producer of the five. Tyler mentioned that "the mine" would be in production for 50 years. When his girlfriend said that she,

"...didn't even know about that 50 year thing",

he reassured her by pointing out that this was just one of the five mines. Regardless of whether he was referring to Elkview or not, this 50 year projection potentially overestimates the calculated mine life of any of the mines. As of 2011, based on 2010 production rates, Elkview is projected to be in operation for only another 41 years. Fording River has a remaining mine life of 33 years, Greenhills for 18 years, Linecreek for 15 years and Coal Mountain for 9 years (Teck 2011). These projections change annually, depending on productions rates which are dictated by supply and demand. It is difficult to forecast the demand for coal in the coming decades, as technologies change and foreign populations grow, thus these projections could change.

Nevertheless, none of these mines are currently expected to still be in operation in 50 years. The justification that a 50 year projected mine life is only for one of the mines is a demonstration of reconciliation between two dissonant cognitions. The theory of cognitive dissonance states that when an individual holds two seemingly inconsistent perceptions, they add a new cognition to reconcile the two or change their perceptions so that the two fit together (Aronson 1969). The

idea that the resource will sustain the community for a long while, along with acknowledgement that the resource will run out is an example of two disparate ideas, but is a common mentality amongst residents.

This mindset is further evidenced by Tyler's notion that his children could making a living and retire off of the mines. He compared the town and the projected mine production to times in the town's history when the mines changed to the hands of a new company. He seemed to believe that when the Teck mines closed, another company could come in and start a new operation. He used the example of when Westar declared bankruptcy. Prior to Teck owning the majority of all the mines, numerous other companies, including Westar, had operated in the valley. The mines had changed hands many times before Teck started to dominate the local industry (Ramsey 1997). The changing ownership of the mines usually had to do with company revenues and operations, however, not the availability of the resource. The idea that another company could initiate operations after the Teck mines are no longer in production does not recognize the fact that coal is a finite resource and there is a limited amount that can be mined. As Nadia put it, many local residents think:

"It's something magical that just comes from the earth and... it will never go away."

While Tyler and Kelsie both planned on earning a living within the community indefinitely, both agreed with many others that once mining was no longer supporting the town, "there would be nothing." The fact that they hold this belief, yet predict that the next generation will be able to live and support themselves off of the mines demonstrates the extent to which the idea of permanence of the industry is engrained.

Influence of the Mining Moratorium for the Flathead Valley

It was expected that more people would know about the mining moratorium in the Flathead Valley, especially considering the high number of participants that attended university or had family members employed in the mining industry. The lack of knowledge about the issue and the general perceptions that a moratorium on mining in the Flathead would not limit the town's growth are evidence of the general perception in the town that mining will always be a viable industry. Even participants who pointed out the existence of this mindset within the community did not seem to feel that it would affect the economic future of the town. They did feel that if the mines currently in operation were to shut down, Sparwood may become a ghost town. However respondents felt that the amount of coal that is currently being produced by the five mines surrounding the town was enough to sustain therefore opening another mine in the Flathead Valley was not needed. The majority of participants consciously recognize that current mining operations cannot support the town forever; however they did not believe that a moratorium on new mines in the Flathead would be detrimental to the economic future of the community. The seemingly conflicting nature of these ideas demonstrate the cognitive dissonance between the two ideas and shows how engrained the mentality that the mines will always provide *something* is amongst residents.

Alternative Economic Futures

The out-migration of young adults is consistent with the 'maturity' stage of Lucas' model (Halseth 2002; Lucas 1971). It indicates the necessity of developing alternative economic options, to avoid the 'winding down' stage proposed by Hayter and St. Martin (1983). Some

participants perceive the natural environment and the town's scenic setting as a potentially valuable resource that could be developed for tourism, recreation-based and energy industries. While most suggestions revolved around further developing the tourism industry and presenting the town as a less expensive destination option to Fernie, the idea of renewable energy was also presented. The town is located near the Elk River, which could provide the source of water-based power, as well as the Crowsnest Pass, which is subject to very high windspeeds. Participants felt, however, that the high start up costs would hinder such development. One participant suggested putting a Tim Horton's in at the confluence of the two highways. They felt this could be a very successful location, attracting both highway traffic and local residents or workers. It was revealed that this was, in fact, already in the works, along with a Best Western nearby. The town already has one hotel, the Causeway Bay Hotel, and it was observed that many of their patrons are people who work in the mines, but live outside of town.

One participant suggested that Sparwood could look into providing renewable energy, but felt that the large investment necessary was intimidating. Many people also suggest outdoor tourism as an option. However they pointed out that a local ski hill had already failed because the city was not willing to invest sufficient money into it. They also did not discuss the willingness of people to undergo economic restructuring in the community. In the case of Silver Valley, Idaho, even after 20 years, only about half of the population supported the shift to tourism in their community. The point was brought us during discussion that if the mines stopped production, many workers would re-locate to places like Fort McMurray, but only one participant recognized that this could potentially occur if residents were dissatisfied with the dominant economic activity, saying,

"I think it would have to be a totally new generation. A lot of older people would probably leave."

Lessons of Silver Valley and Tumbler Ridge

Silver Valley and Tumbler Ridge, like Sparwood, are relatively small, isolated towns amongst natural settings. After making the transition to the tourist industry, both recognized the importance of this new industry as only one component of a new, diversified economy. In both cases, there was great population decrease when the mine shut down; However those who chose to stay were committed to seeing the town succeed, independent of mining (Jackson et al 2006).

This mentality was not apparent amongst participants in Sparwood, where many of the young adults are choosing to leave in favour of larger, more urban locations. They do not anticipate the economy of Sparwood diversifying to a point where they can pursue economic options outside of the mining industry. They also do not predict that the community will be able to provide them with the entertainment, cultural and recreational activities that they enjoy.

Silver Valley and Tumbler Ridge show that great degrees of economic diversification are achievable as the mining industry begins to wane. The town council of Tumbler Ridge was very progressive and supportive of diversified economic development (Jackson et al 2006). From the outset, the goal of Tumbler Ridge's development was to allow it to thrive independent of mining. At Silver Valley, the town did not have a choice but to either diversify or die out. They designated part of the income for contamination cleanup to the construction of infrastructure to support the development of the tourism industry.

These may be the key differences between the two cities and Sparwood. Coal mining has a much longer history in the Sparwood area than in Tumbler Ridge, allowing it time to become much more engrained in the identity of the community. Consequently, it will be much more difficult to change. The preference of investing in bettering mining technologies and activities over economic development in Sparwood will be detrimental. They will lack both infrastructure and income needed to develop the tourism industry once mining activities cease in the valley. The towns of Silver Valley and Tumbler Ridge show the importance of foresightful mentality and investment to ensue community endurance.

Chapter 8: Conclusion

The District of Sparwood must now make decisions about its economic future if the community is going to survive beyond the lifespan of the resources on which it currently depends. The long history of mining in the Elk Valley has created an engrained identity of the residents there that they are a "mining town". The belief that the mines will be able to support the community indefinitely exhibits the mentality of many in the town that mining will continue to be a the economic driver for the community. This is not the case, however, as the lifespan of the mines that currently support the town will relatively soon be coming to a close. They need to pursue alternative economic options to prevent the community from winding down over the next few decades.

Local young adults identified many perceived hindrances to Sparwood undergoing dramatic changes in their economy. They feel that many people would leave to find employment in the resource sector elsewhere, regardless of whether this occurs during economic restructuring or after the resource is depleted. They did not seem optimistic about their community's economic future, which is demonstrated by the fact that the majority of them do not want to continue living in Sparwood. Most are just remaining at home while completing post-secondary education or saving up enough money to move elsewhere. The participants that do intend to stay are employed by the mine and foresee a long career in the Elk Valley. They did not believe a ban on mining in the adjacent Flathead Valley would negatively impact the expansion of the industry because they believed the mines currently in operation would support the community for the next few generations. This mentality demonstrates that the dominant mindset of the community is still prevalent in some, but not all, of Sparwood's young adults.

The mixture of perceptions about the town's economic future is demonstrative of a time of transition. There are some people that are looking ahead and see it in their best interests to pursue options elsewhere, while there are others who feel they can continue in the status quo. Neither of these two perspectives, however, address what can be done in the town now to diversify the economy and ensure that when the coal reserves are depleted, whenever that may be, the community is able to sustain itself. This period of transition needs to spur action within the community to support diversification in the economy in order to slowly wean the town off of mining. Many of Sparwood's young adults have recognized the need to explore and support diversified economic options necessary for the town to become a stable and enduring element of BC's landscape.

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