

*Proposed Bottled Water Facility: An Economic Analysis
Approach and Preliminary Estimates
Cascade Locks Community Meeting
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This Evening

- Background
- Economic Study Objectives
- Approach
- Profile Study Area
- Preliminary Economic Effects
- Next Steps
- Questions

Background - Sorte

- Banking, federal/state educational research project, retail, manufacturing, OSU, elected office
- Cover from the top of the Cascades to the eastern border of Oregon
- Impact analysis, teaching, presentations, newspaper columns, blogs and workshops



Purpose of Study

- Profile the economic setting for the facility – Cascade Locks/Hood River County economy now and future
- Estimate the economic effects of the construction (short run) and operations (long run) of the proposed water facility at the Hood River County and State levels
- Complete a peer reviewed report summarized in a PowerPoint presentation
- Provide community presentations of the findings

Approach

- Profile the study area – Cascade Locks/Hood River County from multiple public and private data bases
- Construct an initial input-output model using a purchased software – *IMpact PLANning* (IMPLAN)
- IMPLAN is a model that was developed for the U.S. Forest Service and the Federal Emergency Management Agency 30 years ago. It has been refined over the last three decades first by the University of Minnesota and now by the Minnesota Implan Group, Inc.
- Ground truth the profile, the model, and the community's expectations through interviews
- Edit the model from the ground-truthing data base checks, interviews and information from Nestle
- Estimate the economic effects of the facility construction, facility operation, and other economic activity that the facility may prompt
- Draft a report and submit it for review for proprietary information to Nestlé and disciplinary review to other economists
- Present the report to the community

Data Sources

- IMPLAN I-O Model Incorporates 30+ Primarily Federal Data Bases
- Bureau of Labor Statistics
- Census Bureau
- Bureau of Economic Analysis
- American Community Survey



One Stop Data Sources



OREGON COUNTY MONITOR - A report for each county in Oregon that includes measures of families' ability to meet their basic needs. (Current site is still in Beta mode. Please let us know if you have comments or suggestions.)

OREGON REGIONAL ECONOMIC ANALYSIS PROJECT - A web-based program to create graphic trends analysis of local economic indicators and generate analysis of local employment growth.

OREGON RURAL COMMUNITIES EXPLORER - An online toolset that includes data and other information to increase understanding of rural issues including vitality and change in Oregon's rural communities.

Rural Communities Explorer	
Communities Reporter Tool	
Unemployment Rate	10%
Percentage of Households with Self-Employment Income	13%
Employment	
Agriculture, Forestry, Fishing, Mining*	4%
Arts, Entertainment, Recreation, Accomodation	12%
Construction	12%
Education, Health, Social Services	12%
FIRE: Finance, Insurance, Real Estate	1%
Information	1%
Manufacturing	12%
Other Services	6%
Professional, Science, Management, Administration	8%
Public Administration	6%
Retail Trade	13%
Transport and Utilities	9%
Wholesale Trade	4%
*Adjusted for fresh salmon sales	
Travel Time to Work	
<10 minutes	21%
10-19 minutes	10%
20-29 minutes	13%
30-44 minutes	31%
45-59 minutes	9%
60+ minutes	16%

Input/Output Models Rely on Export Base Theory

- “Basic sectors”: bring money into a region by exporting goods and services; this money is respent in other sectors.
- Respending is often referred to as ripple effects or the multiplier.
- “Service sectors”: capture the respending of the basic sector dollars
- In “export base” theory, the regional economy is “dependent” on the basic sectors.
- Bottled water would be a basic sector in Cascade Locks.

Types of Economic Effects

- **Direct Effects** - Changes in the industries that respond to increases or decreases in demand from outside the region – bottled water
- **Indirect Effects** - Changes in the intermediate industries which supply the directly affected industries
- **Induced Effects** - Changes due to people/households spending the incomes they receive

Limitations

- Data is reliable at the county level and less so at the city level.
- IMPLAN is a linear model that relies on national averages, which we adjust when we can make a reasonable estimate.
- When the interviews are complete, we will add the third level of economic impacts – what economic and social activity Nestle or any similar employer could prompt.
- We will add a discussion on nonmarket and environmental considerations.
- ODOT decisions could significantly affect these impacts. We will do the projections with and without a new interchange.
- Tax impacts in terms of dollars are most difficult to project, yet they are in the employment effects.

Cascade Locks

Population:	Declining (-2%)
Age :	Increasing (40.8)
Housing:	Competitive (\$163K)
Commuters:	>30 min (~50%)
Education:	H.S. (82%) 4 yr. (10.4%)
Schools:	Uncertain
Avg. Earnings:	\$32,500 (\$15-\$16 per hr.)
Unemployment:	10%

Facility Construction

One Time \$50 million if Hood River General Contractor (could significantly increase depending on how much of the equipment is fabricated onsite and/or purchased locally)

<i>Impact Type</i>	<i>Employment Full & Part-Time</i>	<i>Labor Income (\$)</i>	<i>Total Value Added (\$)</i>	<i>Output (\$)</i>
Direct Effect (Nestle)	255	11,216,025	12,530,341	26,073,629
Indirect Effect (Suppliers)	34	1,587,534	2,347,926	4,126,118
Induced Effect (Household Spending)	66	2,191,761	3,941,793	6,431,945
Total Effect	355	14,995,320	18,820,060	36,631,692

Facility Operations w/53 employees (25-30 residents)

<i>Impact Type</i>	<i>Employment Full & Part- Time</i>	<i>Labor Income (\$)</i>	<i>Total Value Added (\$)</i>	<i>Output (\$)</i>
Direct Effect (Nestle)	30	1,652,919	2,345,576	21,360,428
Indirect Effect (Suppliers)	20	1,308,165	1,832,327	3,220,864
Induced Effect (Household Spending)	20	795,103	1,428,004	2,341,189
Total Effect	70	3,756,186	5,605,906	26,922,480

Next Steps

- Finish interviews
- Complete model edits
- Run impacts
- Draft report December 2011

Questions?