

# “Sustainable Rural Development: An Examination of Mining and Tourism in Ely, Minnesota and the Boundary Waters Canoe Area”

Shelby Maidl

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## Rural Landscapes and Livelihoods

Abstract: The changes occurring on the contemporary rural landscape require that rural areas direct economic development in new directions. Considering two viable options, natural amenity-based tourism and natural resource extraction, this paper has determined that tourism is a more secure and sustainable economic development path for rural communities and small towns. This paper will use academic literature and popular media sources to examine Ely, Minnesota and the Boundary Waters Canoe Area Wilderness to determine the costs and benefits involved in mining and tourism in rural communities. Each industry has implications for local autonomy, the natural environment, employment opportunities, and investment in the community. Though both involve risks, tourism is a sustainable path of development while mining provides only temporary growth followed by decline as the resource is depleted. This paper suggests that Ely and other rural towns avoid implementing an economy dependent on natural resource extraction and determines that tourism is a more beneficial economic strategy.

Rural America today sharply contrasts images of rural life and landscapes from the last two centuries. Rural economies are no longer dominated by agricultural activities, and instead focus primarily on the manufacturing of goods and providing services (Ilbery 1998). The rural demographic is shifting as well. Populations are declining as young rural residents flee to urban areas in search of higher education and greater employment opportunities. Those that remain in rural areas are an increasing proportion of older, retired residents (Woods 2005). With the decline in agricultural production, and the subsequent loss of jobs and population, small towns are now facing challenges in determining future development paths.

Of the many possibilities, the mining of natural resources and rural tourism are two economically viable options. However, these trajectories are inherently contradictory; the former benefits from opening the land and salvaging the pieces that hold value on the global market, while the latter capitalizes on preserving the land and its natural amenities in order to appeal to individuals who seek an experience with nature. Using Ely, Minnesota as a case study, this paper will demonstrate that implementing natural resource extraction as a form of economic development involves risks including the forfeit of local autonomy, a lack of stability due to dependence on the size and quality of the resource, variability in global market values, uncertain employment opportunities for permanent residents, and the inevitable pollution of the natural environment. Considering these risks, this paper argues that Ely, Minnesota should continue with its current tourism-based economy as it provides incentive to invest in local community businesses and services, encourages the protection of the natural environment, improves the quality of life for permanent residents, and allows for the town to remain autonomous and

maintain local circulation of wealth. Mining industry in rural areas has negative implications for both the environment and the economy, for although it produces a boom period, this prosperity is temporary and does not provide a sustainable path towards future development. Before determining a development path, there are important benefits and costs for a rural area to consider.

This paper will first briefly outline the implications of mining and tourism as economic development options. This will be followed by a discussion of the historical background of Ely and the Boundary Waters Canoe Area (BWCA) as well as their place on the contemporary rural landscape. Finally, the recently discovered copper-nickel-precious metals deposit near the BWCA will be discussed along with an in-depth consideration of the implications of mining and tourism to the area.

### Weighing the Options

Natural resource extraction can provide jobs, economic wealth, and attract new residents seeking employment opportunities, increasing the population and the tax base (Power 1996, 89-112). However, these incentives often arrive in the form of broken promises from remote mining corporations and can cause more harm than good. Extraction-based economies are highly dependent on the global market (Power 1996, 102) and are controlled by distant parties (England and Brown 2003, 318), limiting the amount of wealth that remains in a rural community and sacrificing autonomy. Mining practices also pose great risks to the environment and natural amenities, reducing the appeal of an area for permanent residence or tourism (Power 1996, 102-121).

Rural tourism-based economies align with the current shift away from production-oriented business to service-oriented business. It ensures that wealth generated in the community remains in the community, creates jobs, and attracts permanent residents (Power 1996, 214-215). The reliance on natural features and an aesthetically pleasing landscape also increases local incentive to protect the environment (Power 1996, 215). Arguments that disfavor tourism development include the generally low-wage and low-skilled jobs that tourism provides, the overuse of amenities and eventual degradation of the environment, and the inaccessibility of some rural areas (Krannich and Petrzeka 2003, 191-196; Power 1996, 216). Furthermore, it is important to consider the inability for rural areas lacking natural amenities to consider tourism as a viable development option (Krannich and Petrzeka 2003, 191).

When determining an economic development strategy, it is imperative for rural areas to look beyond the present and consider long-term sustainability. For the purposes of this paper, sustainability is interpreted as a development strategy that will provide lasting and consistent employment opportunities and investment in the area, as well as maintain the current protection of the environment and natural features in order to preserve the wilderness of the Boundary Waters Canoe Area and ensure its future.

#### Ely, Minnesota: An Evolving Economic Landscape

Ely, Minnesota is a prime example of a small town facing the challenges and shifts occurring on the contemporary rural landscape. Located in the northeastern region of the state, the town of Ely is encompassed on three sides by the Superior National Forest, including the protected lakes and forests of the Boundary Waters Canoe Area, the world's most visited wilderness destination (Friends (c) 2008). The rural community of 3,460 permanent residents

(U.S. Census Bureau 2010) has a history in the mining of iron ore, a current economy dependent on tourism, and a possible future in the mining of copper-nickel-precious metals from sulfuric ore.

In 1888, Ely became an incorporated town after its initial establishment as a village to accommodate workers in the Chandler Mine, the first of eleven underground iron ore mines to open in the area. Seeking employment, European immigrants flocked to the area and helped to transform the small mine camp into a town. In seven years time, the population grew from just 177 to 2,260 permanent residents. In 1889 Pioneer Mine opened and became the most successful mine in northeastern Minnesota, producing forty percent of the total iron ore for the region (Zenith City 2012).

Along with mining, other economic activities evolved in Ely. Underground mining required long beams of timber to build structural support and avoid collapses. As the mining industry expanded, timber demand increased. This led to the development of logging and sawmill industries in the area, and further spatial and demographic growth of the town (Zenith City 2012).



**Figure SEQ Figure \\* ARABIC 1: Ely and the Surrounding Wilderness**

[http://commons.wikimedia.org/wiki/File:Bwca\\_map.png](http://commons.wikimedia.org/wiki/File:Bwca_map.png)

Beyond natural resource-based economic activities, tourism industry grew in Ely as visitors were drawn to the pristine lakes and forests of the region for camping, canoeing, fishing, and hiking. In 1902, the U.S. Land Office declared 500,000 acres of land in the surrounding area of Ely as protected wilderness prohibited from settlement, logging, and mining (Friends (b) 2008). By 1908, another 659,700 acres were set aside as protected lands and named the Superior National Forest (Friends (b) 2008). Outfitters of camping and fishing equipment, lakeside lodges, and wilderness tour guides contributed to Ely's economy and employment opportunities (Zenith City 2012).

With a permanent and employed population, a dynamic economy, and beautiful scenery, the town flourished for decades, but by 1967 all eleven mines had closed (Zenith City 2012) due to either diminished quantity or quality of the iron ore. Reaching its peak in the 1930s at 6,156 (U.S. Census) the population has steadily dropped for several decades. With the end of the mining era and a decline in logging, the economy is now heavily dependent on tourism and the attractiveness of the natural amenities in the area (Zenith City 2012).

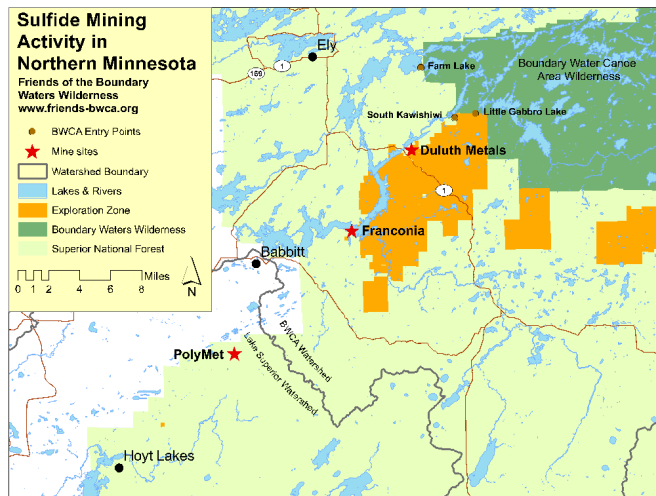
### A Contested Discovery

The key to Ely's tourism industry is the Boundary Waters Canoe Area, a federally protected wilderness area comprising more than one million acres in northeastern Minnesota's Arrowhead Region (Friends (b) 2008). The expansive wilderness provides an experience that is increasingly difficult to find. Upon entrance, a policy of "leave to trace" is expected. Motors and mechanized transportation, i.e., sailboats, bikes, or paddleboats, are prohibited and travel is done exclusively by manpower, paddling a canoe and carrying gear on foot. Cans and glass, soap, and any sort of litter are not allowed. Any garbage produced should be repacked and taken out of the

area at the end of a trip (BWCA 2012). The BWCA is intended to look and sound pristine, with no sign of human impact.

This wilderness and the unique experience it provides have recently come under a potential threat. The world's largest known deposit of copper-nickel-precious metals has been detected within a watershed along the southwestern edge of the BWCA and fifteen miles east of the town of Ely (Hemphill 2010). The mining potential of this deposit is immense and has

become a highly contested issue for residents of Ely and the surrounding areas. On one side are those that consider the prospects of job creation and economic prosperity. On the other side are those that understand the distinct importance of the wilderness to the area and have interests in preservation and conservation of the



**Figure SEQ Figure \\* ARABIC 2: Copper-Nickel-Precious Metals Near the BWCA**

<http://www.friends-bwca.org/issues/sulfide-mining/>

environment (The Ely Echo 2009). With a declining population and a reliance on tourism, a large mining operation promises to attract the working-age demographic and provide thousands of new jobs (Twin Metals 2013). While it may bring in new economic wealth, the mine also threatens the tourism industry on which Ely is dependent. Mining processes will bring both chemical pollution and noise pollution to the border of the BWCA, and jeopardize the pure experience and natural amenities of the area (Friends (a) 2008). This contested landscape raises concerns for the future of Ely.

Redirecting economic development towards mining has potential to create jobs, attract new populations, and boost the economy (Power 1996, 89-112). However, it also poses a substantial threat to the current stability that Ely rests on, provided by the Boundary Waters Canoe Area and its ability to attract tourists with natural amenities (Ely Area 2009). As mentioned, both natural resource extraction and tourism-based economies present costs and benefits. However, given the many risks and the temporary nature of natural resource extraction, I propose that Ely and other rural areas avoid turning to mining as a form of economic development. Rather, Ely should continue with the current tourism-based economy.

The mine situation near the BWCA involves two key players – Duluth Metals and Antofagasta. Duluth Metals is a Canada-based mining exploration company with primary interests in northeastern Minnesota (Duluth Metals 2010). Antofagasta is a mining company in Chile that is providing financial backing to Duluth Metals in a combined project called Twin Metals (Hemphill 2010). In a brief conversation with the Corporate Headquarters of Twin Metals (13 March 2013), it was determined that the project is still in an exploratory, or foundational stage (England and Brown 2003, 322-323). The two companies are in the process of establishing the expanse of the copper-nickel-precious metal deposit, determining the quality of the metals, and assessing the environmental consequences of a mine in the area. When asked for a proposed opening date of a mine, Twin Metals stated that the project is not near that deadline.

Given the indeterminate trajectory for this project, this is the crucial time to assess the economic and environmental consequences of a mine along the Boundary Waters Canoe Area and in close proximity to the town of Ely. Rather than complacently accepting a future economy



based on mineral extraction, Ely and other rural communities should weigh heavily the benefits and costs of both mining and other possible paths of development.

### History of the Wilderness

The Boundary Waters Canoe Area faced a difficult process over several decades in order to achieve full protection and preservation. Existing for nearly 50 years, this wilderness area is one that struggled to gain legitimacy with its strict code of conduct and prohibition of all activities that leave traces of human impact. The progress of overcoming legislation and a long-established idea of what is meant by “wilderness” should not be readily forfeited.

In 1926, areas within the Superior National Forest (established 1909) called for the prohibition of roads in order to preserve the forest for nature recreation (Friends (a) 2008). This was the first step towards forming the BWCA that exists today, free of both human settlement and visible human impact. For the next twenty years, legislation attempted to consolidate the Roadless Area and place all land within the area under federal governance, and finally passed in 1946 (Newell 1977, 143).

A hindrance to complete consolidation of the Superior National Forest was the ownership by private parties of land within “canoe country.” Seeing business ventures in the forest, locals used floatplanes to transport visitors to remote resort settings along the lakeshores. These land owners built up lodges and cabins, leading to deforestation and pollution and the disturbance of the pristine wilderness (Newell 1977, 144). In 1948 the Thye-Blatnik Act passed, authorizing all private lands within the canoe country to become federal lands. Private landowners were compensated with the ability to exchange their land for equivalent national forest land outside of the Roadless Area. The three counties surrounding the Roadless Area (Cook, St. Louis, and

Lake) were compensated with an annual payment in exchange for the lost money due to the loss of tax base, a payment that continues to be paid today (Newell 1977, 159).

In the 1940s, small aircraft were increasing in popularity and affordability among middle-class families. People could be transported to remote areas quickly, rather than taking several days to reach by paddling a canoe. This air traffic continued to disrupt the wilderness and diminished the significance of the prohibition of public roads (Newell 1977, 165). In 1949 President Truman signed a law prohibiting aircraft below 4,000 feet over the Roadless Area and stating that planes could not land within the area except in emergency or rescue situations (Newell 1977, 176).

Throughout the first half of the twentieth century, there was a battle about what was meant by 'wilderness.' Some fought for the practical uses of the land, such as fishing, hunting, and logging. The conservationists believed in the beauty, peace, and seclusion that the wilderness provided (Newell 1977, 208). The latter perspective did not gain momentum until the 1950s and it was not until 1964 that federal laws recognized the complete preservation of the wilderness. The Wilderness Act of 1964, signed by Lyndon B. Johnson, called for all national forest areas to be used in such a way to "leave them unimpaired for future use and enjoyment as wilderness." This act designated all of Superior National Forest as an area free of signs of human impact and a place where visitors were not to be a permanent fixture (Newell 1977, 221). The Boundary Waters Canoe Area Wilderness became a separate entity from Superior National Forest that same year (Friends (a) 2008).

Mining: Providing an Uncertain Future

A law passed over one hundred years ago continues to govern United States mining operations today. The 1872 Mining Law states “all valuable mineral deposits in lands belonging to the United States...shall be free and open to exploration and purchase” (Huber and Emel 2009, 375). Public land may be patented and sold to private companies for \$5 an acre, a price that has remained since the 1872 passing of the law. Upon discovery and extraction from U.S. lands, no royalties are paid to the federal government regardless of whether a mining company is domestic or foreign. This law creates a “scalar mismatch” in mining operations; the economic benefits of mining are obtained by the national government and distant mine company owners, while the local community surrounding an extraction site must manage the costs (Huber and Emel 2009), including mitigation of pollution and environmental degradation as mining companies are not held liable for cleaning up sites (Power 1996, 121). Despite several attempts to repeal and amend the 1872 law, it remains stagnant (Benson 2012), continuing to place public lands into private control for private gains.

For rural communities that face a shrinking job market and declining population, the discovery of minerals in the area may seem a blessing. However, this image of a mine putting a town to work is one of bygone days and the extent to which a modern mine creates jobs is uncertain and variable. Mining processes are becoming increasingly automated and mechanized, reducing the amount of human labor required. Furthermore, as technology improves, the potential for greater output increases. As output and supply rise, the value of the minerals decreases and encourages mine corporations to find cost-cutting production methods. These cuts often are in the form of reduced wages or a smaller work force (Power 1996, 106-107). The size

of an employment pool at a mine is also determined by the size, quality, and future commodity value of any discovered minerals. Despite the uncertain nature of mining employment, it is often the first thing promoted to a community during initial exploration by a mining company (Power 1996, 107).

There is evidence of employment advertising from the Twin Metals project. Though still in the exploratory stage of development, the joint company claims that once in operation, the project will need thousands of construction workers to build the site of the mine, have the potential to create thousands of mining jobs, and that each mining position will lead to 1.8 “spinoff” jobs (Twin Metals 2013). Though impressive, these numbers can be deceiving to a local population. Construction workers recruited for the building of the mine will be hired in temporary employment; once the mine is built, these jobs will disappear (Power 1996, 109). This form of job creation is not sustainable and does not diminish unemployment rates in the long run. Of the projected permanent mining jobs, it is unlikely that locals will acquire many positions. With automation and mechanization, mining processes demand a highly skilled, educated, and specialized workforce, often providing jobs for outside recruited workers and placing further strain on employment opportunities for the local population (Power 1996, 108).

The discovery of minerals also does not ensure a concentration of wealth for a rural area. The value of a deposit is dependent upon the size and quality of the minerals as well as on the global economy (Power 1996, 119). Mineral products are sold and traded internationally and are therefore subject to fluctuations in price and value set by those markets (Power 1996, 102). Furthermore, regardless of the magnitude of wealth generated by a mineral deposit, there is no guarantee that the wealth will remain in the local economy

. Profits are often removed from the local area of extraction because the owners, managers, and stockholders are not located in the area (England and Brown 2003, 321). On their website, Canada-based Duluth Metals claims that it owns 60 percent of the Twin Metals project and that the remaining 40 percent is owned by Antofagasta, however there is no mention that the second party is a distant Chilean-based company. Corporate mining executives who live in other countries, in this case Canada and Chile, have little personal investment in the local area beyond obtaining the mineral wealth and now have the authority to govern previously public lands (England and Brown 2003, 318). In the case of the Twin Metals project near the BWCA, wealth generated from the mine will inevitably make its way to Canada and Chile. Outside workers recruited for mine employment also tend to be commuters (Tigges and Fuguitt 2003, 176), implying that they gain an income at the mine but invest their wages elsewhere. The volatile conditions of the mining industry often carry profits out of the local community and place them in hands of distant parties.

#### Pollution's Harm to the Environment, Population, and Economy

Beyond the concerning lack of stability for employment and generated wealth, the most troublesome threat of a mine is inevitable pollution. Although mining operations have the potential to create jobs and attract an influx population to a rural area, the pollution that mining processes inflict upon the environment can contribute to a loss of population and place stress on the local economy. Intrinsically, resource extraction places humans in conflict with nature. It creates an exploitative relationship rather than one of coexistence (England and Brown 2003, 318). Mining practices use huge machinery to remove layers of earth, dig down to the resource,

and pull out the minerals. Droning machines cause noise pollution. The removed layers of earth lose topsoil, leaving heaps of broken and exposed rock. A significant problem that is often overlooked in the case of the proposed mine in northeastern Minnesota is that the mining of sulfuric ore differs greatly from the mining of iron ore of the past. When exposed to air or water, iron turns to rust (Friends (b) 2008). However, when sulfuric ore is exposed to air and rain the sulfur naturally found in the land turns into toxic sulfuric acid, making it impossible for plants to grow (Hart 1998, 47). Sulfuric acid can cause harm to human, animal, and fish health as well. This toxic process is especially concerning as drainage from the Twin Metals mine will leak into the South Kawishiwi River, an entry point to the BWCA and the adjacent watershed (Friends (b) 2008).

Furthermore, this environmental harm is not confined to the mining site. “Erosion, leaching, and seepage” release chemicals and toxins into water systems and refining processes expel toxins into the air, spreading the pollution to distant places (Power 1996, 119). These negative impacts on the environment diminish the quality of natural amenities and make an area less desirable to live in. This can lead to more out migration and less in migration, reducing the population and weakening the

(Power 1996, 121).

Natural landscapes take extensive time to create themselves and relatively little time to ruin (Power 1996, 118). Considering the temporary quality of mines, their boom period of prosperity yet enduring destruction of the environment does not provide sustainable economic development. Although pollution is an expected outcome of extraction operations, mining companies are not held liable for environmental clean up or restoration. This responsibility often

falls onto the local public, straining the economy. When unable to pay these costs, rural communities may seek assistance from outside sources, such as government agencies (England and Brown 2003, 323), again sacrificing autonomy in the development of their landscape. In a relatively short time, mining operations can reduce the natural environment to a lasting scar in the earth.

### Threatened Wilderness

The close proximity of the Twin Metals project to the Boundary Waters Canoe Area should raise particular caution, as much of the pollution caused by mining operations spreads to surrounding areas (Power 1996, 119). Even more distressing, Duluth Metals makes no mention of the BWCA or Superior National Forest in the summary of the Twin Metals project or on maps of northeastern Minnesota (Duluth Metals 2010).

Mining of copper-nickel-precious metals near Ely, Minnesota may have potential to boost the economy, but this is not a guaranteed outcome. There are high-stake risks involved, including destruction of natural amenities and contamination of the nearby BWCA wilderness – the damage of which could end Ely’s ability to utilize the environment in a tourism-based economy.

As outlined thus far, mining has been shown to cause more harm than good on rural economies and landscapes, limiting the ability of sustainable development. Though Ely may have the opportunity to test this hypothesis with the Twin Metals project, the risk of loss involved in mining outweighs the possible benefits. The town and community should avoid bringing mining to the area and instead continue with the current economy reliant on natural amenity tourism. This method has proven successful for decades due to the town’s unique location at the edge of an expansive wilderness area and its ability to meet specific needs of

tourists. To allow natural resource extraction to begin is to risk the greatest natural assets of the region, as well as jeopardize the foundation of the economy.

### Tourism as a Sustainable Economic Strategy

Today, the BWCA attracts more visitors than any other wilderness area in the world (Friends (c) 2008). It serves as the backbone to Ely's tourism-based economy, creating spinoff jobs, heavily focused in the service sector (Ely Area 2009). While there are costs and benefits to tourism, Ely is able to combat the challenges and has achieved success.

It has been found that residents of rural areas believe that there are personal benefits in utilizing a tourism-based economy. Positive outcomes of well-planned tourism include a revitalized downtown, the implementation of special events and programs, expanded shopping and dining options, improved arts and cultural features, more recreation opportunities, preservation of historic buildings, and a wider variety of community services (Wang and Pfister 2008).

Specifically, natural amenity-based tourism induces greater incentives to preserve the environment (Power 1996, 215). Unlike mining, this kind of tourism depends upon the land in its natural state and protects rather than exploits resources. The protection and perpetuation of natural amenities in rural areas can lead to growth in the permanent population, leading to an increased tax base and a sustainable boost in the economy.

People tend to initially experience rural areas as tourists, visiting for pleasure and recreation purposes (Power 1996, 214-215). With an appreciation for the availability of beautiful landscapes and natural amenities they may decide to move there permanently to improve their quality of life, increasing the population. As long as the landscape is preserved, this path to



development is sustainable; on the contrary, mining reduces the desirability of living in an area and leads to out migration.

Tourism also allows a rural town to remain autonomous and ensures local investment. Development of shops, restaurants, resorts, and recreation facilities can be determined and controlled at the local level. There is no need for the input of large-scale, distantly owned companies. This maintenance of locally directed economic development also ensures that profits remain within the community, rather than being dispersed to outside parties (Power 1996, 223).

Though an economically viable option for rural communities, there are arguments against natural amenity reliance and tourism-based development. However, Ely, with the assistance of the BWCA, is able to combat these challenges and find prosperity.

Rural areas may be located at a distance from other areas so as to be considered too remote or inaccessible (Krannich and Petrzeka 2003, 191). Indeed, Ely is located twenty miles from the next closest town and a one-hour drive from the nearest department store. However, this can be considered a positive attribute of the area. Located at the edge of a wilderness and known as the “end of the road,” Ely cannot be simply a place that is passed through en route to a different destination (Chamber of Commerce 2013). It is this remoteness and distance from urban life that is sought out by tourists. Furthermore, the town does not have to face competition from other areas in close proximity with natural amenities (Krannich and Petrzeka 2003, 191).

Tourism-based employment is more reliable and available for local residents, although often in the service sector. This type of work tends to be seasonal, low-wage, low-skill, and without benefits (Power 1996, 216). While these jobs may not be of the highest quality, it is ensured that local permanent residents will obtain employment. Unlike mining jobs, tourism

work does not require the recruitment of specialized employees. Seasonality is not an issue in Ely, as there are tourism-based economic possibilities all year round. Winter activities include dogsledding, snowmobiling, skiing, snowshoeing, and ice fishing. The spring offers the opening season of open-lake fishing and in the fall, deer and pheasant hunting. Campers, hikers, fishers, and boaters consume the town during the summer months (Chamber of Commerce 2013). There are consistent business and employment needs.

Tourists can put environmental pressures on the land, causing damage and diminishing the attractiveness of natural amenities (Krannich and Petrzelka 2003, 196). However, the primary natural amenity in Ely, the BWCA, is federally regulated and maintained through a strict code of conduct. The most intrinsic characteristic of the wilderness area is that travelers should produce little impact (BWCA 2012).

A final argument against tourism and natural amenity development is that it is not an option for all rural areas, as some do not possess aesthetically pleasing natural features (Krannich and Petrzelka 2003, 191). For Ely, this is not an issue assuming the BWCA will remain pristine and will maintain the ability to attract tourists with the nature-based experience it provides.

### Concluding Thoughts

Considering the many facets of both tourism and natural resource extraction as rural development options, the issue of sustainability is exceedingly important. In the specific case of Ely, Minnesota it may seem fortunate to have the opportunity to return to the past way of making a living through mining. However, the boom period produced by mining is temporary and eventually results in economic downturn. Extraction processes spoil the land, causing pollution and destroying the aesthetic qualities of the natural environment. New jobs will be created, but

will eventually disappear as the resource is depleted. With an increase in unemployment and subsequent population loss, economic growth and stability decreases. The sustainability of tourism contradicts that of mining. It is a strategy that inherently protects the natural features that serve to attract people to rural areas, encouraging lasting development. With the federal regulation of the Boundary Waters Canoe Area, this protection is ensured. The jobs created in the tourism sector capitalize on local workers and maintain wealth locally. In Ely, the year-round nature of tourism provides stable employment for residents. The nature of tourism is continuous and sustainable, rather than providing a temporary period of economic prosperity.

The contemporary landscape of northeastern Minnesota, the rural town of Ely, and the Boundary Waters Canoe Area Wilderness is one of challenges and possibilities. The mining potential of a copper-nickel-precious metals deposit in the region is in an early exploratory state, yet has the possibility to greatly alter the landscape and economy of Ely and the BWCA. If determined to be a suitable path for economic development, the current stability provided by the natural amenities and tourism will be sacrificed. Mining and natural amenity-based tourism inherently contradict each other; Ely will not be able to maintain both simultaneously. Mining is a business controlled by outside parties, highly dependent on the size and quality of a deposit, and easily influenced by global market prices. It can provide a boom period of increased employment and population, but mineral resources eventually run out or no longer maintain a quality that reaps significant economic benefits (England and Brown 2003, 322-323), rendering mining an unsustainable development method for rural communities. Rural tourism requires the existence of natural amenities, provides primarily service-sector employment, and is often seasonal. Ely, however, is already equipped to handle these challenges and succeed. The tourism

offered by the Boundary Waters Canoe Area is unique in that allows for enjoyment throughout the whole year, also providing non-seasonal jobs for local residents. Presented with the choice to develop mining or continue with current tourism, Ely should recognize that the risks associated with mining outweigh the potential benefits, and that the current landscape of the area will be sacrificed in exchange for a temporary mining boom.

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