

Bengal Solutions

REPORT



Idaho State
UNIVERSITY

Economic Impact Study
Of the
Paris Hills Mining Project
On
Bear Lake County

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Executive Summary

The Paris Hills Mine represents a significant economic opportunity for the Bear Lake region. The influx of capital is anticipated to benefit the local economies as jobs will be created and residents spend money on local products and services. Furthermore, local businesses will likely see an increase in customers and several new businesses are likely to open.

As the mine grows from the initial hiring in late 2014 to full scale operations mid-2016 it is anticipated to employ just over 350 people. Local businesses will likely see a matching increase in staffing needs due to the increase in economic activity brought about by the new mine employees. Using what is called an economic “multiplier,” it is anticipated that for every new dollar spent in the region, that dollar will circulate again.

Labor costs represent almost half of the total dollars spent at the mine, and we believe that the population distribution will mimic other similar mines in the area. This means nearly 80% of the payroll of the mine is projected to be injected into the local economy. At this time it is unclear how much the mine will be spending directly into the local economy as heavy equipment must be purchased from large operator like Caterpillar, and some of their supplies must be purchased from specialty providers, but some money will be spent, however it is not measurable at this time.

Paris Hills Mine Proposal

The Paris Hills phosphate project has hit several milestones, and is on schedule to begin operations 4th Quarter of 2014. Permitting activities have also been on schedule, and initial capital has been raised. Stonegate, the company that is preparing the mine for development, recently raised \$11.5 million to continue with the initial stages of activity, and the company hopes to raise, through outside financing, an additional \$121 million to cover initial costs of construction and working capital. The mine encompasses 2,495 acres and is located just west of Bloomington and Paris, Idaho. An image of the focal area is shown below:



Paris Hills Property Location Map

Paris Hills Mine Costs Analysis

Mine Expense Distribution

The mine is expected to incur costs of \$69.49 per Metric tonne mined. The costs are broken down into general categories listed below. As the mine spends money, a portion will remain in the local economy and some will be expended elsewhere. The amount that remains in the local

economy will be a bi-product, in large part, based on the availability of the resources that are need. The mine will need heavy equipment, tools, chemicals, and so forth, and if these resources can be found locally the money has a greater chance of remaining in the region, however, if it is not available locally, the mine will have to seek its resources elsewhere. The following is a chart of how the mine will spend the expected \$69.49 per metric tonne on a percentage basis:

Mine Expenses Quantified

The mine represents a great opportunity for existing businesses and for the entrepreneur in the Bear Lake County and surrounding area. One of the mines major expenses is labor which averages just over 40% of the mines expenses over the anticipated life of the mine. For the overall expected annual expenditures see the table below:

Yearly Mine Expenditures by Resource Requirement						
(amounts in 000)						
	Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-18
Metric Tonnes Mined (estimated)	300	750	875	900	1,000	930
Labor	\$ 13,726	\$ 20,490	\$ 22,855	\$ 23,109	\$ 23,233	\$ 23,358
Ground Control Supplies	\$ 3,857	\$ 9,642	\$ 11,249	\$ 11,571	\$ 12,856	\$ 11,956
Power	\$ 2,711	\$ 6,776	\$ 7,905	\$ 8,131	\$ 9,034	\$ 8,402
Surface Crushing	\$ 1,543	\$ 3,857	\$ 4,500	\$ 4,629	\$ 5,143	\$ 4,783
Receding Face Costs	\$ 814	\$ 2,033	\$ 2,372	\$ 2,440	\$ 2,711	\$ 2,521
Propane	\$ 793	\$ 1,981	\$ 2,311	\$ 2,377	\$ 2,641	\$ 2,456
Administrative	\$ 793	\$ 1,981	\$ 2,311	\$ 2,377	\$ 2,641	\$ 2,456
Other	\$ 438	\$ 1,095	\$ 1,277	\$ 1,314	\$ 1,460	\$ 1,358
Diesel	\$ 188	\$ 470	\$ 548	\$ 563	\$ 626	\$ 582
Total expenses	\$ 24,863	\$ 48,325	\$ 55,328	\$ 56,511	\$ 60,345	\$ 57,872

Economic Impact in Jobs

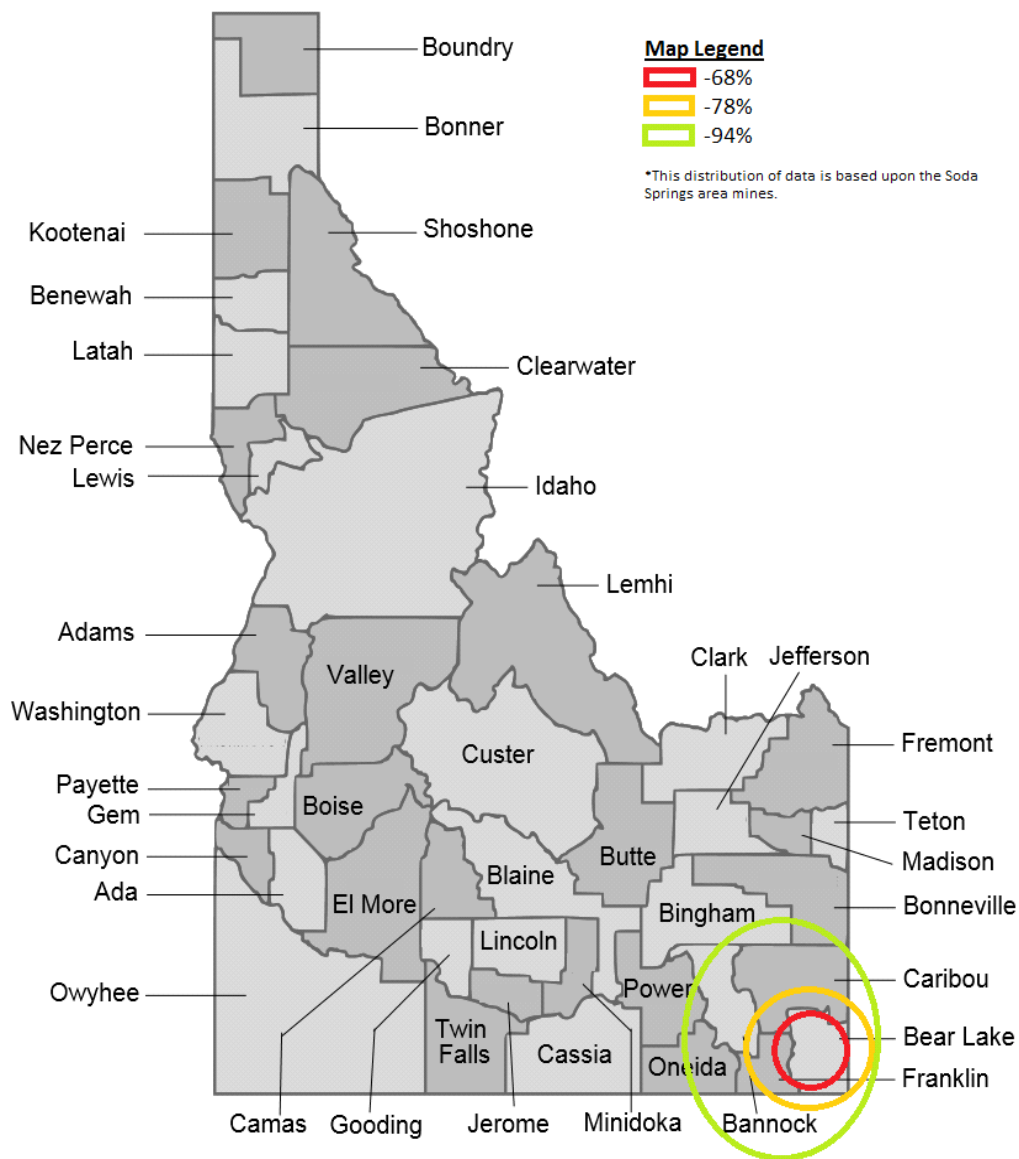
The mine expects to hire a total of 358 employees when running at full capacity. However, there will be an initial hiring several months before the mine opens with additional employees added as new phases of the mine begin. As the mine matures, the operator (Stonegate) anticipates hiring additional employees as needed, but as scheduled, this is what ramp-up would look like in terms of jobs. Please see the Employee Hiring Phase chart below (provided the mine begins operations on schedule as planned):

Entry level employees will earn approximately \$30-\$35 per hour which will comprise the majority of the mine's employees. Many miners will work approximately 40-45 hours per week for an annual salary of approximately \$71,000, with overtime. Mid-level and upper management will earn a salary of approximately \$80,000- \$100,000 per year. The mine will also hire other highly qualified industry professionals with required the required expertise to advance the project.

Total Job Impact

The mines specific contribution of jobs at peak capacity is estimated to be 358 employees, but the region will benefit from the increased economic activity. Based upon the Regional Input-Output Multiplier from the Bureau of Labor Statistics, an additional 350 full-time jobs are likely to be created within the local business community to support the influx of money and workers. These additional jobs will likely be created in industries such as retail, services, entertainment and within the municipal government.

Mine Employee Distribution



The majority (~78%) of the workers are estimated to work within a 1 hour drive of the mine’s location. Based on observations made at the mines in Soda Springs it is likely that some people will travel from as the Logan or Pocatello areas. This means that up to 94% of all employees will live within a 1.5 hour drive of the mine location. The remaining 6% are anticipated to be industry experts that will be brought in for their specific knowledge. It is also a distinct likelihood that workers who pursued “oil money” in North Dakota will choose to return to the

area based on the new mining jobs and overall increased opportunities in the area. Mining in the Bear Lake Region differs from the Oil industry in North Dakota in that the employment positions are stable, in one place, and not based on continual exploration. The majority of the people that will work at the Paris Hills Mine Project will likely be permanent residents of the area. It is anticipated that the influx of 358 direct jobs and 350 indirect jobs will greatly reduce unemployment, and will be a boon to the local economy.

Mine Employee Impact

Expected Economic Impact

Based on forecasted financial projections, the mine will pay employee wages of approximately **\$25.5 million annually**. We estimate that nearly 80% of these wages will be earned by employees who live within a 1-hour drive from the mine. Using Regional Input-Output Multiplier (RIM II) model this means that the total impact of the labor dollars spent on an average production year is estimated to be over **\$50 million**.

Spending Habits

The chart on the following page illustrates the typical break-down of how an average laborer will spend their money. The percentages are based on the Bureau of Labor statistics Consumer Expenditure Survey. These numbers are estimates based on averages and should not be misconstrued as conclusive as spending habits may vary but the data pool is large, and represents national data. The chart is based on the income being \$71,000 annually.

These numbers are estimates based upon observations in other markets and are not to be misconstrued as conclusive but represent an “educated estimate.” However, these numbers can give helpful insight into the expected growth in specific industries. For existing businesses and for aspiring entrepreneurs this massive influx of capital represents a great opportunity. For example, some of the new workers will have families that will need childcare, new shoes, and

want to enjoy some recreation on a Friday night. How will they spend their money? Industry spending is a good indicator, but local businesses should begin thinking about ways that they can capture some of these dollars in the coming years.

Based on the anticipated geographic distribution of future employees and the way that those employees will likely spend their money, the Paris Hills Mine represents a significant economic opportunity for all stakeholders in the region.

Impact of Spending Habits

Using the above allocations and the annual mine projections the following table was constructed that shows the estimated aggregate dollar amounts spent by all miners in each category. Please note that the values in this table are in thousands of dollars.

Annual Spending Distribution for all Employees						
Amounts in 000's						
Category	Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-18
Housing	\$2,594	\$6,485	\$7,565	\$7,781	\$8,646	\$8,041
Transportation	\$1,846	\$4,614	\$5,384	\$5,537	\$6,153	\$5,722
Savings	\$981	\$2,453	\$2,862	\$2,944	\$3,271	\$3,042
Food at Home	\$971	\$2,429	\$2,833	\$2,914	\$3,238	\$3,012
Health Care	\$690	\$1,724	\$2,012	\$2,069	\$2,299	\$2,138
Discretionary	\$583	\$1,457	\$1,700	\$1,749	\$1,943	\$1,807
Food at Dining	\$534	\$1,336	\$1,558	\$1,603	\$1,781	\$1,656
Utilities	\$505	\$1,263	\$1,473	\$1,515	\$1,684	\$1,566
Entertainment	\$495	\$1,239	\$1,445	\$1,486	\$1,651	\$1,536
Clothes and Shoes	\$311	\$777	\$907	\$933	\$1,036	\$964
Education	\$204	\$510	\$595	\$612	\$680	\$632
Total Income	\$9,713	\$24,287	\$28,334	\$29,143	\$32,382	\$30,116

If spending by industry stays consistent with national numbers, this means employees of the mine will have roughly an additional \$583,000 in discretionary spending in Year 1 of the mines operations, and nearly \$1.5 million in Year 2. These are the expected spending behaviors of mine employees based on industry. Specific application of each of these categories is difficult to pinpoint. However, a restaurant owner might look at the above chart and see that based on the typical spending habits of individuals, an additional \$500,000 dollars are likely to be spent in my specific industry once the mine is opened. This number grows from \$500,000 to \$1.6 million within a few years. The restaurant owner may want to consider how they can capture a portion of this additional revenue stream.

Conclusion

The numbers expressed in the report are not meant to be conclusive; however, our purpose in preparing this document is to offer guidance to local businesses to enable them to see the opportunities that the Paris Hills Mine Project presents in their area. Existing businesses should begin to prepare for possible expansions. Store owners and service providers will likely experience an increase in revenues as additional dollars circulate and re-circulate in the local economy. Certain industries will see higher growth and opportunities than other industries but capturing additional revenue will require effort and preparation on the part of local businesses. Local business owners should be excited about the prospects of the Paris Hills Mining Project and should review their current business resources and identify the future needs of the mine and mine employees.