



**APPLIED ECONOMICS**

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**ECONOMIC IMPACTS OF  
CRYSTAL GEYSER ON  
SISKIYOU COUNTY, CALIFORNIA**

**PREPARED BY:**

**APPLIED ECONOMICS LLC  
11209 N. TATUM BLVD, SUITE 225  
PHOENIX, AZ 85028**

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## IMPACT SUMMARY

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The economic benefits resulting from the attraction of Crystal Geysers to Siskiyou County depict the on-going operations impacts of this company and interactions with other local businesses. These impacts can be described in terms of direct and indirect jobs, personal income and economic activity or output that would be generated by the project. Indirect impacts are the result of the multiplier effect and capture supported supplier and consumer businesses and their employees that would benefit from this new operation.

Crystal Geysers is building a new water bottling facility in Siskiyou County. Assumptions regarding construction costs and labor, non-local contractors, projected number of new jobs used in this analysis were provided by Crystal Geysers. The company would make a total capital investment of \$71.7 million including \$38.3 million in equipment, \$27.3 million for building purchase and renovation, \$1.2 million for land, and \$4.9 million for other soft costs. Once construction is complete, they are expected to employ about 60 people at an estimated average wage of \$32,400, based on the current average annual wage for the county.

**Construction Impacts.** The construction of the new Crystal Geysers bottling facility is generating a significant amount of construction expenditures in the county. Of the total capital investment of \$71.7 million, an estimated \$4.7 million will be spent on activities that will generate a local economic impact. The multiplier effect of this \$4.7 million in direct construction spending will result in a total increase in economic output of about \$5.4 million (Table 1). The approximately 50 direct and indirect FTE jobs created during the two year construction period will result in over \$2.3 million in personal income in Siskiyou County.

**TABLE 1  
CONSTRUCTION IMPACT OF CRYSTAL GEYSERS  
ON SISKIYOU COUNTY**

Year	Direct			Indirect and Induced			Total		
	Construction Expenditures	Jobs	Personal Income	Output	Jobs	Personal Income	Output	Jobs	Personal Income
2015	\$3,540,376	36	\$1,583,984	\$540,493	4	\$142,571	\$4,080,869	40	\$1,726,555
2016	\$1,127,661	11	\$504,522	\$166,328	1	\$43,862	\$1,293,989	13	\$548,384
<b>Total</b>	<b>\$4,668,037</b>	<b>47</b>	<b>\$2,088,506</b>	<b>\$706,821</b>	<b>5</b>	<b>\$186,433</b>	<b>\$5,374,858</b>	<b>52</b>	<b>\$2,274,939</b>

**Non-Local Contractor Impacts.** In addition to the regular construction impacts, there are a number of non-local contractors involved in the construction that are staying in hotels, trailer parks, rental homes and other accommodations in Siskiyou County. Based on the number of non-local contractors and the length of time they were in the county, this translates into 11,110 person-nights over two years. Data from the California Office of Tourism (Visit California) indicates that the average business overnight visitor spends \$191 per day on food, lodging, retail, entertainment and local transportation. However, since these contractors are working during the day, it is likely that they spend less on retail, food and recreation than the average visitor. Thus, daily visitor spending patterns were adjusted to account for this. The average per night lodging

spend was also adjusted for individual staying in hotels or rental homes versus other types of accommodations. Double occupancy was assumed for all hotels and rental homes. At \$79 per person per day, the 11,110 visitor nights generated by non-local contractors would translate into estimated spending of \$877,000 in the local economy in 2015 and 2016 combined (Table 2).

**TABLE 2  
ESTIMATED NON-LOCAL CONTRACTOR EXPENDITURES**

Type of Expenditure	Annual Expenditures	
	2015	2016
Lodging	\$329,600	\$114,840
Food & Beverage	\$186,953	\$65,139
Transportation/Gas	\$78,080	\$27,205
Retail	\$56,086	\$19,542
<b>Total Non-Local Contractor Expenditures</b>	<b>\$650,719</b>	<b>\$226,725</b>
<b>Total Contractor Days</b>	<b>8,240</b>	<b>2,871</b>
<b>Average Expenditure per Day</b>	<b>\$79</b>	<b>\$79</b>

Sources: Visit California/TNS Travels America, 2014 Domestic Travel to California.

These non-local contractor expenditures support local jobs and payroll in the hospitality and retail industries. All total, the \$877,000 in contractor spending will create in a total economic impact of \$1.2 million in Siskiyou County over two years, in addition to the regular construction impacts (Table 3). This corresponds to about 15 jobs and \$393,000 in personal income at local retail and hospitality establishments.

**TABLE 3  
SPENDING IMPACTS FROM NON-LOCAL CONTRACTORS  
CRYSTAL GEYSER**

	Direct			Total		
	Contractor Spending	Jobs	Personal Income	Output	Jobs	Personal Income
2015	\$650,719	9	\$230,025	\$891,180	11	\$291,791
2016	\$226,725	3	\$80,146	\$310,507	4	\$101,666
<b>Total</b>	<b>\$877,444</b>	<b>12</b>	<b>\$310,170</b>	<b>\$1,201,687</b>	<b>15</b>	<b>\$393,457</b>

**Operations Impacts.** The operations impacts include the on-going year to year impacts that would be created by the company. The company would create 60 jobs with an estimated annual payroll of \$1.94 million. The multiplier effect of this increase in economic activity on the region would result in a total output impact of \$36.8 million annually in Siskiyou County (Table 4). Total output includes the value of production at Crystal Geyser (direct output), as well as the value of local supplier purchases (indirect output) and the value of employee spending (induced output). Note that these annual operations impacts will not likely occur before 2017 due to delays in construction permitting. The permitting delay has effectively created a \$36.8 million loss in annual economic activity in the county in 2016.

**TABLE 4  
ANNUAL OPERATIONS IMPACT OF CRYSTAL GEYSER  
ON SISKIYOU COUNTY**

Direct			Indirect and Induced			Total		
Output	Jobs	Personal Income	Output	Jobs	Personal Income	Output	Jobs	Personal Income
\$29,740,790	60	\$1,944,420	\$7,022,812	40	\$1,855,171	\$36,763,602	100	\$3,799,591

**Household Spending.** The approximately 100 direct, indirect and induced jobs created by the company would result in \$3.8 million in total personal income in the county each year. This translates into potential annual household spending of \$3.6 million, a portion of which will be captured in Siskiyou County.

**Multiplier Effects.** The secondary or indirect impacts are called multiplier effects. Multiplier effects are a way of representing the larger economic effects on the local economy. The multipliers effects translate an increase in output (loosely defined as sales, less profits) into a corresponding increase in jobs and personal income. The multipliers used in this analysis are from IMPLAN, a national vendor of economic impact software, and are specific to the economic base of Siskiyou County. There are also specific to the bottled water industry. In essence, the multiplier effect represents the recycling of local spending. This recycling process creates new business opportunities.

**Impact Multiplier.** The output multiplier for Siskiyou County used in this analysis is 1.35 for the on-going operations of the company. This means that for every \$1 million of output created by Crystal Geyser, an additional \$350,000 in economic activity is generated in the local economy, along with 1.4 jobs and \$62,400 in payroll at *other local businesses*.

**Total Revenue Impacts.** In addition to supporting jobs and output at related businesses in the area through multiplier effects, Crystal Geyser would also generate local tax revenues. Total on-going local revenue impacts beginning in 2017 are estimated at \$851,000 per year (Table 5). There will be additional sales tax impacts during the construction period related to non-local contractors as detailed below.

**TABLE 5**  
**ANNUAL LOCAL REVENUE IMPACT OF CRYSTAL GEYSER**  
**ON SISKIYOU COUNTY**

Year	Direct	Indirect		Total	
	Property	Property	Sales & Bed Tax	Property	Sales & Bed Tax
2015 (Construction)	\$0	\$0	\$26,151	\$0	\$26,151
2016 (Construction)	\$0	\$0	\$11,463	\$0	\$11,463
2017 and beyond	\$636,556	\$195,745	\$18,808	\$832,301	\$18,808
Total	\$636,556	\$195,745	\$56,422	\$832,301	\$56,422

**Direct Revenues.** Direct property taxes that would be paid by Crystal Geyser based on a capital investment of \$28.52 million in land, building purchase and renovations and \$38.25 million in equipment are estimated at \$637,000 per year. This revenue estimate is based on a property tax rate of 1.052 percent. Personal property is depreciated using a 15 year schedule based on the year of purchase.<sup>1</sup>

**Indirect Revenues.** There would also be indirect revenues generated by non-local contractors as well as permanent employees at Crystal Geyser and employees at other supported local businesses. Using the results from the economic impact analysis, it is possible to estimate indirect tax impacts.

- Indirect sales and bed tax revenues in 2015 and 2016 are generated by non-local construction contractors. Based on estimated spending of \$877,000 on food, lodging and retail over two years, these contractors could generate \$12,000 in local sales tax revenues (based on a rate of 1.5 percent) and \$26,000 in bed tax revenues (based on a rate of 8 percent).<sup>2</sup> Although these revenues are non-recurring, they are significant during the construction period.
- Indirect sales tax revenues in 2017 and beyond include sales taxes from direct employees and employees at supported local businesses estimated at \$19,000 per year. Employee expenditures are calculated by multiplying total personal income times 33 percent, times the local sales tax rate of 1.5 percent.<sup>3</sup> Additional sales taxes would be generated to the state.
- Indirect property taxes from permanent employees are estimated at about \$196,000 per year based on average assessed per service population (population + employment) times supported population and jobs, times the county average property tax rate.

<sup>1</sup> The effective value of equipment purchased in 2014 through 2016 is estimated at 84 percent of total cost in 2017 based on 15 year depreciation schedules.

<sup>2</sup> Only lodging expenditures on hotels were included in the bed tax calculation based on the number of non-local contractors that reported staying in hotels and an average room rate of \$80 per night.

<sup>3</sup> According to the Census Bureau Consumer Expenditure Survey, persons in the median income range spend about 33 percent of their income on taxable goods.

The operations of Crystal Geyser described in this analysis could create significant economic benefits for Siskiyou County. These benefits include the construction impacts as well as the ongoing impacts of operations, once the facility is completed. The company would not only create basic jobs and payroll in the county, but would create demand for other local businesses based on supplier purchases and employee spending. In addition, the company would generate local tax revenues through their capital investment and through their employees.