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Bureau of Business and Economic Research

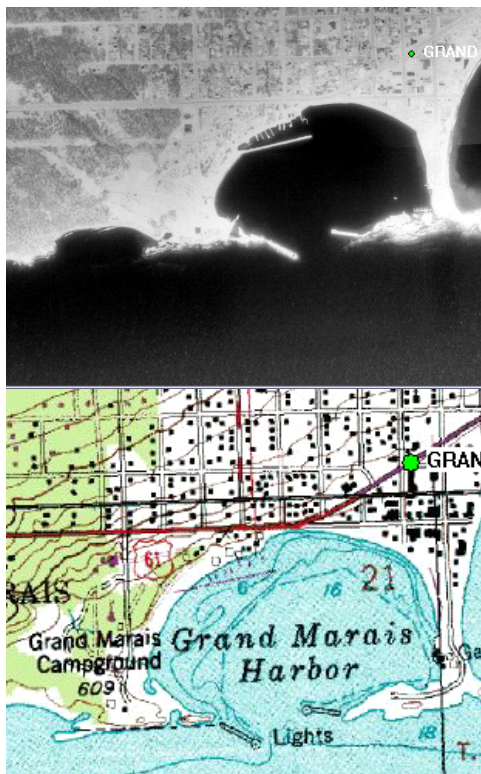
*Research Report*

## Grand Marais Harbor Expansion: Economic Impact, Three Scenarios

June 2005

For

Minnesota Department of  
Natural Resources  
and  
City of Grand Marais, Minnesota



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BBER would like to acknowledge the generous assistance of DNR personnel, Tom Peterson, Area Supervisor- MN DNR Trails & Waterways; Dave Oltman, Silver Bay Harbor Master; and Dave Gould, Knife River Harbor Master.

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## *Scope of Work*

### **Project Overview**

Community stakeholders in Grand Marais, MN have proposed an expansion to the recreational marina and harbor facilities, especially as used by tourists to Cook County. The University of Minnesota Duluth Labovitz School research bureau was requested to analyze the economics involved, and to estimate the impact of the proposed expansion. Tourism, as measured by the industry sectors hotel/motel, food and beverages, and attraction and amusement attendance, is a large part of the economic base of Cook County and Grand Marais, and impacts to these sectors from changes in marina facilities will be significant to the local and regional economy. The methodology of this impact study includes direct, indirect, and induced measures of employment, value added, and output impacts.

Stakeholders may also want to consider such questions as: How do the economic impacts of the trailerable, sail, cruiser, seasonal and “guest” boaters compare to other potential uses of the site? Will the facility complement existing local businesses? BBER hopes that the following economic impact estimates will assist stakeholders to address these and other questions.

### **UMD/BBER Deliverables**

1. Estimate operating impacts for Employment, Output and Value Added effects of the Grand Marais Harbor expansion, Grand Marais, MN.
2. A final written report that presents the findings and analysis.
3. An oral PowerPoint presentation of the BBER findings

The UMD Bureau of Business and Economic Research (BBER) has agreed to study and estimate the economic impacts of Grand Marais Harbor expansion on the economics of Cook County, MN. The economic model used was IMPLAN. The impact of three possible configurations was estimated: large (250 slips), medium (165 slips), and small (75 slips). The results are presented below as a written report, and as a PowerPoint presentation. Estimates based on the input-output model IMPLAN, include direct, indirect and induced effects for the measures of Employment, Output and Value Added impacts.

Note: The model’s definition of indirect spending defines indirect effects as rounds of business to business purchases caused by Grand Marais marina and harbor expenditures. Induced impacts are also estimated, measuring impacts on all county industries caused by expenditures from new household income generated by the direct and indirect effects. These indirect effects look at business to business spending; induced effects measure business employees spending their new

income. BBER reviewed relevant previous studies of the harbor/marina facilities. Please see the Appendix material for selected data and comparisons.

The BBER worked closely with the stakeholders in Grand Marais in determining key assumptions and inputs in the development of the IMPLAN model. The key inputs required for this model included: number of local and non-local visitor boaters, dollar expenditure of local and non-local visitor boaters, types of boats and ships, and miscellaneous data as required. Revenue from seasonal and transient slip fees are assumed to be dedicated to construction and maintenance of the harbor facilities.

It was agreed that all study area definitions and impact model assumptions must be provided and agreed on before work with the model begins.

## Study Area

Grand Marais City; Cook County, MN.



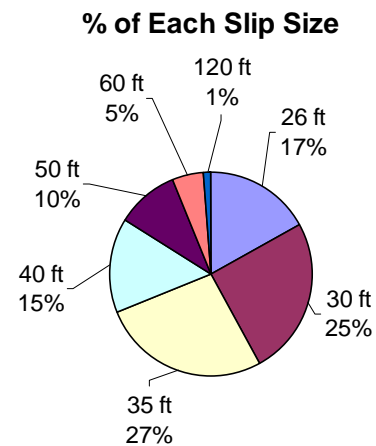
Source: [http://www.dot.state.mn.us/statemap/pdf/north\\_east.pdf](http://www.dot.state.mn.us/statemap/pdf/north_east.pdf)

## Assumptions

The assumptions used for the economic impact model have been set based on secondary data from previous marina impact studies as well as data estimated with the assistance of information provided through the Minnesota Department of Natural Resources (DNR).

***For a small, medium, and large marina expansion, how many slips, of what sizes, are proposed?***

BBER modeled three scenarios to measure the possible impacts of a proposed marina expansion in Grand Marais: In the smallest scenario, 75 slips are to be constructed in the marina. The medium scenario constructs 165 additional slips, and the largest scenario calls for 250 slips at the Grand Marais marina. To determine the number of slips of each size in these scenarios, BBER needed to assume percentages of sizes of slips in the marina. Percentages used were provided to BBER by the DNR. Note: Scenarios were developed through discussion by the Grand Marais Harbor Advisory Committee.



### Estimate of Slip Percentage by Size for Three Scenarios

Source: MN DNR

Slip Size (ft.)	% of each size
26	17%
30	25%
35	27%
40	15%
50	10%
60	5%
120	1%

***How many days per year do boaters visit the Grand Marais Marina location?***

The next assumption made was in regard to the boater season calendar in Grand Marais, MN. The duration of the boating season was found from the Grand Marais RV Park and Campground web site ([www.grandmaraisrvparkandcampground.com/marina.html](http://www.grandmaraisrvparkandcampground.com/marina.html)). (Note: For this impact, a boater day is defined as a day when a boat occupies a slip in the marina and the occupant is present on the boat.) BBER's estimate of visitor/boater days used the boating season dates of

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May 1-October 15 as the base for calculations of boater days and adjusted this number by DNR provided occupancy rates. Since the majority of the marina related spending takes place between May 1 and October 15, a number within this 168-day total was needed to accurately measure harbor activity in a given year. Based on primary data collected for existing studies from the Recreation Marine Research Center<sup>1</sup> with comparisons studied from the DNR Lake Superior boating study,<sup>2</sup> and the Army Corps of Engineers' Natural Resources Management Gateway Economic Impact Analysis<sup>3</sup>, calculations from weather almanacs from the National Oceanic and Atmospheric Administration<sup>4</sup>, we can estimate the number of boated days for each size of boat. The average boated day data for three size ranges of boat length are as follows.

### Estimation of Average Boated Days per Season by Boat Size

Source: UMD BBER

Number of days per season:	Boat Length		
	21-28 ft	28-40 ft	40+ ft
	26.4	31.0	33.7

Note: these estimates include number of days in the boating season adjusted by weather factors. See appendix for weather calendar estimates.

### *How can we estimate how much marina-related visitor expenditure to predict?*

The inputs into our input-output model were based on calculations and adjustments of “Average Trip Spending” data collected for the Recreation Marine Research Center (RMRC) at Michigan State University. The data used came from the recently completed National Boater Panel Survey (2004) that focused on marinas of the Great Lakes. Data included number of marina establishments, boater spending, marina usage, and marina-related impacts. This survey was used in the Great Lakes Commission Economic Impacts Study at the RMRC website.<sup>5</sup> Also this Grand Marais study replicates the methodology from an RMRC impact case study for the Tower Marina<sup>6</sup> to successfully estimate economic impact from these expenditure data.

Ten categories of spending were used by the RMRC to measure the economic impact of marinas: Lodging, Marina Services, Restaurant, Groceries, Boat Fuel, Auto Fuel, Repair/Maintenance, Marine Supplies, Recreation/Entertainment, and Shopping. The Grand Marais impact assumes

<sup>1</sup> Great Lakes Commission Economic Impacts Study at the RMRC website, <http://www.prr.msu.edu/rirc/rmrc.html>.

<sup>2</sup> Market Study for Boating on the Minnesota Waters of Lake Superior, October 2003, [www.dnr.state.mn.us](http://www.dnr.state.mn.us).

<sup>3</sup> Army Corps of Engineers, Natural Resources Management Gateway, at <http://corpslakes.usace.army.mil/employees/research.html>, see “economic impact analysis.”

<sup>4</sup> National Climate Data Center, NOAA, see <http://www.ncdc.noaa.gov/oa/ncdc.html>.

<sup>5</sup> <http://www.prr.msu.edu/rirc/rmrc.html>.

<sup>6</sup> See above reference to RMRC; also MN DNR representative Larry Killien.

numbers from the 2004 survey to represent boater spending at a marina in the Cook County area. These numbers were adjusted for inflation and estimated for Year 2002 (source: *Bureau of Labor Statistics*) to correlate with IMPLAN model data.

**Average Trip Spending by Segments (\$ Per boat per day).\***

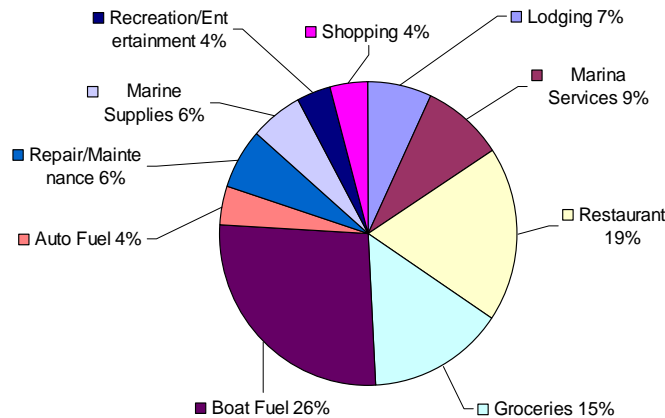
Source: *RCMC Great Lakes Commission Economic Impacts Study*

Category	Marina			
	Less than 21'	21-28'	28-40'	More than 40'
Lodging	\$8.85	\$17.46	\$10.60	\$12.05
Marina Services	\$1.43	\$6.16	\$20.86	\$31.80
Restaurant	\$17.53	\$29.27	\$37.07	\$49.46
Groceries	\$13.41	\$20.72	\$25.28	\$50.28
Boat Fuel	\$22.84	\$46.38	\$43.94	\$78.10
Auto Fuel	\$13.12	\$11.18	\$6.42	\$5.87
Repair/Maintenance	\$10.86	\$11.12	\$10.16	\$19.29
Marine Supplies	\$9.25	\$10.24	\$10.72	\$14.83
Recreation/Entertainment	\$1.30	\$5.42	\$8.20	\$7.57
Shopping	\$2.46	\$5.43	\$6.98	\$15.88

\*See page 6 for an update on the local and non-local impact of marine fuel.

**Spending Category % for Averaged Boat Length**

Source: *Great Lakes Commission Economic Impacts Study*





### ***How were the three scenarios constituted?***

The three scenarios use slip size estimates provided by the DNR, and boat size ranges (21-28, 29-40, 40+) reported for the Great Lakes Commission Economics Impact Study. Boat sizes that were 21 feet or less were not included in the average boater day spending calculations due to trailer-able access and the nature of marina usage. Although data on boat size for the State of Minnesota shows numbers of smaller boats, the boating activity on Lake Superior is reported (by the DNR) to include bigger boats. The DNR reports that the average boat size for marina usage on Lake Superior is 30 feet. The smaller boats would continue to have an economic impact on the study area, but a marina expansion would not generate a significant additional impact from the use of smaller boats. To interpret slip size (DNR data) as boat size (RMRC data), BBER adjusted totals by a percentage adjustment. This adjustment factor was derived from a review of the DNR estimate, comparison data collected for Silver Bay, and calculation by the BBER team. As previously noted: Scenarios were developed through discussion by the Grand Marais Harbor Advisory Committee.

### ***How was the weather factor estimated for the average days boated?***

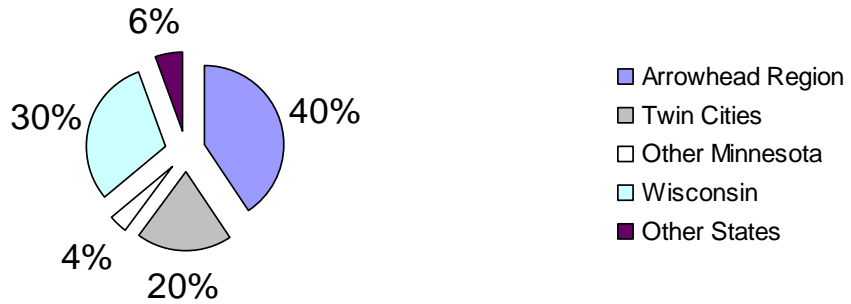
For the three scenarios, the estimate for total boated days was derived from DNR occupancy percentages, and adjusted for a weather factor (*Source: NOAA*). BBER looked at average precipitation and estimated boating days.

### ***How can we estimate what is local spending, and what is non-local spending?***

A true economic impact statement must discount spending by local participants when that spending does not reflect new spending in the study area related to the impact assessment. The last adjustment to assumptions for the model was to calculate non-local spending. Data for non-local spending percentages were available from the DNR for the Lake Superior marina facility nearest to the proposed Grand Marais marina expansion, at the Silver Bay Marina, Silver Bay, MN. These data show total transient and seasonal renters for 2004, as well as point of origin for visitors traveling to the Silver Bay Marina. Total numbers were entered into IMPLAN based on each category's percent of boat-year spending.

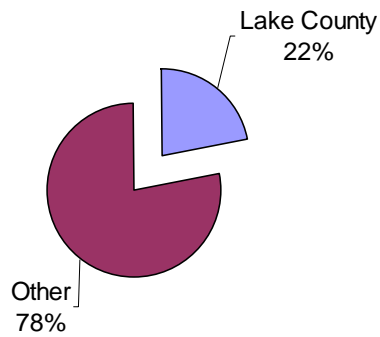
**[Update, 1/31/2006]: Is marine fuel a local or non-local impact? The IMPLAN model used here assumes this expenditure is mostly local. However, a special concern was raised about the local or non-local impact of marine fuel (see table p. 5) given Minnesota State Legislature statute 86A.21 that determines marine fuel under fees collected by the DNR. BBER understands from the DNR that the allocation of fuel revenue to a non-local category would also be misleading, as this revenue is directed at local improvements to marina facilities and contributes to local revenue through such impacts as employment and construction. Although it would be best to calibrate this expenditure more closely, without more information BBER cannot arbitrarily reassign local or non-local impact to fuel. Survey input from the involved sectors would be helpful.]**

### 2004 Visitors to Silver Bay Marina



Source: Silver Bay Marina Harbormaster

### Percentage Local Spending



Source: Silver Bay Marina Harbormaster

## Methodology

**Economic Assessment Data and Models: Definitions.** Economic impacts are made up of direct, indirect, and induced impacts. The following include suggested assumptions for accepting the impact model:

- IMPLAN input-output is a production based model
- Visitor/Tourist impacts come from exports to people residing outside the region.
- Local or export based purchases that represent transfers from other potential local purchases are not counted.
- The numbers (from U.S. Department of Commerce secondary data) treat both full and part time individuals as being employed.
- Assumptions need to be made concerning the nature of the local economy before impacts can be interpreted.
- The IMPLAN model was constructed for the year 2002. 2004 spending was deflated to 2002 dollars.

### Measures.

- Gross Output represents the value of local production required to sustain activities.
- Value Added is a better measure of the impacting industry's contribution to the local community, and approximate addition to the region's Gross Domestic Product.
- Employment is fairly self-explanatory. Part time individuals are counted as being employed. This means that the employment estimates are not in terms of full time equivalents.

### Effects.

- **Direct** – For each dollar outlay for a given industry that amount used for purchase of goods and services from each industry sector model
- **Indirect** – The inter-industry effects of input-output analysis
- **Induced** – The impact of household expenditure in input-output analysis

### Caveats.

- Induced effects should be used with caution.
- IMPLAN input-output is a production based model.
- Visitor/Tourist impacts come from exports to people residing outside the region.
- Local or export based purchases that represent transfers from other potential local purchases are not counted.
- The best way to trace visitor expenditures in a region is through survey, which was not done here.
- The numbers (from U.S. Department of Commerce secondary data) treat both full and

part time individuals as being employed.

- Assumptions need to be made concerning the nature of the local economy before impacts can be interpreted.

**Definition of Measures:**

Gross Output	represents the value of local production required to sustain track activities.
Value Added	wages, rents and interests and profits; value added is a better measure than output of the impact of the industry's contribution to the local community, because value added measures the wages that are spent due to increased economic activity
Employment	is fairly self-explanatory. Remember that both full time and part time individuals are counted as being employed.

## Findings: Three Scenarios, Operating Impact Estimates for Small, Medium and Large Expansions of the Grand Marais Marina

The following three scenario sizes were developed through discussion by the Grand Marais Harbor Advisory Committee. Discussion included issues of minimum activity as well as growth possibilities.

### Scenario 1: Economic Impact of Small Expansion to the Grand Marais Harbor Marina 75 Slips

Source: IMPLAN

Effects/Measure	<i>Direct Effect</i>	<i>Indirect Effect</i>	<i>Induced Effect</i>	<i>Total Effect</i>
<b>Gross Output</b>	\$353,192	\$43,456	\$44,822	\$441,470
<b>Value Added</b>	\$207,455	\$24,026	\$30,185	\$261,667
<b>Employment</b>	6.3	0.6	0.6	7.5

Spending is calculated by expenditures per day per boat times Days Boated.

Spending used to generate the impacts include:

Total Spending	\$455,144
Local Spending	\$101,952
Non-Local Spending	\$353,192

Note: Percent of the slips assumed occupied and generating spending is termed in this study “Days Boated.” The basis for the BBER’s use of estimated days boated number was provided by the DNR occupancy rates and was adjusted by a weather factor. Comparisons with other marina studies would require similar adjustments.

When 75 new marina slips are added to the present Grand Marais facility, the IMPLAN model shows total change from output of all industries in the Cook County study area to be \$441,470. The 75 slip (small expansion) model reports changes in the value added measure totaling an additional \$261,667 for all industries in the study area. Changes in employment for the 75 slip expansion model total almost 8 jobs added to the economy of Cook County. Note: The IMPLAN estimates assume full employment and consider any job as full-time job. These are the most conservative estimates from the model.

**Scenario 2: Economic Impact of Medium Expansion  
to the Grand Marais Harbor Marina  
165 Slips**

Source: IMPLAN

Effects/Measure	<i>Direct Effect</i>	<i>Indirect Effect</i>	<i>Induced Effect</i>	<i>Total Effect</i>
<b>Gross Output</b>	\$777,022	\$95,603	\$98,608	\$971,233
<b>Value Added</b>	\$456,402	\$52,858	\$66,407	\$575,667
<b>Employment</b>	13.9	1.4	1.2	16.5

Spending is calculated by expenditures per day per boat times Days Boated.

Spending used to generate the impacts include:

Total Spending	\$1,001,317
Local Spending	\$224,295
Non-Local Spending	\$777,022

This estimate from the model represents expansion of the Grand Marais Marina by 165 slips, approximately a ninety greater than the smallest expansion and eighty-five less than the largest expansion. This middle number was suggested after consultation with the MN DNR about marina size possibilities. We note that with the addition of 90 slips, total output increased from \$441 thousand to \$971 thousand; value added increased from \$262 thousand to \$576 thousand; and employment increased from almost 8 to almost 17 jobs.

**Scenario 3: Economic Impact of Large Expansion  
to the Grand Marais Harbor Marina  
250 Slips**

Source: IMPLAN

Effects/Measure	<i>Direct Effect</i>	<i>Indirect Effect</i>	<i>Induced Effect</i>	<i>Total Effect</i>
<b>Gross Output</b>	\$1,177,306	\$144,853	\$149,406	\$1,471,565
<b>Value Added</b>	\$691,518	\$80,087	\$100,617	\$872,222
<b>Employment</b>	21.1	2.1	1.9	25.1

Spending is calculated by expenditures per day per boat times Days Boated.

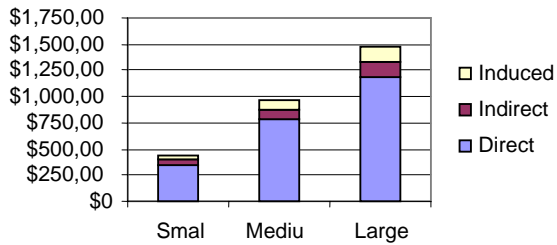
Total Spending	\$1,517,147
Local Spending	\$339,840
Non-Local Spending	\$1,177,307

These numbers represent high-end estimates from the model and were discussed in relation to expectations for growth. In general the BBER IMPLAN model is constructed on the soundest assumptions available for consideration. Opinions from marina operators and speculation from the DNR suggests that a growth trend makes the BBER numbers even more conservative than might be apparent from this report. For instance, the Silver Bay Harbormaster expects that with the expansion of the Grand Marais Marina Silver Bay's traffic would also increase, and as Silver Bay's marina continues to grow, Grand Marais' marina would see increased traffic. For the large expansion, the model reports that with the addition of another 85 slips added to the 165 slips of the medium expansion, total output increases to \$1, 472 thousand; value added increases to \$872 thousand; and employment increases to almost 25 jobs.

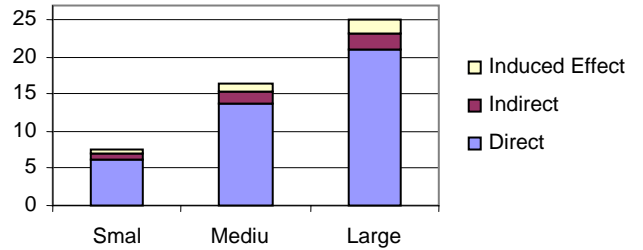
# Graphical Comparisons of Three Scenarios

Source: IMPLAN 2002

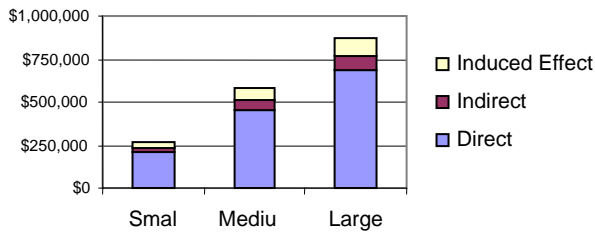
**Grand Marais Marina Expansion Impact  
Small, Medium, Large Scenarios  
Gross Output**



**Grand Marais Marina Expansion Impact  
Small, Medium, Large Scenarios  
Employment**



**Grand Marais Marina Expansion Impact  
Small, Medium, Large Scenarios  
Value Added**



-The Upper Left Graph shows the differences in Gross Output for each scenario.

-The Upper Right Graph shows the differences in Employment for each scenario.

-The Lower Left Graph shows the differences in Value Added for each scenario.



## **Service, Repair, Maintenance and Related Facilities**

Marina services, as a part of total marina revenues can vary widely. Typical business opportunities a marina can offer include such enterprises as retail marine stores, commissioning and winterizing services, outdoor cranes, repair shops for boats, sails, and small engines, on-dock fuel facility, bars and restaurants, summer and winter storage, trailer storage, public boat ramps and courtesy dock, and maritime information centers.

For comparison, BBER looked at revenue at Knife River Marina, where the maintenance facility has been present and quantified. The maintenance facility generated 17.3% of the total marina revenue for 2000; 21.8% for 2001; 30.2% for 2003, and 30.2% for 2004. Figures from the background literature can place this percent as high as 66% for other U.S. marinas, such as Barker Island in Superior, WI. BBER used 50% to represent the percent of revenue that might be possible for Grand Marais from such a facility.

The marina facility at Silver Bay is new (established in 1999) and related business activity shows a growth trend, however, these percentages cannot be directly generalized meaningfully for Grand Marais. Silver Bay doesn't have the service and repair facilities, which is different than the proposal at Grand Marais. The proximity to shopping areas and tourist attractions are too an important difference between Silver Bay and Grand Marais. Barkers Island Marina in Superior, WI, continues to develop its marina facilities and services, can promote itself as a "complete boating center and marina community," and includes slips and storage, service, specialty shops, a boating store, boat sales, and sailing instruction.

Given that marina facilities and services can vary so widely, a detailed view of such a facility as proposed for Grand Marais would have to be decided upon before estimates of this revenue can be modeled.

Repair and Maintenance activity is included in the IMPLAN sector 478 *Other Amusement, Recreation* and although these maintenance activities are not broken out and detailed as separate impacts, the model makes some allowance for this activity. Possibilities for double-counting are reduced by aggregating these activities into this sector of the model.

The impact assumes that slip fee revenue collected is dedicated to return into the marina maintenance and facilities fund.

## Conclusions

Stakeholders have been actively meeting and discussing a proposed marina expansion. BBER hopes these impact numbers will assist policy making and help clarify some of the questions about possible economic impacts from proposed changes to the marina facilities. Policy makers will recognize that a full cost benefit study can show aspects of the decision process that an impact study cannot, for instance the opportunity costs of choosing one option over another. The data used in the impact presented here are secondary data (except for observations and estimates provided by the BBER team and the MN Department of Natural Resources). For important decisions that affect regional economics a survey data collection can provide data estimates for information not available from other sources. The BBER has studied and used some survey data collected for similar regions and found some of these data useful in the Grand Marais impact where survey data for Cook County could not be collected because of cost and scope of the project. Efforts have been made to make reasonable assumptions and to use the best data available.

For more information please contact the Minnesota Department of Natural Resources. Please see the Labovitz School research bureau's web page for a digital copy of this report at: <http://www.d.umn.edu/sbe/departments/bber/>.



## Appendix

Including:

- Silver Bay Statistics and Point of Origin Data
- Knife River Comparisons
- Weather Almanac
- Occupancy Calendar

### Silver Bay Statistics and Point of Origin Data

<b>Slip Size</b>	20	30	35	40	45	50	
<b>Number/boats</b>	1	18	3	8	3	1	34
<b>Avg Boat Size</b>	20	24.9	27.7	33.0	34.7	37	29.53
<b>% of Slips Size</b>	100.0%	82.9%	79.0%	82.5%	77.0%	74.0%	82.6%

Source: BBER calculation

<b>Total Slips</b>	108
<b>Occ. 6/16/05</b>	34
<b>Occ. %</b>	31.48%

Source: BBER calculation

Year	Local	Regional	Other MN	Wisc	Other	Total
1999	22	58	8	20	4	112
%	0.2	0.52	0.07	0.18	0.04	1
2000	40	66	63	68	19	256
%	0.16	0.26	0.25	0.27	0.07	1
2001	37	73	75	108	29	322
%	0.11	0.23	0.23	0.34	0.09	1
2002	38	55	84	86	17	280
%	0.14	0.2	0.3	0.31	0.06	1
2003	31	58	69	94	9	261
%	0.12	0.22	0.26	0.36	0.03	1
2004	32	78	67	100	8	285
%	0.11	0.27	0.24	0.35	0.03	1
2005	7	4	29	3	2	45
5/15-6/14	0.16	0.09	0.64	0.07	0.04	1

Source: Dave Oltman, Silver Bay Marina

<b>Count/State Category</b>	<b># of people</b>	<b>Percent</b>
Lake County, MN	61	22.4%
St. Louis County, MN	44	16.2%
Cook County, MN	5	1.8%
MN County Other	10	3.7%
Twin Cities	54	19.9%
Wisconsin	83	30.5%
Michigan	7	2.6%
Illinois	2	0.7%
Iowa	3	1.1%
South Dakota	2	0.7%
Canada	1	0.4%
<b>Total:</b>	<b>272</b>	<b>100%</b>

Source: Dave Oltman, Silver Bay Marina

### Knife River Background and Comparisons

<b>Sales</b>		<b>2001</b>	<b>2000</b>
	Accessories, parts and apparel	\$ 34,134	\$ 28,560
	Gas and oil	43,004	32,837
	Launch fees	476	2,265
	Other sales	1,171	821
	Pump-out	1,046	720
	Seasonal dockage	100,237	73,647
	Service and repairs	71,166	35,165
	Transient dockage	17,175	14,106
	Travel lift	5,957	2,590
	Winter storage	51,518	11,703
	<b>Total Sales</b>	<b>325,884</b>	<b>202,414</b>
<b>Cost of Sales</b>		<b>127,443</b>	<b>74,696</b>
	<b>Gross Profit</b>	<b>198,441</b>	<b>127,718</b>
	General and Administrative Expenses	172,987	122,455
	<b>Operating income</b>	<b>25,454</b>	<b>5,263</b>
	Interest Expense	1,866	1,230
	<b>Division income</b>	<b>\$ 23,588</b>	<b>\$ 4,033</b>

Source: DNR

Bureau of Business and Economic Research  
 Labovitz School of Business and Economics  
 University of Minnesota Duluth

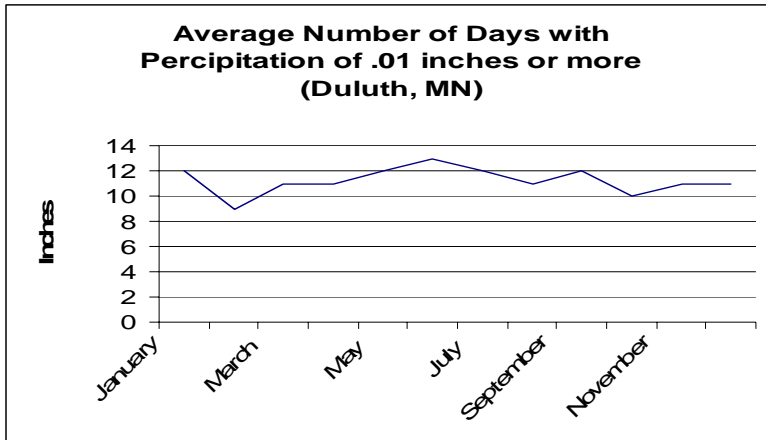
<b>Sales</b>	<b>2004</b>	<b>2003</b>
Accessories, parts and apparel	\$ 56,553	\$ 46,381
Gas and oil	34,614	39,745
Other sales	7,705	5,175
Pump-out	1,007	1,060
Seasonal dockage	126,658	108,207
Service and repairs	134,487	121,883
Transient dockage	8,138	13,077
Travel lift	5,454	7,775
Winter storage	70,304	60,489
<b>Total Sales</b>	444,920	403,792
<b>Cost of Sales</b>	160,763	152,328
<b>Gross Profit</b>	284,157	251,464
General and Administrative Expenses	256,891	223,375
<b>Operating income</b>	27,266	28,089
Interest Expense	1,495	-
<b>Division income</b>	<b>\$ 25,771</b>	<b>\$ 28,089</b>

Source: DNR

**Weather Almanac**

**Average Days of Precipitation, .01 In or more**

<b>DATA THROUGH 2004</b>	<b>YRS</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>	<b>NOV</b>	<b>DEC</b>
DULUTH, MN	63	12	9	11	11	12	13	12	11	12	10	11	11



Source: National Climate Data Center, NOAA, see <http://www.ncdc.noaa.gov/oa/ncdc.html>

**Occupancy Calendar**

**May**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>1</b> 35%	<b>2</b> 17.50%	<b>3</b> 17.50%	<b>4</b> 17.50%	<b>5</b> 17.50%	<b>6</b> 17.50%	<b>7</b> 35%
<b>8</b> 35%	<b>9</b> 17.50%	<b>10</b> 17.50%	<b>11</b> 17.50%	<b>12</b> 17.50%	<b>13</b> 17.50%	<b>14</b> 35%
<b>15</b> 35%	<b>16</b> 17.50%	<b>17</b> 17.50%	<b>18</b> 17.50%	<b>19</b> 17.50%	<b>20</b> 17.50%	<b>21</b> 35%
<b>22</b> 35%	<b>23</b> 17.50%	<b>24</b> 17.50%	<b>25</b> 17.50%	<b>26</b> 17.50%	<b>27</b> 17.50%	<b>28</b> 35%
<b>29</b> 35%	<b>30</b> 17.50%	<b>31</b> 17.50%				

**June**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			<b>1</b> 17.50%	<b>2</b> 17.50%	<b>3</b> 17.50%	<b>4</b> 35%
<b>5</b> 35%	<b>6</b> 17.50%	<b>7</b> 17.50%	<b>8</b> 17.50%	<b>9</b> 17.50%	<b>10</b> 17.50%	<b>11</b> 35%
<b>12</b> 35%	<b>13</b> 17.50%	<b>14</b> 17.50%	<b>15</b> 17.50%	<b>16</b> 17.50%	<b>17</b> 17.50%	<b>18</b> 35%
<b>19</b> 35%	<b>20</b> 17.50%	<b>21</b> 17.50%	<b>22</b> 17.50%	<b>23</b> 17.50%	<b>24</b> 17.50%	<b>25</b> 35%
<b>26</b> 35%	<b>27</b> 17.50%	<b>28</b> 17.50%	<b>29</b> 17.50%	<b>30</b> 17.50%		

**July**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					<b>1</b> 17.50%	<b>2</b> 100%
<b>3</b> 100%	<b>4</b> 100%	<b>5</b> 17.50%	<b>6</b> 17.50%	<b>7</b> 17.50%	<b>8</b> 17.50%	<b>9</b> 35%
<b>10</b> 35%	<b>11</b> 17.50%	<b>12</b> 17.50%	<b>13</b> 17.50%	<b>14</b> 17.50%	<b>15</b> 17.50%	<b>16</b> 35%
<b>17</b> 35%	<b>18</b> 17.50%	<b>19</b> 17.50%	<b>20</b> 17.50%	<b>21</b> 100%	<b>22</b> 100%	<b>23</b> 100%
<b>24</b> 100%	<b>25</b> 17.50%	<b>26</b> 17.50%	<b>27</b> 17.50%	<b>28</b> 17.50%	<b>29</b> 17.50%	<b>30</b> 35%
<b>31</b> 35%						

**August**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	<b>1</b> 17.50%	<b>2</b> 17.50%	<b>3</b> 17.50%	<b>4</b> 17.50%	<b>5</b> 17.50%	<b>6</b> 35%
<b>7</b> 35%	<b>8</b> 17.50%	<b>9</b> 17.50%	<b>10</b> 17.50%	<b>11</b> 17.50%	<b>12</b> 17.50%	<b>13</b> 35%
<b>14</b> 35%	<b>15</b> 17.50%	<b>16</b> 17.50%	<b>17</b> 17.50%	<b>18</b> 17.50%	<b>19</b> 17.50%	<b>20</b> 35%
<b>21</b> 35%	<b>22</b> 17.50%	<b>23</b> 17.50%	<b>24</b> 17.50%	<b>25</b> 17.50%	<b>26</b> 17.50%	<b>27</b> 35%
<b>28</b> 35%	<b>29</b> 17.50%	<b>30</b> 17.50%	<b>31</b> 17.50%			

**September**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				<b>1</b> 17.50%	<b>2</b> 17.50%	<b>3</b> 100%
<b>4</b> 100%	<b>5</b> 100%	<b>6</b> 100%	<b>7</b> 17.50%	<b>8</b> 17.50%	<b>9</b> 17.50%	<b>10</b> 35%
<b>11</b> 35%	<b>12</b> 17.50%	<b>13</b> 17.50%	<b>14</b> 17.50%	<b>15</b> 17.50%	<b>16</b> 17.50%	<b>17</b> 35%
<b>18</b> 35%	<b>19</b> 17.50%	<b>20</b> 17.50%	<b>21</b> 17.50%	<b>22</b> 17.50%	<b>23</b> 17.50%	<b>24</b> 35%
<b>25</b> 35%	<b>26</b> 17.50%	<b>27</b> 17.50%	<b>28</b> 17.50%	<b>29</b> 17.50%	<b>30</b> 17.50%	

**October**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						<b>1</b> 35%
<b>2</b> 35%	<b>3</b> 17.50%	<b>4</b> 17.50%	<b>5</b> 17.50%	<b>6</b> 17.50%	<b>7</b> 17.50%	<b>8</b> 35%
<b>9</b> 35%	<b>10</b> 17.50%	<b>11</b> 17.50%	<b>12</b> 17.50%	<b>13</b> 17.50%	<b>14</b> 17.50%	<b>15</b> 35%
<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>
<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>
<b>30</b>	<b>31</b>					

Source: DNR



## Marina Background: Revenue Comparisons

Source://www.grandmaraisrvparkandcampground.com/marina.html and BBER adjustments.

Rates			
2005 Marina Rates include tax. For dock slips, minimum boat length is 22 feet.			
<b>Seasonal Rates</b> (May 1 - Oct 15)	\$44/foot		
<b>Daily Transient Rates</b>	\$1/foot		
June, July and August			
<b>Daily Transient Rates</b>	\$1/ft		
May, Sept. and Oct.			
<b>Weekly Transient Rates</b>	\$5.50/ft		
June, July and August			
<b>Weekly Transient Rates</b>	\$2.75/ft		
May, Sept., and Oct.			
<b>Monthly Transient Rates</b>	\$16.50/ft		
June, July and August			
<b>Monthly Transient Rates</b>	\$8.25/ft		
May, Sept., and Oct.			
<i>Commercial mooring rates are 50 percent of the above rates. For Daily, Weekly, and Monthly.</i>			
<b>Seasonal Mooring: \$250.00</b>			
<b>On-Shore Rates</b>			
	<b>Daily</b>	<b>Weekly</b>	<b>Monthly</b>
	\$3	\$16	\$46
<b>Storage Rates</b>			
	<b>Daily</b>	<b>Weekly</b>	<b>Monthly</b>
	\$6	\$20	\$40

Note: The price charged currently (summer 2005) for Daily Transient Rates May, Sept. and Oct are stated to be \$.50/ft. However, DNR sources indicate that the price for the proposed expanded marina for this use will increase to \$1/ft. BBER used this increased rate for the modeling of this analysis.