is significant competition. For this reason, we recommend that food and beverage services remain a part of the Phase I, but that potential concessionaires be offered the opportunity to propose cost-cutting measures such as seasonal food operations, limited table service, and/or limited menus.

10. Limited-Service Restaurant (Snack Bar)

Alternative B recommends that there be fast-food snack bars at two of the development sites in Phase I of the contract, at the Pleasure Cove and Steele Park locations. The standard, 1,500 square foot size of each snack bar was the size recommended for Lake Berryessa by a restaurant industry expert and thus assumed for the analysis.[36] In actuality, however, a potential concessionaire should scale the snack bar to fit both the size and theme of the concession, and consider how to best complement any full-service restaurant at the site. Based on a review of restaurant operating statistics available from the National Restaurant Association, we assumed that the per-person check of the proposed limited-service restaurants would average about $6. We also assumed that alcoholic beverages would not be made available at these snack bars.

Like full-service restaurants, snack bars also incur high costs of equipment, food and supplies, food spoilage, and labor costs. Of the 175 limited-service fast food restaurants surveyed in the National Restaurant Association's Restaurant Industry Operations Report,[37] 27% reported being unprofitable based on operating expenses alone, and not including capital costs. According to the Restaurant Industry Association, average operating costs for limited-service single-unit restaurants are 81%. Consistent with the rest of our analysis, we assumed total operating costs to be annual operating expenditures including a reserve for capital replacement but excluding interest, tax, and depreciation expenses.

Based on the above, we estimated that each of the proposed snack bars would need to generate on average about $112,000 per year in sales (excluding inflationary growth) to return 15% on the concessionaire's investment. This revenue translates to nearly $310 in sales per day per snack

[36] Conversation with Adam Block, 4/23/02.
[37] 1998 Restaurant Industry Operations Report, National Restaurant Association.

bar year-round, or an average of about 51 customers per day or over 37,000 customers per year assuming an average bill per person of $6 (approximately 3.4% of the estimated total number of visitors to Lake Berryessa in 2001). Put in different terms, assuming that about half of the snack bar revenues are generated in the three summer months of June, July, and August[38], this level of sales would require about 101 customers a day per snack-bar in the summer, and about 34 people per day during the other nine months of the year.

Compared to our limited information regarding revenues of the snack bars at the current concessions, the revenue necessary to achieve feasibility under the new contract is high.[39] However, as noted above, the shift in visitor population away from long-term trailer tenants is expected to yield a much higher per capita use of concession food and beverage operations, as we have learned that most long-term trailer tenants bring their own food with them to the Lake. And, snack bars will be a necessary complement to the other visitor services, regardless of their contribution to overall concession profits. We recommend that potential concessionaires be offered the opportunity to propose the nature of the food and beverage service that they consider most appropriate given the nature and scale of their other operations so that they may maximize the profitability of these food service operations.

11. Retail Store

a. Permanent Retail Space

For the analysis of retail development at Berryessa, we assumed that three retail stores would be constructed under Phase I, at Markley Cove, Pleasure Cove, and Steele Park. The standard, 2,000 square foot size assumed for the analysis was developed from Marshall & Swift construction information, but would be adjusted to fit the visitor needs of each individual concession. We assumed that the stores would most likely resemble a general convenience store, although they would certainly offer a number of items not typical of a convenience store, such as

[38] According to interviews with current LBRA concessionaires operators and managers.

[39] Rancho Monticello's snack bar generated about $74,000 in 2001, and Lake Berryessa Marina's snack bar earned only about $31,000 in 2001 (from AFR's; all figures adjusted into 2003 dollars).

fishing-related gear, fishing licenses, and sundry goods (like t-shirts, etc.). Although any potential concessionaire will also need to invest in inventory for the retail stores, we assumed for our analysis that the up-front inventory costs to the concessionaire would be negligible due to available vendor credit.

Based on financial statistics provided by the National Association of Convenience Stores, we determined that it is reasonable to assume that operating costs (total annual expenditures including a reserve for capital replacement but excluding interest, taxes, and depreciation) for the proposed stores would be about 85% of receipts.

Based on these assumptions, we determined that the retail stores would be feasible if they were each to generate on average about $200,000 in annual receipts (excluding inflationary growth). We believe this level of demand should be achievable, as the current Lake Berryessa retail stores earned an average of about $239,000 each, in 2003 dollars. Also, as mentioned above, we expect the shift in visitor population away from long-term tenants will further increase demand for food and other provisions. Financial information from retail operations at comparable lakes further supports the likelihood of this threshold demand. Lastly, interviews with marina resort operators suggest that despite relatively low merchandise profit margins, retail stores generally represent a vital and profitable component of marina resorts.

b. Portable Retail Store

Phase I of Alternative B includes limited retail space for providing sundries, snacks, and some basic boating supplies at the Spanish Flat, Lake Berryessa Marina, Rancho Monticello, and Putah Creek locations. Given the low level of initial Phase I development at these locations, and the limited projected revenue stream associated with this development, we recommend that the potential concessionaire use portable buildings at these sites that are leased, thus requiring no initial construction investment. As with our analysis of permanent stores above, we assumed that the up-front inventory costs for these smaller retail operations would be negligible due to available vendor credit. We also assumed that the portable buildings would be 8 feet by 16 feet (128 square feet), operate without electricity or water (day-use only), and cost $2,000 per year to lease.[40] [41] While this operation is of a much smaller scale than a full convenience store, we assumed, as we did for the permanent retail stores, that operating costs for these portable stores would run at 85% of revenues.

Because of the lack of initial investment and the monthly rental structure, we did not evaluate these portable stores using discounted cash flows (since the discounted cash flow models used in the rest of this analysis evaluate return on initial investment, and virtually no investment will be required). Additionally, we were unable to find a similar operation on which to base expected revenues.[42] Instead, we simply inserted into our overall model an estimated amount of sales that we deemed reasonable given the anticipated level of development at each site, $20,000 in sales per site, which translated into an average of $27,000 per portable store when accounting for a small share of the distributed infrastructure costs. Assuming these portable stores are open from May through September, this translates to under $180 per day in sales per portable concession stand. We believe that these portable retail spaces will complement day use at these sites, and may generate an even greater level of sales than necessary to achieve feasibility. However, given the negligible associated initial investment, these portable stores would have little overall effect on the LBRA concession operation as a whole, and thus a more exact financial assessment is not crucial to this analysis.

12. Water Ski Operation

Alternative B includes a water ski instruction center at the Steele Park location, which we assumed to be similar in scope to the existing operation, Willi's Water Ski Center, which runs

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[40] Rate and size were provided by a representative from Sani-Hut Company, a company which leases portable concession buildings.

[41] According to Reclamation wishes, we assumed in this model that there would be no electricity at the limited development concession sites. If the incoming concessionaire feels that a basic level of electricity is necessary for even a small retail concession (to provide ice cream and deli food, for example), then the concessionaire may want to veer from this model and instead introduce a truck or electricity generator to the proposed limited development sites.

[42] The Sani-Hut Company representative was unable to help estimate revenue stream associated with these concession buildings. As expected, the revenues associated with these portable, 128 square foot concession buildings depend on what is sold as well as the location of the concession and associated foot traffic.

camps and day lessons in the closed-off private cove near Steele Park.[43] For the analysis, we assumed this operation would run camps and instruction at all skill levels for six to ten students per day, and remain open for six months of the year (assuming five days per week only, based on similar operations), from April through October. We estimated that a 1,500 square feet building would be necessary to store equipment, house a small office, and provide on-land instruction.[44] Additionally, we assumed that the initial investment would include the cost of three boats and FF&E (including water ski equipment). We assumed that the water ski operation would realize an average rate of $150 per day per skier. This rate is actually slightly lower than the rates currently charged by Willi's Water Ski Center, but consistent with the rates charged at other water ski schools in California.[45]

We were unable to find published operating cost statistics for water ski operators such as the one proposed for the LBRA concession. However, based on interviews with operators of similar operations, we used a ground-up approach to estimate expenses, accounting for salaries, camp insurance, and a reserve account for facilities improvement (RAFI) associated with the short life and high maintenance cost of ski boats.[46] Based on the scale of the current operation, we assumed that three full-time instructors would be required to run the operation during its anticipated six months of annual operation.

Based on the above, we calculated that the water ski operation would need to generate $132,000 in sales to achieve financial feasibility. This figure translates into a 68% utilization rate of total capacity (10 students per day) throughout the six-month season. According to operators of similar water ski centers, utilization is near capacity during the three summer months (with most water ski camps sold-out), and is significantly lower in the shoulder season. Therefore,

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[43] According to water ski operators with whom we spoke, having a private cove in which to operate the water ski classes is crucial to the success of a water ski center, and it would be difficult to be financially self-sustainable without such a cove.

[44] The potential concessionaire may be able to take advantage of economies of scale by sharing building space (among various concession components) at the Steele Park location. In this model, however, we evaluated each component separately, both to be conservative in our cost estimations and also to isolate the projected returns on each individual component.

[45] Despite numerous attempts, we were unable to speak with management at Willi's Ski School, and Reclamation did not provide us with any financial information regarding the water ski operation. Therefore, we were unable to learn the justification for the relatively high rates at Willi's Ski School.

[46] Interviews with operators of Boot Camp, Soda Lake Ski School, and Cutting Edge Ski School.

assuming the proposed water ski operation achieves 90% capacity in the three summer months, it would need to realize just under 50% utilization rate in the three shoulder season months. It is uncertain whether this shoulder season utilization will be achieved. According to operators of water ski camps and centers, these types of operations can be profitable if run correctly, but are not known to be particularly lucrative businesses. Also, the interviews revealed that popularity of water ski operations often depends on the fame (in the water ski world) of the water ski instructor, a variable that is impossible to incorporate into a financial model. Therefore, we conclude that the necessary level of revenue to achieve financial feasibility at the proposed water ski center may be reasonable, and that the details of this operation will need to be revisited closer to its implementation.

VII. Conclusions

Table 3 presents a summary of the threshold level of revenues necessary to achieve financial feasibility, by concession component. These thresholds represent the *minimum* revenues that need to be generated by each concession component under Phase I of Alternative B for those components to represent a viable business opportunity for prospective concessionaires. The thresholds in the table do not represent an assessment of the probable demand for concession services (as the next concessionaire may well achieve a revenue stream substantially different than the thresholds). We evaluated the threshold revenue indications of our analyses in terms of the corresponding necessary occupancy and utilization rates. We concluded, based largely on historical LBRA concession and other regional lakeside hospitality enterprise performance that it is realistic to expect the proposed concession development to meet or surpass the threshold revenue levels. Accordingly, we conclude that the Phase I of Alternative B is financially feasible at the conceptual level proposed, , and applying the costs to upgrade the associated infrastructure as directed by Reclamation.

As presented in the Table 3, the proposed Phase I development of Alternative B would require about $23 million in initial capital costs, and would need to realize a minimum threshold of about $7.2 million in revenues, in 2003 dollars, to achieve feasibility.

Table 3: Costs and Sales Necessary to Achieve a 15% Rate of Return, by Concession Component

(In 2003 Dollars. Rounded to the nearest thousand dollars.)

Enterprise	Quantity (# Locations)	Unit	Total Capital Cost[1]	Necessary Sales to Achieve 15% Return
Hotel/Motel	30 (1)	Rooms	$1,335,000	$465,000
Cabins/Cottages	28 (1)	Units	$873,000	$255,000
RV Sites	300 (3)	Sites	$4,833,000	$894,000
Tent Sites	250 (2)	Sites	$1,141,000	$189,000
Group Tent Sites	3 (1)	Group Sites	$117,000	$21,000
Marina (Slips, launch, and fuel)	601 (3) 7 (7)	Slips Ramps	$6,277,000	$1,311,000
Houseboats	20	Houseboats	$4,605,000	$1,701,000
Other Rentals	36 (2)	Boats	$1,072,000	$543,000
Dry Storage	100 (1)	Boats	$128,000	$29,000
Restaurant	2 (2)	Restaurants	$1,058,000	$725,000
Snack Bar	2 (2)	Snack Bars	$381,000	$224,000
Store	3 (3)	Stores	$813,000	$601,000
Portable Store	4 (4)	Units	$177,000	$108,000
Water Ski Center	1	Center	$287,000	$132,000
Total			**$23,093,000[2]**	**$7,198,000**

[1] Total Capital Cost includes distributed allocation of infrastructure upgrade costs.

[2] The sum of the line items do not add exactly due to rounding error.

Our analysis was somewhat limited by lack of historical information regarding the usage and financial operations of the current Lake Berryessa concessions. Without usage numbers, trends, and/or financial information broken down by concession component, much of our assessment of the current Lake Berryessa concession operations is based on interviews with Lake Berryessa concession and other lakeside hospitality enterprise operators. However, due to the anticipated shift of the LBRA visitor base (and their associated spending habits) from long-term trailer tenants, knowledge of the operations of the current Lake Berryessa concessions provided only limited insights to future demand for LBRA concession services following Phase I implementation, and thus are not integral to this analysis.

Additionally, we believe that the infrastructure upgrade costs provided by Reclamation (and that we were directed to incorporate directly into our analysis) will, at some stage, need to be reassessed, so that infrastructure costs correspond to the level of infrastructure that will actually be required to support Phase I concession operations rather than a simple upgrade of existing infrastructure. This disparity is of particular concern when evaluating certain components of Phase I that will clearly require additional infrastructure beyond that which is already in place. These include, in particular, the Phase I proposals to replace RV sites that currently do not have full hook-ups (electricity, water, and sewage) with those that do, and to open a new houseboat operation that will require a considerable number of parking spaces per vessel (spaces that are currently not available at the proposed development site). Further, the infrastructure upgrade costs estimates provided by Reclamation that we adopted for our analysis do not account for any infrastructure-related expenditures at three of the four LBRA sites where only limited development would be implemented under Phase I. The next concessionaire, however, may find that some upgrade of the infrastructure at these sites will be necessary to provide even the limited services that will be required. On the other hand, the infrastructure upgrade costs include $2.7 million for one of the four LBRA sites where only limited development would be implemented under Phase I, the Rancho Monticello resort location. This expenditure level may prove excessive given the minimal nature of concession services to be provided at that site under Phase I.

VIII. Socio-Economic Impacts

The purpose of this section is to evaluate the potential regional socio-economic impacts of the proposed concession development under Phase I. These impacts can be separated into two primary categories: those impacts that may result from expenditures to construct/rehabilitate concession facilities and supporting infrastructure ("construction phase") and those impacts that may result from expenditures of visitors on concession goods and services once the concession is operational ("operations phase").

Napa County was selected as the primary geographic study area for the socio-economic analysis, as the LBRA is located entirely within the County. While the socio-economic influence of concessions at the LBRA may extend beyond the County's borders, particularly into Yolo and Solono Counties where many concession employees may reside, the majority of LBRA concession-related economic effects, including all direct job creation, was assumed to occur within Napa County. It should be noted that defining a County as the primary study area, rather than designating an ad-hoc geographic boundary, facilitates the impact analysis since much of the relevant socio-economic data available from federal, state and local sources is aggregated at the county level.

A. Methodology

The input-output model IMPLAN was used to quantify the direct and secondary economic impacts associated with the proposed concession development. The model was originally developed by the U.S. Forest Service to conduct this type of regional economic assessment. Input-output models, like IMPLAN, are well regarded and used all over the world to characterize regional and national economies, and to quantify potential economic impacts from commercial and public developments as well as changes in policy and resource allocation. IMPLAN provides estimates of the direct and secondary economic effects that result from an initial stimulus to a business sector (e.g., agriculture, construction, transportation & utilities, etc.). In the current case, for example, the stimulus includes spending in the Napa County construction sector to construct and rehabilitate concession facilities and infrastructure. The IMPLAN model calculates a range of economic metrics, most importantly the effects of spending changes on industrial output, personal income and employment within a specified region. Industrial output represents the total value of production of goods and services. Personal income is derived from employee compensation and proprietor income. This includes, but is not limited to, wages, benefits, rents, and income to business owners. Employment impacts are measured in full-time equivalents or FTEs (one FTE equals 2,080 hours of work). The employment impacts indicated by the IMPLAN model were used to separately evaluate the potential population, housing and infrastructure effects of Phase I of Alternative B.

B. Socio-Economic Baseline

An important step in evaluating the potential socio-economic effects of the proposed LBRA concession development is to characterize the existing socio-economic conditions (or baseline) within the chosen study area. This baseline provides a benchmark to evaluate the magnitude of impacts indicated by the IMPLAN model, and, to determine if adequate labor resources are available within the study region to meet the anticipated labor needs of the concession development.

Relevant socio-economic statistics for Napa County were obtained from a number of sources including the California Departments of Finance and Employment Development, the U.S. Census and the IMPLAN model output itself.

Just north of the San Francisco Bay, Napa County covers 788 square miles. The County is recognized internationally for its wine production, and for that reason, has become an important tourist destination. In the year 2002, the County had a total population of 128,000, almost 60% of which resided in the city of Napa. Since 1990, the County population has grown at an average annual compound rate of about 1.2%. The California Department of Finance projects the County's population to increase another about 30,000 by the year 2020.[47]

[47] California Department of Finance, 2003.

In the year 2001, Napa County had an employment base of 64,400 jobs. In that same year, the County's unemployment rate was 3.3% well below the statewide rate of 5.3%. Recent job growth in Napa County has been quite robust. For the period 1997 through 2001, employment in the County increased by 10,500 wage and salary jobs, or about 15%. Much of this expansion occurred in the agricultural and service sectors.[48]

Table 4 summarizes year 2001 Napa County employment by broad industrial sector. The table indicates that the County economy is relatively well diversified with relatively large manufacturing, trade and service sectors. A portion of manufacturing sector employment is involved in the production and bottling of wine. Tourism is not considered its own industrial sector. Instead, tourism jobs are found mostly in the services sector, but also appear in retail and wholesale trade and government sectors (Bureau of Reclamation, for example).

Table 4

Industrial Sectors	# FTE Jobs
Agriculture	5,500
Construction & Mining	3,900
Manufacturing	10,600
Transportation and Utilities	1,600
Retail and Wholesale Trade	12,500
Finance, Insurance and Real Estate	2,400
Services	17,900
Government	9,700
Total	**64,400**

Source: California Department of Finance 2003

Total Napa County personal income in 1999 was approximately $4.23 billion or $34,935 per capita, ranking 7th in county per capita income statewide.[49] Total industrial output for the County in the year 2000 was about $8.5 billion.[50] The median price of a home in the County as of December 2001 was $312,500, and the overall vacancy rate that year for the County's approximately 49,000 housing units was approximately 6.5%.[51]

48 California Department of Finance, 2003, and California Employment Development Department.

49 U.S. Census Bureau, 2000.

50 Micro-ImPlan Group, 2003.

C. Socio Economic Impacts of Phase I Project Development

The purpose of this section is to evaluate the potential economic impacts of anticipated construction-related activities proposed under Phase I of Alternative B ("project development"). Spending on labor, materials and services to construct new concession facilities and upgrade/rehabilitate existing concession facilities and infrastructure at LBRA will impact Napa County industrial output, employment and personal income. At this time, a time schedule for project development has yet to be formulated by Reclamation. Accordingly, for this analysis we reasonably assumed that project development would occur over a two-year period during which there would be a full cessation of concession activities at the lake.

As discussed previously, total project development costs are estimated at almost $23.1 million in 2003-dollar terms. Lacking more specific information, it is assumed that half this cost, $11.55 million, will be spent during each of the two years assumed for project development. The direct expenditures of $23.1 million ($11.55 million per year) will trigger secondary rounds of spending that will in turn generate additional regional industrial output, employment, and personal income. Offsetting the positive economic effects of this spending will be the elimination of economic activity at the lake as the existing concession facilities are closed/demolished and concession services are no longer made available during construction. There is no available information regarding the employment and personal income generated by the existing concessionaires. However, and as discussed previously, recent reported LBRA concession revenues have averaged approximately $12.7 million for the seven concession operations combined (estimation, in 2003 dollar terms), including about $5.0 million from long-term trailer rental fees.

Thus, one might conclude, based purely on a comparison of recent concession revenues and projected concession-related construction spending, that during project development, much of the anticipated construction-related positive economic impacts may be offset by the elimination of concession-related service and retail sector positions. Despite this mitigating factor, we still felt it relevant to the planning process to evaluate the potential construction-related effects of

[51] California Department of Finance, 2003.

project development, primarily to characterize the project's overall scale in the context of the regional economy.

- **Project Development Industrial Output Impacts**

The estimated contribution to Napa County industrial output from project development is estimated to be about $38.5 million over the two-year period implementation period (in 2003 dollar terms). The $38.5 million represents approximately 0.2% of recent total annual industrial output in the County. Thus, project development will have only a negligible impact on County industrial output even before accounting for any probable offsetting effects resulting from a cessation of concession operations during project development. It should be noted that based on their recent combined sales, the current LBRA concessions have historically only made a negligible contribution to the Napa County economy.

Among Napa County's industrial sectors, the construction sector will be the most significantly impacted by project development, experiencing an estimated total output increase of about $23.1 million over the two-year implementation period. The majority of the remaining approximately $15.4 million of industrial output generated will occur in the services, trade and FIRE sectors (finance, insurance and real estate), which together should realize approximately $9.7 million in output due to project development.

- **Project Development Employment Impacts**

The total estimated contribution to Napa County employment from project development is estimated to be the creation of about 185 new jobs (which represents about 0.3% of recent total employment in the County, a negligible effect). Accordingly, even before accounting for the offsetting loss of concession operation-related jobs during project development, project development will have only a negligible impact on regional employment (again noting that based on their recent combined sales, the current LBRA concessions have themselves historically only made a negligible contribution to the Napa County economy).

The Napa County construction sector will be the most significantly impacted sector, realizing a total estimated increase in employment of 89 jobs during project development. These jobs would increase the employment base in the County's construction sector by about 2.3% over recent levels, a relatively minor effect, and one that can easily be accommodated by the current unemployed portion of the region's labor force. The remaining approximately 95 jobs created secondarily by project construction activities will be generated primarily in the services and trade sectors.

- **Project Development Personal Income Impacts**

The total estimated contribution to Napa County personal income from project development is estimated to be $7.4 million annually during each of the two years anticipated for construction, which represents about 0.2% of recent total personal income in the County. Accordingly, even before accounting for the offsetting loss of concession operation-related jobs during project development, project development will have only a negligible impact on regional personal incomes (again noting that based on their recent combined sales, the current LBRA concessions have themselves historically only made a negligible contribution to the Napa County economy).

- **Project Development Population, Housing and Infrastructure Impacts**

Due to the relatively negligible anticipated regional economic effects of project development even before consideration of the offsetting loss of economic activity with closure of the existing LBRA concessionaires, it is reasonable to conclude that the project associated effects on regional population, housing and infrastructure will also be negligible. (Again, it should be noted that based on their recent combined sales, the current LBRA concessions have themselves historically only made a negligible contribution to the Napa County economy and thus have had a negligible effect on regional population, housing and infrastructure).

D. Socio Economic Impacts of Phase I Concession Operations

The purpose of this section is to evaluate the potential economic impacts of anticipated concession operations proposed under Phase I of Alternative B ("concession operations") following project development. Spending by visitors at Lake Berryessa concessions affects Napa County industrial output, employment, and personal income. These direct impacts have secondary effects as well, as spending is generated in related sectors. For example, the concession restaurants purchase supplies from vendors in the county. These purchases generate personal income for the vendor's proprietor and employees, and in turn results in further spending in the regional economy.

As discussed previously, total threshold revenues necessary for a concessionaire to achieve financial feasibility in developing and operating Phase I of Alternative B are estimated to be approximately $7.2 million annually in 2003-dollar terms. While certainly the concession may generate more revenues than the threshold levels concluded earlier in this report, we limited the impact analysis to the threshold amounts determined for the purpose of feasibility evaluation. We did so because we lacked the basis to develop specific projections regarding demand and therefore visitor concession spending beyond the threshold level. Offsetting the positive economic effects of visitor spending at the new concession operation will be the elimination of economic activity at the lake associated with the existing concessions. There is no available information of the employment and personal income generated by the existing concessionaires. However, based on recent reported LBRA concession revenues which have averaged approximately $12.7 million for the seven concession operations combined (in 2003 dollar terms) including about $5.0 million from long-term trailer rental fees, it would appear that the new concession operation will have very little net effect on the regional economy. (Although, as noted previously, according to Reclamation many of the existing concessions historically have operated understaffed and the long-term trailer operations require very little labor.) Despite this obvious mitigating factor, we felt it relevant to evaluate the potential effects of the proposed concession to characterize the operation's scale in the context of the regional economy.

- **Concession Operations Output Impacts**

The total estimated direct and secondary contribution to Napa County output from concession operations is estimated based on the IMPLAN model to be almost $13.0 million (in 2003 dollar terms). This output represents about 0.15% of recent total annual industrial output in the County, a negligible amount. About 70% of this output effect, or $9.0 million, will occur in the services sector (including lodging, eating & drinking places and marina services).

- **Concession Operations Employment Impacts**

The total estimated direct and secondary contribution to Napa County employment from proposed concession operations is estimated based on the IMPLAN model to be almost 140 FTEs. This employment represents about 0.2% of total recent employment in the County. About 70% or nearly 100 of these jobs will be in service-related positions (primarily in lodging, eating & drinking places and marina activities).

- **Concession Operations Personal Income Effects**

The total estimated direct and secondary contribution to Napa County personal income from proposed concession operations under Phase I of Alternative B is estimated based on the IMPLAN model to be almost $4.4 million (in year 2003 dollar terms). This personal income represents slightly more than 0.1% of recent total personal income in the County. About 65% of this income will derive from service-related fields (primarily from lodging, eating & drinking places and marina activities).

Due to the relatively negligible anticipated regional economic effects of operation of the concession under Phase I of Alternative B even before consideration of the offsetting loss of economic activity with closure of the existing concessionaires, it is reasonable to conclude that the effects of the proposed concession operation on regional population, housing and infrastructure will also be negligible.

- **Concession Operation's Population, Housing and Infrastructure Impacts**

Due to the relatively negligible anticipated regional economic effects of the concession operations proposed under Phase I even before consideration of the offsetting loss of economic activity with closure of the existing LBRA concessionaires, it is reasonable to conclude that the concession operations-associated effects on regional population, housing and infrastructure will also be negligible.