REGIONAL DISTRICT OF
CENTRAL OKANAGAN

ANALYSIS AND SYNTHESIS REPORT

PART B

MAJOR LAKES RECREATIONAL MARINE FACILITIES STUDY

Submitted by:

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In association with
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MAJOR LAKES RECREATIONAL MARINE FACILITIES STUDY: PART B. ANALYSIS AND SYNTHESIS

TABLE OF CONTENTS

Introduction

This report provides an analysis of demand for marine recreational facilities on the major lakes and the potential facilities required to meet that demand. The analysis is based on the data collected in PART A and the information contained on environmental issues and impacts in PART C. It also includes preliminary economic impact analysis information.

This report is organized into the following sections:

1. Projected Demand for Recreational Marine Facilities
2. Analysis of Potential Facility Locations
3. Governing Authorities Part 2
4. Consultation Update
5. Economic Impact Analysis

The mapping for Part B is provided under separate cover.

1. Projected Demand for Recreational Marine Facilities

The potential demand for recreational marine facilities on the major lakes is anticipated to grow at the same or greater rate than the projected population growth. This will put considerable strain on the current recreational marine facilities on the lakes.

The major facilities which include boat launches, moorage slips, gas pumps and grey water pump outs are inadequate to serve the current needs.

Although there are considerably more than 12 locations which are used to launch boats, the following twelve are the most frequently used:

- Fintry Park - RDCO- West E.A.
- Bear Creek - RDCO- West E.A.
- Westbank – Westside
- Pincushion Bay – Peachland
- Doggie Beach - Peachland
- Coral Beach – Lake Country
- Okanagan Centre – Lake Country
- Oyama – Lake Country
- Ponderosa Rd/ Winfield North – Lake Country
- Sutherland Bay – Kelowna
- Water Street – Kelowna
- Cook Street/Lakeshore – Kelowna

There are 1560 slips at the yacht clubs and marinas in the Regional District. Private residential moorage is not included.

With respect to gas pumps, the following are the 8 publicly accessible locations:

- Okanagan Lake Resort RDCO West E.A.
- Shelter Bay Marina- WFN
- Pentowna Marina- Peachland
- Kelowna Marina -Kelowna
- Eldorado Marina – Kelowna
- Turtle Bay Marina- Lake Country
- Tween Lakes Trailer Park- Lake Country
- Owls Nest Resort- Lake Country

There are only three pump outs on Lake Okanagan in the Central region: Kelowna Marina, Eldorado Marina, Shelter Bay Marina. On Wood Lake there is one at Turtle Bay Marina, and none on Kalamalka Lake located within the region.

Demand exceeds the available inventory in all areas. A possible exception is the number of gas pumps in the south end of Kalamalka Lake. It is difficult to analyze whether there is a shortage of fuelling facilities on this lake, as many boats go through the pass from Wood Lake, and the majority of Kalamalka Lake is not within the study area.

All indications received by the study team are that a higher level of service is needed immediately, with the greatest shortages being boat launches, moorage slips and moorage buoys. It was not possible to obtain an accurate count of moorage buoys available to the public, due to the lack of records or enforcement.

The washroom facilities at the marinas are very limited and often not easily accessible. Places to tie up and use facilities are few.

Dry dock storage is available both on a seasonal basis, and for concierge purposes. The following is a list of the main dry dock storage within the Regional District boundaries: Dockside (500), Malibu (400), Eldorado (200), Rayburn (100), and Winfield (300). There are a few additional locations with a small number of boats stored at each location. These are primarily in Kelowna.

Over the next 20 years the number of boats in the Regional District boundaries could exceed 100,000. In order to meet this demand a significant investment is required in the major facilities over this time period. If the level of service were to just remain the same, on a per capita basis, the following would be required within 10 years:

- an additional 2 gas pumps
- an additional 3 boat launches (or equivalent)
- an additional 380 slips

By the year 2028 these numbers would be (in total):

- an additional 4 fuelling facilities
- an additional 5 launches, or the equivalent in launch capacity
- an additional 723 slips

If the service levels were to be increased by just ten percent above the current level of service the numbers of facilities required in 20 years would increase to: 5 new gas pumps, 7 new boat launches, and 951 boat slips.

Additional pump outs are also required, preferably at least one per municipality on Lake Okanagan, except Kelowna, which already has two locations.

There is a demand for “places to go” on the lakes including restaurants, parks, camping areas and attractions. There are a number of opportunities on the lake for these types of facilities, which will be considered in the analysis and recommendations.

2. Analysis of Potential Facility Locations

In order to further analyze the 47 points of interest identified in PART A of the report, criteria have been developed for the selection and elimination of sites for new or upgraded marine recreational facilities.

Marinas

New and/or expanded Marinas could address the needs for moorage slips, fuelling, pump outs and washrooms. Parking facilities on site would also be required.
The criteria for the selection of a site for use as a Marina are:

1. Environmental consideration: area should be rated as "low sensitivity". This rating was applied by Summit Environmental to areas which were determined to have a low probability of having important environmental features and would therefore experience lower potential impacts.
2. The foreshore area should include a large enough parcel of land to accommodate parking and facilities associated with a marina.
3. Road access.
4. Suitable water access (depth and shelter)

Boat Launches

Boat launches should preferably accommodate a double launching area and include docks, a parking lot for cars and trailers and washroom facilities.

The criteria for a boat launch are:

1. "Low sensitivity" environmental rating
2. Large parcel of land for car and trailer parking
3. Primary or secondary road access
4. Not within residential neighbourhoods
5. Appropriate water depth

Hand or small boat launches could be located in "moderate sensitivity" areas, and would require limited on on-street parking only.

Mooring Buoys

Mooring buoys should be provided in a manner that allows for both day and overnight use.

The criteria for mooring buoys:

1. High, medium or low sensitivity ratings. If the rating is high they must be located outside of shore spawning habitat range.
2. Located in sheltered areas
3. Located offshore of public lands only, e.g. parks or crown lands

Dry Dock Storage

Dry dock storage is ideally located in proximity to, but not on the foreshore lands.

Criteria for dry dock storage are:

1. Environmental rating would depend on location of facility, but should likely be medium or low sensitivity.
2. Proximity to a boat launch or potential launch
3. Land parcel and appropriate zoning to accommodate a large industrial style building

Points of Interest

Each of the forty–seven points of interest has been analyzed based on the criteria outlined in the previous section. The points are listed by municipality.

REGIONAL DISTRICT OF CENTRAL OKANAGAN West Electoral Area

R1 Fintry Park:
Existing Facilities: Boat launch with dock, washrooms, parking, beach, camping in park, mooring buoys. Preliminary Suggested Direction: Additional mooring buoys in bay to north of launch
Analysis: Meets all three criteria

R2 Agate Bay
Existing Facilities: Mooring buoys, beaching area. PSD: Additional buoys for day and overnight use.
Analysis: Meets all three criteria; however there would be high environmental impact on spawning habitat.

R3 Agate Bay South
Existing Facilities: Mooring buoys, beaching area. PSD: Additional mooring buoys for day and night use.
Analysis: Meets all three criteria; however there would be high environmental impact on spawning habitat.

R4 Wilson Landing North
Existing Facilities: Beach PSD: Additional mooring buoys
Analysis: Does meet criteria; however domestic water intake must be considered.

R5 Traders Cove Regional Park
Existing Facilities: unpaved parking area, large open space park areas, beach, picnic shelter, toilets, boat moorage bay, navigational light. PSD: Additional mooring buoys for day and overnight use.
Analysis: Meets all three criteria, if buoys placed outside spawning area.

R6 Tolko Lands
Existing: Graving docks for bridge construction/dismantling, entrance road, construction trailer.
PSD: Potential for full scale marina, boat launch, parking areas, dry boat storage
Analysis: Moderate sensitivity rating, meets other three criteria.

R7 Bear Creek
Existing Facilities: Single launch- Parking (40) cars (15) trailers (temporary use of park's day use lot), beach, washrooms, picnic areas, camping, all in Bear Creek Park. PSD: Re-instate double boat launch as soon as possible.
Analysis: High sensitivity rating, meets other criteria – could be combined with Tolko Lands

R8 OK Mountain Park
Existing Facilities: Mooring buoys, small dock, beach area. PSD: Additional mooring buoys.
Analysis: Meets all three criteria, if buoys are outside of spawning area.

R9 Scruggins Reef
Existing Facilities: Mooring buoy, dive area. PSD: Additional mooring buoys.
Analysis: Meets all three criteria.

DISTRICT OF WESTSIDE

W1 Raymer Bay Regional Park:
Existing Facilities: Beach: Small parking area, washrooms& picnic shelter, mooring buoys.
PSD: Additional mooring buoys (day and overnight use).
Analysis: Meets all three criteria, although domestic water intake is nearby.

W2 Casa Loma Resort:
Existing Facilities: Lakeshore Resort-Private/Commercial, Safe Harbour/ Public Rental and Visitors Slips. PSD: Additional visitor slips and mooring buoys.
Analysis: Meets all criteria for buoys; and could add slips as it is a low sensitivity rated area.

W3 Kalamoir Park
Existing Facilities: Park, beach, washrooms, parking, mooring buoys. PSD: Additional mooring buoys.
Analysis: Meets all criteria

W4 Gellatly Bay
Existing Facilities: Beach, swim platform, washrooms, parking, mooring buoys. PSD: Additional mooring buoys.
Analysis: Sensitivity rating is medium, however the impact of additional mooring buoys would be high due to spawning habitat.

W5 Westbank Yacht Club
Existing Facilities: Double bay launch, vehicle & trailer parking (12), plus car parking (40), Yacht Club facility, public washrooms. PSD: Additional parking and boat storage
Analysis: Does not meet criteria to upgrade the launch; no room on site for additional parking or boat storage; although there may be opportunities on private land in the vicinity. It is in a high sensitivity zone, and high impact to the environment.

W6 Gellatly Nut Farm Regional Park
Existing Facilities: Park, parking lot, tourist attraction, beach. PSD: Dock for day visitors.
Analysis: Has not yet been assessed for environmental sensitivity.

DISTRICT OF PEACHLAND

P1 Davis Cove
Existing Facilities: Beach, mooring buoys. PSD: Additional mooring buoys for day and overnight use.
Analysis: Does not meet the criteria for public lands, although Peachland controls the foreshore.

P2 Pincushion Bay
Existing Facilities: Double bay cement boat launch, washroom nearby, beach, with on street parking. PSD: Upgrade launch area, add parking.
Analysis: Meets environmental criteria, but insufficient land base for parking

P3 Peachland Yacht Club
Existing Facilities: 55 slips, 2 visitors' bays, adjacent washrooms, snack bar .PSD: Upgrade boat slips
Analysis: Meets criteria.

P4 Heritage Park
Existing Facilities: Day mooring (28), park area; adjacent to restaurants, boutiques and amenities.
PSD: Upgrade day moorage; consider overnight moorage
Analysis: Meets criteria.

P5 Pentowna Marina
Existing: 82 Slips, rentals, gas pump, washroom
PSD: Upgrade docks and slips; potential expansion to marina
Analysis: Meets criteria, with the exception of land for additional parking.

P6 Doggie Beach
Existing: Double bay launch, parking area for 20 (unmarked spots)cars and trailers PSD: Concierge Boat Storage Proposed (Private sector)
Analysis: Meets criteria.

DISTRICT OF LAKE COUNTRY

L1 Coral Beach
Existing Facilities: Boat launch with doc, 2 parking spots, washrooms, and park.PSD: Additional parking
Analysis: Does not meet criteria – no land for parking; medium sensitivity.
L2 Lake Country Sailing & Boating Association- Marshal Park
Existing Facilities: Small Boat storage, launch, washrooms, beach (10) car parking
PSD: Install dock and improve parking.
Analysis: Meets criteria for dock (medium sensitivity) but on the edge of red zone. Some land available for parking.

L3 Whiskey Cove
Existing Facilities: Beach, parking lot, "unofficial" boat launch. PSD: Install boat launch
Analysis: Does not meet criteria – medium sensitivity.

L4: Kopje Regional Park
Existing Facilities: Beach, washrooms, Historical House, Parking (25)
PSD: Boat launch, additional parking for trailers, mooring buoys
Analysis: Does not meet criteria for launch– medium sensitivity. However the environmental impacts for a boat launch were rated as low to moderate. Could have mooring buoys.

L5 Pixie Beach
Existing Facilities: Public beach, mooring buoys. PSD: Additional mooring buoys.
Analysis: Meets criteria for buoys. Could accommodate more marine facilities at this location, as it is rated " low sensitivity", with the main concern being an irrigation water intake nearby.

L6 Okanagan Centre Safe Harbour
Existing Facilities: double launch/parking for 10 car/trailers. PSD: Marina Development and additional parking.
Analysis: Does not meet criteria – medium sensitivity and in red zone.

L7 Sheltered Area
Existing Facilities: None. PSD: Additional buoys.
Analysis: Meets criteria.

L8: Sheltered Bay
Existing Facilities: beach, mooring buoys PSD: Additional buoys
Analysis: Meets criteria.

L9: Kaloya Regional Park
Existing Facilities: Parking (70 cars), beaches, washrooms, picnic areas, buoys
PSD: Capacity for new boat launch and car/trailer parking, additional buoys
Analysis: Meets criteria.

L10: Lake Country Board & Sail Club Existing Facilities: Beach, docks, mooring buoys.
PSD: Upgrade docks.
Analysis: Meets criteria.

L11: Twin Lakes Channel Crossing-maintenance required
Analysis: Low sensitivity.

L12: Oyama Launch
Existing Facilities: Launch, roadside parking
PSD: Upgrade launch, provide parking area

L13 Picnic Area
Existing Facilities: Picnic Area, Mooring buoys. PSD: Mooring buoys.
Analysis: Meets criteria

L14: Sheltered Bay
Existing Facilities: Mooring Buoys. PSD: Additional buoys.
Analysis: Meets criteria if buoys are placed outside spawning areas.

L15: Winfield/Ponderosa Rd.
Existing Facilities: 2 Roadside Launches & Road-side parking
PSD: Upgrade when HWY 97 re-located
Analysis: Meets criteria – low sensitivity; land will be available once Highway 97 is re-located.

CITY OF KELOWNA

K1 Paul's Tomb
Existing Facilities: Mooring Buoys. PSD: Additional buoys.
Analysis: Meets criteria, but is in high impact area for spawning.

K2 Sutherland Bay
Existing Facilities: Double launch, beach & washrooms, on-street parking.
PSD: Enhanced boat launch; Small Boat Club location. Future considerations: Parking, Dry Boat Storage, Moorage.
Analysis: Meets criteria except for proximity to residential area.

K3 Waterfront Park
Existing Facilities: docks, boat rentals, beach. PSD: hotel / strata/public expansion
Analysis: Low sensitivity area. Good opportunity for public/private partnerships.

K4 Kelowna Yacht Club
Existing Facilities: Moorage 620 slips, Yacht club facility, Grey water pump out, parking lot
PSD: Expand moorage; clubhouse re-location
Analysis: Meets criteria for additional moorage.

K5 Kelowna Marina and Kerry Park
Existing Facilities: Marina, rentals, gas pump, beach, park, parking
PSD: Expansion and restructuring under City consideration; should include improved marina facility, new gas pump/storage, public moorage slips.
Analysis: Medium sensitivity zone – limits opportunity for expansion.

K6 City Park
Existing Facilities: beach, parking, washrooms, concessions
PSD: Capacity for Small Boat Club- hand launch, mooring buoys
Analysis: Medium sensitivity zone; could accommodate small boat launch and club

K7 Kinsmen Park
Existing Facilities: Park, beach, washrooms, concession, parking lot, mooring buoys.
PSD: Additional mooring buoys
Analysis: Meets the criteria.

K8 Lakeshore Boat Launch, Eldorado/Manteo
Existing Facilities: Quad Launch, Marina (66) slips, gas, grey water pump out, trailer parking (40) & car parking (30) Valet boat storage (200).PSD: Marina expansion and upgrades.
Analysis: Medium sensitivity, plus yellow zone spawning habitat.

K9 Bluebird Beach:
Existing Facilities: Beach, playground, parking lot, mooring buoys. PSD: Additional mooring buoys.
Analysis: Meets the criteria

K10 Central Okanagan Sailing Association
Existing Facilities: Club house and washrooms, boat launch, major docks, beach, parking, boat storage. PSD: Upgrade launch and docks.
Analysis: Low sensitivity, but limited land area for parking and in residential area.

K11 Cedar Creek
Existing Facilities: Beach and Launch, second beach & picnic area; limited parking capacity at launch. PSD: Upgrade launch.
Analysis: Low sensitivity, but limited land area for parking.

K12 Bertram Creek Park
Existing Facilities: Beach, picnic areas, parking, washrooms, playground PSD: Mooring Buoys
Analysis: High sensitivity for Kokanee Spawning, but rated medium overall.

In the next phase, PART D, specific sites and facilities will be recommended and included in the 20 Year Plan for implementation.

3. Governing Authorities Part 2

The Regional District of Central Okanogan (RDCO) is interested in examining its future role associated with marine recreation facilities and/or the delivery of marine services on the District's major lake system. Governance approaches used by other jurisdictions and the related merits and drawbacks of the different management models were described in the previous consultant's report (Part A).

Several alternatives described in the earlier report are already employed on the District's lakes. Municipalities use the "public sector self management model" in maintaining boat launches within their jurisdictional boundaries. The "private sector model" applies to all marinas on the major lakes while the "not-for-profit organizational model" is applicable to yacht clubs. To date, the "contracting out" and "joint venture" alternatives have not been implemented within the RDCO.

Several issues are relevant to the assessment of what is required to effectively govern and manage marine facility and service delivery on the lakes in the study area. These include:

- local circumstances and precedents have resulted in different marine service delivery approaches employed by RDCO municipalities;
- the current system has evolved with no overarching oversight or guiding principles to ensure consistency over time;
- private and not-for-profit entities employ a variety of service provision philosophies and approaches;

- beyond legislative requirements, there is no universally applied standard that governs marine service provision;
- the current approach is increasingly under stress caused by escalating demands for more and new types of marine services; and
- the public's expectations for unfettered access and comfortable enjoyment of the lake system are rising.

Effective governance and service delivery models normally conform to a "form follows function" philosophy, meaning that the model focuses on meeting the needs of selected target audiences by addressing what is required to enhance current service levels while providing for additions to fill gaps in the existing system. Our research would suggest that the preferred governance and service delivery model should make allowance for the following requirements:

- coordination of marine services – regardless of service provider - on the three lakes in the jurisdictions affected by this study;
- a mechanism to ensure that the marine facilities inventory arising from this study remains current and up-to-date;
- standardization of "like" services that may be offered by a variety of different providers on the lake system – e.g. signage at launches;
- systematic, transparent and fair approaches to the determination of potential marine facility additions and/or improvements;
- means to ensure the environmental standards are maintained;
- methods and tools to effectively communicate with users of the lakes as well as those affected by lake use;
- mechanisms to remain current with the needs and desires of boaters;
- approaches to capitalize on the collective energies and expertise of individuals, groups, organizations and agencies capable of and willing to contribute to the success of the RDCO lake system;
- opportunities to improve customer service and increase the public's access to the lake system; and
- approaches to optimize the use of public sector resources and to gain greater access to new sources of capital.

In view of these diverse requirements, it is possible that the governance and service delivery model that is most appropriately applied to the RDCO lake system will be a hybrid of a number of different types of approaches that combine to meet boaters' needs. And, as is frequently the case, there will be a single factor that will dictate the selected model's success – willingness of all involved to work together to improve the current circumstance and to remain keenly focused on improvement. Simply put, there must be a shared commitment to passionately pursue results that are consistent with the needs and expectations of boaters and those affected by lake use.

The selected model should create a foundation to ensure that service delivery mechanisms are designed from a client perspective, obtaining good value, utilizing systematic management practices and striving for positive results. This can be achieved by ensuring that compatible organizations are assigned appropriate responsibilities within the governance structure as well as by capitalizing on the capacities of individuals or entities involved in service delivery.

The next phase of the study will examine the applicability of various governance approach is to this situation, circumstances and needs of the RDCO lake system. A governance and service delivery model will be recommended in PART D.

4. Consultation Update

The consultation process was reported on in Part A. The first of three public meetings was held on August 13th in Kelowna. It was run as an open house, followed by a more formal meeting for one hour. A second open house was held on August 19th in Peachland. Both were fairly well attended by a range of stakeholders. Participants were asked to fill out questionnaires.

The comments that were received during the two public open houses/meetings were fairly consistent, although there were issues specific to each local area. Participants included boaters, non-boaters, environmentalists and a good number of individuals interested in the business aspects of boating (marina/restaurant/resort development; boat sales and storage).

Participants expressed dissatisfaction with the state of marine recreational facilities generally in the study area. There was consensus that the study is very timely and that "something needs to be done". People expressed doubts as to the motivation of the local governments to implement any changes, and hoped that the Study would not just sit on the shelf once completed.

People are concerned about preserving the way of life in the Okanagan, and some feel that the situation with boating is out of control from both an enforcement perspective and congestion on the lakes during busy periods. Many feel that it is important to have a Plan to deal with not only the facilities, but the whole boating picture. Many felt that the study area should have included all of Okanagan Lake.

People were concerned about trailer parking and congestion on local streets, and are wary of any improvements to boat launches as it would result in more traffic.

The persons with development interests expressed dissatisfaction and frustration with the development approvals process, primarily at the municipal level, but provincial approvals as well.

The majority of respondents would be willing to pay a fee to launch their boats, provided parking is available; a number of people felt they paid enough taxes and should not have to pay additional fees. The same applied to moorage buoys. There is interest in a two-tiered user pay system- residents versus visitors. There is majority support for a new "super launch" located outside of developed areas.

Many felt that new large residential and resort developments should provide access and amenities for the public including boat slips, waterfront access. There was a suggestion that developers pay into a fund for marine facility improvements.

Protecting the environment was deemed extremely or very important. Any new or improved facilities must respect the environment.

There was mixed reaction to support for Tourism. Some felt "we need to get our own house in order first". Some don't want more boats, others support destinations and amenities.

There was good support for some sort of Lake Authority or Alliance, although there were questions as to how that would work, and who would participate in this organization.

In general, the public feels that there is a role for government in the protection of the lakes and the communities surrounding them, as well as in the provision of appropriately located boat launches. . Mooring buoys should be placed and maintained by government (most said Provincial) or through a public/private partnership and that fees should be charged.

5. Economic Impact Analysis

This analysis has been conducted utilizing the Boating Economic Impact Model developed Dr E. Mahoney, Dr Dan Stynes and Dr Yue Cui of the Recreational Marine Research Centre at Michigan State University.
GDH Solutions acknowledges the support of the Association of Marine Industries, the Great Lakes Commission, the U.S. Coast Guard and the B.C. Marine Trades Association.

The Executive Summary for Marinas, Yacht Clubs and Boat launches follows. The complete reports for each of the three areas are in the Appendix.

EXECUTIVE SUMMARY for MARINAS, YACHT CLUBS & BOAT LAUNCHES

This report provides the estimates of the economic impacts for the Regional District of Central Okanagan using boater spending and marine impact model. Recreational Boating at Marinas, Yacht Clubs and at boat launches produces direct and indirect revenues for many different types of businesses. It contributes to the community quality of life through resident and tourism activities. The estimates of annual craft spending have been adjusted for this region using the basis of the national spending surveys conducted in 2006 and 2007. The averages have been adjusted using the consumer price indices for each category.

The activity of a boat on Okanagan, Wood and Kalamalka Lakes creates spending on fuel, groceries, entertainment and at restaurants. The implied annual craft costs include insurance, taxes, storage, repairs, servicing, accessory purchases and trailers. Since most boats are not manufactured in the local area, loan payments are included but boat purchase is not. Wholesale and retail margins are not equated in these activity impacts but can be obtained from the local economic development authorities.

MARINAS

Economic Impact Reports have been conducted at 8 commercially operated marinas based on the present composite operating capacity of 699 slips and boating support amenities which include rentals. Based on a comparative with the national norms of boating activity and test case of this regional district, this represents 22,424 boating days. In this composite, the sector spending categories depend upon the direct and secondary effects on the lakes and not necessarily specific services at a single locale. For example, boat fuelling is not marinas specific. The economic effect of marinas does include sales, jobs and labour incomes at direct and secondary levels. The detail reports include the higher potential for value added impact; however for this analysis it is not verifiable.
MARINAS ECONOMIC IMPACT- DIRECT - $4.27M
MARINAS ECONOMIC IMPACT SECONDARY - $2M
<u>TOTAL MARINA EFFECT - $6.3M</u>

YACHT CLUBS

There are 3 public associated Yacht Clubs operating in the regional district. Individual economic impact reports have been conducted based on the current operating capacity of 861 slips. Similar to the marina formula this translates into 27,178 boating days. Only the Kelowna Yacht Club has a fully operating club facility with staff, but direct spending of boaters at the other clubs is a still considered within the local effect. The potential for value added does not apply at this time.
YACHT CLUB ECONOMIC IMPACT – DIRECT - $5M
YACHT CLUB ECONOMIC IMPACT – SECONDARY - $2.37M
<u>TOTAL YACHT CLUB EFFECT - $7.4M</u>

BOAT LAUNCHES

A total of 27 boat launches were monitored over 43 days to develop the norms for an Okanagan season of 123 days. For the analysis of this economic indicator 52,820 boats were launched between May 16 to September 14.08. Boat launching is very much a weather driven activity. The launch range was 11peak days of 1,200 launches per day to 15 low days of 50 launches. The average boats launched per day is 429. Three test cases were conduct by on the water and under the bridge counts to verify launch-lake activity comparisons. The economic impact model indicates the implied jobs and labour force to maintain these craft. For the economic impact derivatives of this report the secondary effects are a guide and value added would require a future business case.
BOAT LAUNCH ECONOMIC IMPACT –DIRECT- $25.5M

ECONOMIC IMPACT VARIABLES AND SUMMATION

The economic impact of boating as reported by Discover Boating Canada is $15.6B and $3B is attributable to British Columbia which does include purchase of boats and related tourism activities. The study indicates from sales tax revenue that 27 cents of the boating dollar is spent at the marina or yacht club, 21 cents for fishing/tourism, 16 cents on retail sales, 16 cents on gas and 14 cents on boat purchase/payments. The remaining 6 cents is insurance and licensing.

This Economic Impact Composite Report respects the cooperation from the Marina and Yacht Club operators and owners. The impact of these services for residents and tourist are supported by Marine Business of Dockside, Malibu and Rayburn. The dry-land storage impact of 1,560 berths is contained within this report but boat sales are not part of this particular template. The cooperation from these service centres indicate that growth of boating matches the provincial growth rate of +2.6%.

The terms of reference of this study does not include private moorage nor the tourism impact from ticketed commercial operations from local moorage; specifically the Fintry Queen, Okanagan Princess, Executive House Boat, and the Kelowna Princess. The reported tourism spending is about $345M per annum (2001)

It cannot go unnoted that the regional district is home to Campion boats with over 83 dealers worldwide. Boat manufacturing revenues is $2B in Canada $277M in British Columbia. The building of Allante, Chase and Explorer Campion craft contributes healthily to the regional economy. These variables are secondary impact contributors to the total economic impact figures

ECONOMIC IMPACT OF BOATING
$39.2M

Further to this current status, the development activity for future private/strata moorage is conservatively estimated at 1400. The commercial/public moorage forecast within 5 years is at 400. The Economic Impact for 400 new public slips would be: $3.5M

MARINAS

TABLE 1 - Number of Different Type and Size Boats Kept at the Marina

Boats Type and Size	Number of Boats	Average Days Per Boat	Total Boat Days
Power <40'	651	32	20,757
Power 40'+	14	45	636
Sail <40'	34	30	1,031
Transient Power	-	-	-
Total	**699**	**-**	**22,424**

Economic Impact Result/Tables

TABLE 2 - Economic Impacts of Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Lodging	20.4	0.4	8.9	14.5
Marina Services	386.0	7.4	141.7	237.4
Restaurant	546.7	13.7	214.9	242.7
Recreation & Entertainment	81.7	1.6	30.0	50.2
Repair & Maintenance	-	-	-	-
Grocery Stores (Margin &Sales)	113.6	2.4	46.2	61.7
Gas Service Stations (Margin &Sales)	244.9	2.9	94.8	123.2
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margins & Sales)	41.9	1.0	19.8	27.7
Wholesale Trade (Margins &Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	1,435.3	29.5	556.3	757.4
Secondary Effects	723.4	8.6	232.7	399.7
Total Effects	**2,158.7**	**38.0**	**789.0**	**1,157.1**

TABLE 3 - Economic Impacts of Craft Spending by Boats Kept at the Marinas

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	1,218.3	23.4	447.1	749.3
Repairs	1,216.4	8.8	232.3	534.0
Insurance	71.4	0.9	35.0	62.1
Credit Intermediaries	14.9	0.1	6.1	11.8
Retail Margins	312.8	7.7	148.1	206.4
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trailers, Accessories	-	-	-	-
Total Direct Effects	2,833.9	40.8	868.6	1,563.6
Secondary Effects	1,299.9	15.3	423.8	707.3
Total Effects	**4,133.7**	**56.1**	**1,292.5**	**2,270.9**

TABLE 4- Economic Impact of both Craft and Trip Spending by Boats Kept at the Marinas

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Lodging	20.4	0.4	8.9	14.5
Marina Services	1,604.3	30.8	588.8	986.6
Restaurant	546.7	13.7	214.9	242.7
Recreation & Entertainment	81.7	1.6	30.0	50.2
Repair & Maintenance	1,216.4	8.8	232.3	534.0
Insurance &Credit	86.3	1.0	41.1	73.9
Gas Service	244.9	2.9	94.8	123.2
Other Retail Trade	468.3	11.1	214.1	295.8
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	4,269.1	70.3	1,424.9	2,321.0
Secondary Effects	2,023.3	23.8	656.6	1,107.0
Total Effects	**6,292.4**	**94.1**	**2,081.5**	**3,428.0**

YACHT CLUBS

TABLE 1 - Number of Different Type and Size Boats Kept at the Yacht Clubs

Boats Type and Size	Number of Boats	Average Days Per Boat	Total Boat Days
Power <40'	686	32	21,872
Power 40'+	-	-	-
Sail <40'	175	30	5,305
Sail 40'+	-	-	-
Total	**861**	**32**	**27,178**

Economic Impact Result/Tables

TABLE 2 - Economic Impacts of Trip Spending by Boats Kept at the Yacht Clubs

Sector/Spending category	Sales ($ Thousands)	Jobs	Labor Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Lodging	27.6	0.6	12.1	19.6
Marina Services	433.0	8.3	158.9	266.3
Restaurant	620.7	15.6	243.9	275.6
Recreation & Entertainment	91.5	1.8	33.6	56.3
Repair & Maintenance	-	-	-	-
Grocery Stores (Margin &Sales)	129.9	2.7	52.9	70.5
Gas Service Stations (Margin &Sales)	256.5	3.1	99.3	129.0
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margins &Sales)	49.4	1.2	23.4	32.7
Wholesale Trade (Margins &Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	1,608.7	33.2	624.0	850.0
Secondary Effects	809.9	9.6	260.3	447.2
Total Effects	**2,418.5**	**42.8**	**884.3**	**1,297.2**

TABLE 3 - Economic Impacts of Craft Spending by Boats Kept at the Yacht Clubs

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	1,534.0	29.4	563.0	943.4
Repairs	1,404.1	10.1	268.2	616.4
Insurance	78.7	1.0	38.6	68.5
Credit Intermediaries	15.5	0.1	6.4	12.3
Retail Margins	378.0	9.3	178.9	249.4
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trailers, Accessories	-	-	-	-
Total Direct Effects	3,410.3	49.9	1,055.0	1,890.0
Secondary Effects	1,565.3	18.4	510.8	853.1
Total Effects	**4,975.6**	**68.4**	**1,565.8**	**2,743.1**

TABLE 4 - Economic Impact of both Craft and Trip Spending by Boats Kept at the Yacht Clubs

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Lodging	27.6	0.6	12.1	19.6
Marina Services	1,967.0	37.7	721.9	1,209.7
Restaurant	620.7	15.6	243.9	275.6
Recreation & Entertainment	91.5	1.8	33.6	56.3
Repair & Maintenance	1,404.1	10.1	268.2	616.4
Insurance & Credit	94.2	1.1	44.9	80.7
Gas Service	256.5	3.1	99.3	129.0
Other Retail Trade	557.3	13.2	255.2	352.6
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	5,019.0	83.2	1,679.0	2,739.9
Secondary Effects	2,375.2	28.0	771.1	1,300.3
Total Effects	**7,394.2**	**111.2**	**2,450.1**	**4,040.2**

BOAT LAUNCHES

TABLE 1 - Boats Using the Launch Sites Over The Boating Season.08

Type of Boats	Number Boats Launched	Number of Launch/Days
Power <25'	43,700	27/123
Power 25'+	9,120	27/123
Total	**52,820**	**3,321**
Boating Norms*	**Days Launches**	**Totals**
Peak	11days X 1200	13,200
High	43 X 590	25,370
Mid-Range	54 X 250	13,500
Low	15 X 50	750
TOTALS		**52,820**

- The Boat Launch Norms where developed from a 43 day monitoring period

Economic Impact Result/Tables

TABLE 2 - Economic Impacts of Trip Spending by Boats Using the Launch Sites

Sector/Spending category	Sales (000's $)	Jobs	Labour Income (000's $)	Value Added (000's $)
Direct Effects				
Lodging	260.1	5.3	113.7	184.1
Marina Services	348.6	6.7	127.9	214.4
Restaurant	791.8	19.9	311.2	351.5
Recreation &Entertainment	179.1	3.4	65.7	110.1
Repair &Maintenance	-	-	-	-
Grocery Stores (Margin &Sales)	206.5	4.3	84.1	112.2
Gas Service Stations (Margin &Sales)	593.0	7.1	229.5	298.3
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margins &Sales)	90.0	2.2	42.6	59.5
Wholesale Trade (Margins &Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	2,469.0	48.9	974.6	1,330.1
Secondary Effects	1,244.2	14.8	403.9	692.5
Total Effects	**3,713.2**	**63.7**	**1,378.5**	**2,022.6**

TABLE 3 - Economic Impacts of Craft Spending by Boats Using the Launch Sites

Sector/Spending category	Sales (000's $)	Jobs	Labour Income (000's $)	Value Added (000's $)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	1,635.0	31.4	600.0	1,005.5
Repairs	13,844.3	99.8	2,644.3	6,077.7
Insurance	1,929.6	25.6	945.5	1,678.8
Credit Intermediaries	402.8	2.0	165.1	318.6
Retail Margins*	5,531.5	132.3	2,622.9	3,635.9
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trailers, Accessories	-	-	-	-
Total Direct Effects	23,343.2	291.0	6,977.9	12,716.4
Secondary Effects	10,623.8	122.5	3,443.6	5,725.9
Total Effects	**33,967.0**	**413.5**	**10,421.4**	**18,442.3**

TABLE 4 - Economic Impact of both Craft and Trip Spending by Boats Using the Launch Sites

Sector/Spending category	Sales (000's $)	Jobs	Labour Income (000's $)	Value Added (000's $)
Direct Effects				
Lodging	260.1	5.3	113.7	184.1
Marina Services	1,983.5	38.1	728.0	1,219.9
Restaurant	791.8	19.9	311.2	351.5
Recreation & Entertainment	179.1	3.4	65.7	110.1
Repair & Maintenance	13,844.3	99.8	2,644.3	6,077.7
Insurance & Credit	2,332.4	27.6	1,110.7	1,997.4
Gas Service	593.0	7.1	229.5	298.3
Other Retail Trade	5,828.0	138.8	2,749.5	3,807.5
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	25,812.2	340.0	7,952.4	14,046.5
Secondary Effects	11,868.0	137.3	3,847.5	6,418.4
Total Effects	**37,680.2**	**477.2**	**11,799.9**	**20,464.9**

Terms Used in this Economic Impact Analysis

Term	Definition
Sales	Sales of firms within the region resulting from boater spending.
Jobs	The number of jobs in the region supported by the boater spending. Job estimates are not full time equivalents, but include part time positions. Seasonal jobs are adjusted to annual equivalents, e.g. four jobs for three months each equates to one job.
Income	Labour income, including wages and salaries, payroll benefits and incomes of sole proprietor's
Value added	Income accruing to households in the region plus rents and profits of businesses and indirect business taxes. As the name implies, it is the net value added to the region's economy. For example, the value added by a marina includes wages and salaries paid to employees, their payroll benefits, profits of the marina, and sales and other indirect business taxes. The marina's non-labor operating costs such as purchases of supplies and services from other firms are not included as value added by the marina.
Direct effects	Direct effects are the changes in sales, income and jobs in those business or agencies that directly receive the boater spending.
Secondary effects	These are the changes in the economic activity in the region that result from the re-circulation of the money spent by boaters. Secondary effects include indirect and induced effects.
Indirect effects	Changes in sales, income and jobs in industries that supply goods and services to the businesses that sell directly to boaters. For example, restaurant supply firms benefit from boater spending in restaurants.
Induced effects	Changes in economic activity in the region resulting from household spending of income earned through a direct or indirect effect of the boater spending. For example, marina employees live in the region and spend their incomes on housing, groceries, education, clothing and other goods and services.
Total effects	Sum of direct, indirect and induced effects. ▪ Direct effects accrue largely to boating and tourism-related businesses in the area ▪ Indirect effects accrue to a broader set of businesses that serve these firms. ▪ Induced effects are distributed widely across a variety of local businesses that provide goods and services to households in the region.
Multipliers	Multipliers capture the size of the total effects relative to the direct effects. A sales multiplier of 2.0 means that for every dollar of direct sales, there is another dollar of sales in the region due to secondary effects. Direct effect multipliers convert sales to the associated income, jobs and value added by using simple ratios. For example, nationally 34 cents of every dollar of sales in restaurants goes to wages and salaries and 48 cents to value added. There are about 22 jobs for every million dollars in restaurant sales. These ratios are used to convert estimates of sales in each economic sector to the associated income, jobs, and value added. The job to sales ratios vary from region to region.

APPENDIX I - ECONOMIC IMPACT ANALYSIS: MARINAS

This analysis has been conducted utilizing the Boating Economic Impact Model developed Dr E. Mahoney, Dr Dan Stynes and Dr Yue Cui of the Recreational Marine Research Centre at Michigan State University.
GDH Solutions acknowledges the support of the Association of Marine Industries, the Great Lakes Commission, the U.S. Coast Guard and the B.C. Marine Trades Association.

This report provides estimates of the **Marina economic impacts** of the OKANAGAN LAKES. The marina produces direct and indirect revenues for many different types of businesses (e.g., retail, restaurants) in the local area. It also contributes to the visual character of the waterfront and contributes to the community's quality of life. Unfortunately, the economic contributions of marinas like this often go unrecognized or are undervalued. This report provides estimates of the direct and indirect economic impacts associated with the spending by the owners of boats that rent seasonal and annual slips, and the direct spending by transient boaters (tourists) staying at the OKANAGAN LAKES.

Economic impacts are estimated using a boater spending and impact model. Boater spending averages on a per day basis for trip spending and per boat basis for annual craft spending are adapted from spending profiles developed from two different national boater surveys conducted by the Recreation Marine Research Center (RMRC) at Michigan State University in 2005. Estimates of annual craft spending for boats kept at marinas are taken from a national survey of more than 12,500 boaters conducted in 2005 and 2006.

Annual craft spending averages were price adjusted to 2008 using consumer price indices for each spending category. Annual craft spending includes storage (during the boat season), insurance, taxes, replacement outboard motors, trailers, fuel, repairs & marine services and accessories. Loan payments for the year are included, but purchases of new boats are not. Since most boats, trailers, motors and other equipment purchased by boaters are not manufactured in the local area, only the retail and wholesale margins on these purchases are included as local impacts.

Trip spending estimates, including what boaters spend on groceries, lodging, entertainment and restaurants, came from a 2006 national survey of more than 6,000 boaters that gathered information about more than 13,000 boating trips. Trip sending includes what boaters spend on boating trips for fuel, groceries, lodging, entertainment, and restaurants. Spending averages were price inflated to 2008. Spending profiles were developed for different size and type boats in different regions of the country. The craft and trip spending averages used here are for boats kept at marinas in Pacific Region.

The spending averages are applied to the number of slip renters and transient boaters at OKANAGAN LAKES. Distinct spending averages are used for power and sail boats divided into two size classes. Spending is divided into 12 trip spending categories and eight craft spending categories.

Total spending by these boaters who rent slips seasonally or annually or are transient renters is applied to a set of economic ratios and multipliers that reflect the local economy. The impact region is defined to include roughly a 30 mile radius of the marina. Economic ratios and multipliers were estimated with the IMPLAN input-output modeling system. Because the size of multipliers differ depending on the size and nature (e.g., types of businesses) of the local economy distinct sets of multipliers were developed for rural (population less than 100,000), small metro (populations 100,000-500,000), and larger metro regions (population over 500,000). Multipliers representing "Small Metro Areas" were selected for this analysis. Economic ratios translate the spending into wages and salaries and jobs supported by the boater spending. Multipliers estimate the secondary effects as this spending flows through the local economy. Total effects include the (1) direct sales, jobs and income in firms selling directly to boaters, (2) indirect effects in firms that supply goods and services to boating businesses, and (3) induced effects resulting from household spending of income earned directly or indirectly from boater spending.

A total of 699 boats are being kept at OKANAGAN LAKES during 2007. This includes 665 power boats ranging from 16’ to more than 40’ and 34 sailboats. It is estimated that the 699 seasonal/annual slip renters will take their boats out on the water a total of 22,424 days in 2007. The average number of boating days per boat is 32 days. The marina rented slips to transient boaters a total of - nights in 2007.

The boaters who rent slips for the season or annually contribute to the local and state economies through spending on the upkeep and maintenance of their craft and also spending on their boating trips. Boaters who keep their boats in slips will spend about 4,973 thousand dollars annually on craft upkeep and maintenance not counting fuel. This spending is broken down as follows: 24% on slip/storage fees, 23% to loan payments including principal and interest, 24% for repairs, 7% for insurance, and 15% for accessories. Combining trip and craft spending, a typical boat spends $3,869 per year on boating trips and $7,114 per year on craft-related expenses.

The Inputs to the Model

TABLE 1 - Number of Different Type and Size Boats Kept at the Marinas

Boats Type and Size	Number of Boats	Average Days Per Boat	Total Boat Days
Power <40'	651	32	20,757
Power 40'+	14	45	636
Sail <40'	34	30	1,031
Sail 40'+	-	-	-
Transient Power	-	-	-
Transient Sail	-	-	-
Total	**699**	**-**	**22,424**

Spending Profiles By Boats Kept at the Marinas

TABLE 1A - Average Spending on Boat Trip by Boats Kept at the Marinas ($ Per Boat Day)

	Boat Type and Size					
CATEGORY	Power <40'	Power 40'+	Sail <40'	Sail 40'+	Transient Power	Transient Sail
Lodging	0.9	0.3	1.5	2.2	4.4	4.3
Marina services	17.3	25.6	10.3	18.3	40.8	28.5
Restaurant	24.4	36.7	16.4	30.7	44.1	33.6
Groceries	19.9	32.6	14.7	24.6	31.5	27.4
Boat fuel	41.1	61.6	3.6	8.0	59.5	8.4
Auto fuel	9.2	8.6	5.8	6.6	9.2	5.9
Repair & Maintenance	-	-	-	-	-	-
Marine supplies	-	-	-	-	-	-
Recreation & Entertainment	3.7	4.4	2.0	6.6	8.6	6.5
Shopping	2.9	6.3	2.9	5.2	12.9	11.6
Other services	-	-	-	-	-	-
Other goods	2.5	1.8	2.0	2.9	-	-
Total	**122**	**178**	**59**	**105**	**211**	**126**

TABLE 1B - Average Annual Craft Spending by Boats Kept at the Marinas ($ Per Boat Per Year)

	Boat Type and Size			
CATEGORY	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Slip	1,652.2	4,635.8	2,289.1	4,096.3
Loan Payments	1,506.6	9,842.1	902.0	5,232.7
Motors	27.8	38.9	11.3	13.8
Trailers	16.7	8.6	6.7	6.1
Insurance	472.8	2,556.4	395.3	1,266.2
Repairs	1,681.5	5,218.7	1,432.1	4,135.1
Accessories	1,041.4	3,174.6	1,197.2	3,521.3
Taxes	331.2	1,102.3	224.1	677.2
Total	**6,730**	**26,577**	**6,458**	**18,949**

Estimates of Total Spending by Boats Kept at the Marinas

TABLE 1C - Total Trip Spending by Different Size and Type Boats Kept at the Marina ($ Thousands)

	Boat Type and Size							
CATEGORY	Power <40'	Power 40'+	Sail <40'	Sail 40'+	Transient Power	Transient Sail	Total	PCT
Lodging	18.68	0.19	1.55	-	-	-	20.42	1%
Marina services	359.09	16.29	10.62	-	-	-	386.00	14%
Restaurant	506.46	23.36	16.90	-	-	-	546.72	20%
Groceries	413.05	20.75	15.15	-	-	-	448.95	17%
Boat fuel	853.09	39.20	3.71	-	-	-	896.00	33%
Auto fuel	190.96	5.47	5.98	-	-	-	202.41	7%
Repair & Maintenance	-	-	-	-	-	-	-	-
Marine supplies	-	-	-	-	-	-	-	-
Recreation & Entertainment	76.80	2.80	2.06	-	-	-	81.66	3%
Shopping	60.19	4.01	2.99	-	-	-	67.19	2%
Other services	-	-	-	-	-	-	-	-
Other goods	51.89	1.15	2.06	-	-	-	55.10	2%
Total	**2,530**	**113**	**61**	**-**	**-**	**-**	**2,704**	**100%**

TABLE 1D - Total Craft Spending by Different Size and Type Boats Kept at the Marinas ($ Thousands)

	Boat Type and Size					
CATEGORY	Power <40'	Power 40'+	Sail <40'	Sail 40'+	Total	PCT
Slip	1,075.58	64.90	77.83	-	1,218.31	24%
Loan Payments	980.80	137.79	30.67	-	1,149.25	23%
Motors	18.10	0.54	0.38	-	19.03	0%
Trailers	10.87	0.12	0.23	-	11.22	0%
Insurance	307.79	35.79	13.44	-	357.02	7%
Repairs	1,094.66	73.06	48.69	-	1,216.41	24%
Accessories	677.95	44.44	40.70	-	763.10	15%
Taxes	215.61	15.43	7.62	-	238.66	5%
Total	**4,381**	**372**	**220**	**-**	**4,973**	**100%**

TABLE 1E - Numbers of Boats, Boating Days and Craft and Trip Spending by Different Size and Type Boats Kept at the Marinas

CATEGORY	Boat Type and Size						Total
	Power <40'	Power 40'+	Sail <40'	Sail 40'+	Transient Power	Transient Sail	
Number of boats	651	14	34	-	-	-	699
Annual craft spending per boat	$6,730	$26,577	$6,458	$18,949	-	-	-
Total craft spending ($ Thousands)	$4,381	$372	$220	-	-	-	$4,973
Average days per boat	32	45	30	33	1	1	-
Total boat days	20,757	636	1,031	-	-	-	22,424
Average trip spending per boat day	$122	$178	$59	$105	$211	$126	-
Total trip spending per boat per year	$3,887	$8,087	$1,795	$3,418	$211	$126	-
Total trip spending ($ Thousands)	$2,530	$113	$61	-	-	-	$2,704
Total craft&trip spending per boat per year	$10,617	$34,664	$8,253	$22,366	$211	$126	-
Total craft& trip spending ($ Thousands)	$6,912	$485	$281	-	-	-	$7,677
Pct of spending by boats	90%	6%	4%	-	-	-	100%
Pct of boats	93%	2%	5%	-	-	-	100%
Pct of boat days by boats	93%	3%	5%	-	-	-	100%
Pct of spending on trips by boats	37%	23%	22%	-	-	-	35%

Economic Impact Result/Tables

TABLE 2 - Economic Impacts of Trip Spending by Boats Kept at the Marinas

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Lodging	20.4	0.4	8.9	14.5
Marina Services	386.0	7.4	141.7	237.4
Restaurant	546.7	13.7	214.9	242.7
Recreation & Entertainment	81.7	1.6	30.0	50.2
Repair & Maintenance	-	-	-	-
Grocery Stores (Margin &Sales)	113.6	2.4	46.2	61.7
Gas Service Stations (Margin &Sales)	244.9	2.9	94.8	123.2
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margins & Sales)	41.9	1.0	19.8	27.7
Wholesale Trade (Margins &Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	1,435.3	29.5	556.3	757.4
Secondary Effects	723.4	8.6	232.7	399.7
Total Effects	**2,158.7**	**38.0**	**789.0**	**1,157.1**

TABLE 3 - Economic Impacts of Craft Spending by Boats Kept at the Marinas

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	1,218.3	23.4	447.1	749.3
Repairs	1,216.4	8.8	232.3	534.0
Insurance	71.4	0.9	35.0	62.1
Credit Intermediaries	14.9	0.1	6.1	11.8
Retail Margins	312.8	7.7	148.1	206.4
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trailers, Accessories	-	-	-	-
Total Direct Effects	2,833.9	40.8	868.6	1,563.6
Secondary Effects	1,299.9	15.3	423.8	707.3
Total Effects	**4,133.7**	**56.1**	**1,292.5**	**2,270.9**

TABLE 4 - Economic Impact of both Craft and Trip Spending by Boats Kept at the Marinas

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Lodging	20.4	0.4	8.9	14.5
Marina Services	1,604.3	30.8	588.8	986.6
Restaurant	546.7	13.7	214.9	242.7
Recreation & Entertainment	81.7	1.6	30.0	50.2
Repair & Maintenance	1,216.4	8.8	232.3	534.0
Insurance &Credit	86.3	1.0	41.1	73.9
Gas Service	244.9	2.9	94.8	123.2
Other Retail Trade	468.3	11.1	214.1	295.8
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	4,269.1	70.3	1,424.9	2,321.0
Secondary Effects	2,023.3	23.8	656.6	1,107.0
Total Effects	**6,292.4**	**94.1**	**2,081.5**	**3,428.0**

APPENDIX II - ECONOMIC IMPACT ANALYSIS: YACHT CLUBS

This analysis has been conducted utilizing the Boating Economic Impact Model developed Dr E. Mahoney, Dr. Dan Stynes and Dr. Yue Cui of the Recreational Marine Research Centre at Michigan State University.
GDH Solutions acknowledges the support of the Association of Marine Industries, the Great Lakes Commission, the U.S. Coast Guard and the B.C. Marine Trades Association.

Name of the Marina:	OKANAGAN LAKES
Type of the Marina:	Publicly owned marina yacht clubs
Types of Slips Rented:	Seasonal, Annual or Condominium Slips
Region of the country:	Pacific
Type of Economy:	Small Metro Areas. (Populations of 100-500,000)
Date:	9/2/2008

This report provides estimates of the **economic impacts of Yacht Clubs** on Lake Okanagan. The yacht clubs (referred to as marinas) produce direct and indirect revenues for many different types of businesses (e.g., retail, restaurants) in the local area. It also contributes to the visual character of the waterfront and contributes to the community's quality of life. Unfortunately, the economic contributions of marinas like this often go unrecognized or are undervalued. This report provides estimates of the direct and indirect economic impacts associated with the spending by the owners of boats that rent seasonal and annual slips during 2008 at Lake Okanagan Yacht Clubs.

Economic impacts are estimated using a boater spending and impact model. Boater spending averages on a per day basis for trip spending and per boat basis for annual craft spending are adapted from spending profiles developed from two different national boater surveys conducted by the Recreation Marine Research Center (RMRC) at Michigan State University in 2005. Estimates of annual craft spending for boats kept at marinas are taken from a national survey of more than 12,500 boaters conducted in 2005 and 2006.

Annual craft spending averages were price adjusted to 2008 using consumer price indices for each spending category. Annual craft spending includes storage (during the boat season), insurance, taxes, replacement outboard motors, trailers, fuel, repairs & marine services and accessories. Loan payments for the year are included, but purchases of new boats are not. Since most boats, trailers, motors and other equipment purchased by boaters are not manufactured in the local area, only the retail and wholesale margins on these purchases are included as local impacts.

Trip spending estimates, including what boaters spend on groceries, lodging, entertainment and restaurants, came from a 2006 national survey of more than 6,000 boaters that gathered information about more than 13,000 boating trips. Trip sending includes what boaters spend on boating trips for fuel, groceries, lodging, entertainment, and restaurants. Spending averages were price inflated to 2008. Spending profiles were developed for different size and type boats in different regions of the country. The craft and trip spending averages used here are for boats kept at marinas in Pacific Region.

The spending averages are applied to the number of slip renters and transient boaters at okanagan lakes. Distinct spending averages are used for power and sail boats divided into two size classes. Spending is divided into 12 trip spending categories and eight craft spending categories.

Total spending by these boaters who rent slips seasonally or annually or are transient renters is applied to a set of economic ratios and multipliers that reflect the local economy. The impact region is defined to include roughly a 30 mile radius of the marina. Economic ratios and multipliers were estimated with the IMPLAN input-output modeling system. Because the size of multipliers differ depending on the size and nature (e.g., types of businesses) of the local economy distinct sets of multipliers were developed for rural (population less than 100,000), small metro (populations 100,000-500,000), and larger metro regions (population over 500,000). Multipliers representing "Small Metro Areas" were selected for this analysis. Economic ratios translate the spending into wages and salaries and jobs supported by the boater spending. Multipliers estimate the secondary effects as these spending flows through the local economy. Total effects include the (1) direct sales, jobs and income in firms selling directly to boaters, (2) indirect effects in firms that supply goods and services to boating businesses, and (3) induced effects resulting from household spending of income earned directly or indirectly from boater spending.

A total of 861 boats are being kept at Lake Okanagan Yacht Clubs during 2008. This includes 686 power boats ranging from 16' to more than 40' and 175 sailboats. It is estimated that the 861 seasonal/annual slip renters will take their boats out on the water a total of 27,178 days in 2008. The average number of boating days per boat is 32 days.

The boaters who rent slips for the season or annually contribute to the local and state economies through spending on the upkeep and maintenance of their craft and also spending on their boating trips. Boaters who keep their boats in slips will spend about 5,747 thousand dollars annually on craft upkeep and maintenance not counting fuel. This spending is broken down as follows: 27% on slip/storage fees, 21% to loan payments including principal and interest, 24% for repairs, 7% for insurance, and 16% for accessories. Combining trip and craft spending, a typical boat spends $3,461 per year on boating trips and $6,675 per year on craft-related expenses.

Total trip spending by these boats kept at the Yacht Clubs are estimated to be $5 million, with 15% spent on marina services, 21% on restaurants and bars, 17% groceries, 8% auto fuel and 31% boat fuel. Secondary Effects represent an additional $2.4M For a total of $7.4M.

The direct economic effects on the local economy of this spending are 83 jobs[1], $1.7 million in labour income and $2.7 million in value added[2]. The marina's non-labour operating costs such as purchases of supplies and services from other firms are not included as value added by the marina. Direct effects cover the impacts in businesses selling goods and services directly to these boaters. This includes 38 jobs in marina services, 16 jobs in restaurants and bars, and 13 jobs in retail stores.

Including secondary effects, the total impact on the local economy is 111 jobs, $2.5 million in labour income and $4.0 million in value added.

[1] Jobs are not full time equivalents, but include full time and part time jobs. Seasonal positions are adjusted to an annual basis, e.g., two jobs for six months equates to one job on an annual basis. Labor income includes wages and salaries, payroll benefits and income of sole proprietors. Value added includes labor income as well as profits and rents and sales taxes and other indirect business taxes.

[2] Value added is the income accruing to households in the region plus rents and profits of businesses and indirect business taxes. As the name implies, it is the net value added to the region's economy. For example, the value added by a marina includes wages and salaries paid to employees, their payroll benefits, profits of the marina, and sales and other indirect business taxes.

The Inputs to the Model

TABLE 1 - Number of Different Type and Size Boats Kept at the Yacht Clubs

Boats Type and Size	Number of Boats	Average Days Per Boat	Total Boat Days
Power <40'	686	32	21,872
Power 40'+	-	-	-
Sail <40'	175	30	5,305
Sail 40'+	-	-	-
Total	**861**	**32**	**27,178**

Spending Profiles by Boats Kept at the Yacht Clubs

TABLE 1A - Average Spending on Boat Trip by Boats Kept at the Yacht Clubs ($ Per Boat Day)

	Boat Type and Size			
CATEGORY	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Lodging	0.9	0.3	1.5	2.2
Marina services	17.3	25.6	10.3	18.3
Restaurant	24.4	36.7	16.4	30.7
Groceries	19.9	32.6	14.7	24.6
Boat fuel	41.1	61.6	3.6	8.0
Auto fuel	9.2	8.6	5.8	6.6
Repair & Maintenance	-	-	-	-
Marine supplies	-	-	-	-
Recreation & Entertainment	3.7	4.4	2.0	6.6
Shopping	2.9	6.3	2.9	5.2
Other services	-	-	-	-
Other goods	2.5	1.8	2.0	2.9
Total	**122**	**178**	**59**	**105**

TABLE 1B - Average Annual Craft Spending by Boats Kept at the Yacht Clubs ($ Per Boat Per Year)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Slip	1,652.2	4,635.8	2,289.1	4,096.3
Loan Payments	1,506.6	9,842.1	902.0	5,232.7
Motors	27.8	38.9	11.3	13.8
Trailers	16.7	8.6	6.7	6.1
Insurance	472.8	2,556.4	395.3	1,266.2
Repairs	1,681.5	5,218.7	1,432.1	4,135.1
Accessories	1,041.4	3,174.6	1,197.2	3,521.3
Taxes	331.2	1,102.3	224.1	677.2
Total	**6,730**	**26,577**	**6,458**	**18,949**

Estimates of Total Spending by Boats Kept at the Yacht Clubs

TABLE 1C - Total Trip Spending by Different Size and Type Boats Kept at the Yacht Clubs($ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Lodging	19.69	-	7.96	-	27.64	1%
Marina services	378.39	-	54.65	-	433.04	15%
Restaurant	533.69	-	87.01	-	620.70	21%
Groceries	435.26	-	77.99	-	513.25	17%
Boat fuel	898.96	-	19.10	-	918.06	31%
Auto fuel	201.23	-	30.77	-	232.00	8%
Repair & Maintenance	-	-	-	-	-	-
Marine supplies	-	-	-	-	-	-
Recreation & Entertainment	80.93	-	10.61	-	91.54	3%
Shopping	63.43	-	15.39	-	78.82	3%
Other services	-	-	-	-	-	-
Other goods	54.68	-	10.61	-	65.29	2%
Total	**2,666**	**-**	**314**	**-**	**2,980**	**100%**

TABLE 1D- Total Craft Spending by Different Size and Type Boats Kept at the Yacht Clubs ($ Thousands)

CATEGORY	Boat Type and Size					
	Power <40'	Power 40'+	Sail <40'	Sail 40'+	Total	PCT
Slip	1,133.41	-	400.59	-	1,534.00	27%
Loan Payments	1,033.53	-	157.85	-	1,191.38	21%
Motors	19.07	-	1.98	-	21.05	0%
Trailers	11.46	-	1.17	-	12.63	0%
Insurance	324.34	-	69.18	-	393.52	7%
Repairs	1,153.51	-	250.62	-	1,404.13	24%
Accessories	714.40	-	209.51	-	923.91	16%
Taxes	227.20	-	39.22	-	266.42	5%
Total	**4,617**	**-**	**1,130**	**-**	**5,747**	**100%**

TABLE 1E - Numbers of Boats, Boating Days and Craft and Trip Spending by Different Size and Type Boats Kept at the Yacht Clubs

	Boat Type and Size				
CATEGORY	Power <40'	Power 40'+	Sail <40'	Sail 40'+	Total
Number of boats	686	-	175	-	861
Annual craft spending per boat	$6,730	$26,577	$6,458	$18,949	-
Total craft spending ($ Thousands)	$4,617	-	$1,130	-	$5,747
Average days per boat	32	45	30	33	-
Total boat days	21,872	-	5,305	-	27,178
Average trip spending per boat day	$122	$178	$59	$105	-
Total trip spending per boat per year	$3,887	$8,087	$1,795	$3,418	-
Total trip spending ($ Thousands)	$2,666	-	$314	-	$2,980
Total craft &trip spending per boat per year	$10,617	$34,664	$8,253	$22,366	-
Total craft &trip spending ($ Thousands)	$7,283	-	$1,444	-	$8,727
Pct of spending by boats	83%	-	17%	-	100%
Pct of boats	80%	-	20%	-	100%
Pct of boat days by boats	80%	-	20%	-	100%
Pct of spending on trips by boats	37%	-	22%	-	34%

Economic Impact Result/Tables

TABLE 2 - Economic Impacts of Trip Spending by Boats Kept at the Yacht Clubs

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Lodging	27.6	0.6	12.1	19.6
Marina Services	433.0	8.3	158.9	266.3
Restaurant	620.7	15.6	243.9	275.6
Recreation & Entertainment	91.5	1.8	33.6	56.3
Repair & Maintenance	-	-	-	-
Grocery Stores (Margin &Sales)	129.9	2.7	52.9	70.5
Gas Service Stations (Margin &Sales)	256.5	3.1	99.3	129.0
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margins &Sales)	49.4	1.2	23.4	32.7
Wholesale Trade (Margins &Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	1,608.7	33.2	624.0	850.0
Secondary Effects	809.9	9.6	260.3	447.2
Total Effects	**2,418.5**	**42.8**	**884.3**	**1,297.2**

TABLE 3 - Economic Impacts of Craft Spending by Boats Kept at the Yacht Clubs

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	1,534.0	29.4	563.0	943.4
Repairs	1,404.1	10.1	268.2	616.4
Insurance	78.7	1.0	38.6	68.5
Credit Intermediaries	15.5	0.1	6.4	12.3
Retail Margins	378.0	9.3	178.9	249.4
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trailers, Accessories	-	-	-	-
Total Direct Effects	3,410.3	49.9	1,055.0	1,890.0
Secondary Effects	1,565.3	18.4	510.8	853.1
Total Effects	**4,975.6**	**68.4**	**1,565.8**	**2,743.1**

TABLE 4 - Economic Impact of both Craft and Trip Spending by Boats Kept at the Yacht Clubs

Sector/Spending category	Sales ($ Thousands)	Jobs	Labour Income ($ Thousands)	Value Added ($ Thousands)
Direct Effects				
Lodging	27.6	0.6	12.1	19.6
Marina Services	1,967.0	37.7	721.9	1,209.7
Restaurant	620.7	15.6	243.9	275.6
Recreation & Entertainment	91.5	1.8	33.6	56.3
Repair & Maintenance	1,404.1	10.1	268.2	616.4
Insurance & Credit	94.2	1.1	44.9	80.7
Gas Service	256.5	3.1	99.3	129.0
Other Retail Trade	557.3	13.2	255.2	352.6
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	5,019.0	83.2	1,679.0	2,739.9
Secondary Effects	2,375.2	28.0	771.1	1,300.3
Total Effects	**7,394.2**	**111.2**	**2,450.1**	**4,040.2**

APPENDIX III- ECONOMIC IMPACT ANALYSIS: BOAT LAUNCHES

This analysis has been conducted utilizing the Boating Economic Impact Model developed Dr. E. Mahoney, Dr. Dan Stynes and Dr. Yue Cui of the Recreational Marine Research Centre at Michigan State University. GDH Solutions acknowledges the support of the Association of Marine Industries, the Great Lakes Commission, the U.S. Coast Guard and the B.C. Marine Trades Association.

BOAT LAUNCHES SUMMARY

This report provides the estimates of the economic impacts for the Regional District of Central Okanagan using boater spending and marine impact model. Marine recreational use of launches produces direct and indirect revenues for many different types of businesses. It contributes to the community quality of life through resident and tourism activities. The estimates of annual craft spending have been adjusted for this region using the basis of the national spending surveys conducted in 2006 and 2007. The averages have been adjusted using the consumer price indices for each spending category.

A total of 27 boat launches were monitored over 43 days to develop the norms for an Okanagan season of 123 days. For the analysis of this economic indicator 52,820 boats were launched between May 16 to September 14.08. Boat launching is very much a weather driven activity. The launch range was 11peak days of 1,200 launches per day to 15 low days of 50 launches. The average boats launched per day is 429.

The launching of a boat on Okanagan, Wood and Kalamalka Lakes creates spending on fuel, groceries, entertainment and at restaurants. The implied annual craft costs include insurance, taxes, storage, repairs, servicing, accessory purchases and trailers. Since most boats are not manufactured in the local area, loan payments are included but boat purchase is not. Wholesale and retail margins are not equated in these activity impacts but can be obtained from the local economic development authorities.

The direct economic impact of the launch activities can be assessed at $25.8M per year with a secondary impact of $11.9M The boating activity from the monitored 27 sites could achieve the valued added potential of $14M should a business plan for destination travel be adopted across the lakes.

TABLE 1 - Boats Using the Launch Sites Over The Boating Season.08

Type of Boats	Number Boats Launched	Number of Launch/Days
Power <25'	43,700	27/123
Power 25'+	9,120	27/123
Total	**52,820**	**3,321**
Boating Norms*	**Days Launches**	**Totals**
Peak	11days X 1200	13,200
High	43 X 590	25,370
Mid-Range	54 X 250	13,500
Low	15 X 50	750
TOTALS		**52,820**

- The Boat Launch Norms where developed from a 43 day monitoring period

• Spending Profiles by Boats Using the Launch Sites

TABLE 1A - Average Spending on Boat Trip by Boats Using the Launch Sites ($ Per Boat Day)

	Boat Size	
CATEGORY	**Power <25'**	**Power 25'+**
Lodging	5.2	3.6
Marina services	4.7	15.7
Restaurant	12.4	27.4
Groceries	14.8	18.6
Boat fuel	20.6	66.0
Auto fuel	21.8	22.4
Repair & Maintenance	-	-
Marine supplies	-	-
Recreation & Entertainment	3.2	4.3
Shopping	2.4	4.0
Other services	-	-
Other goods	2.1	3.2
Total	**87**	**165**

TABLE 1B - Average Annual Craft Spending by Boats Using the Launch Sites ($ Per Boat Per Year)

CATEGORY	Boat Size	
	Power <25'	Power 25'+
Slip	20.3	82.0
Loan Payments	322.2	1,853.4
Motors	15.5	19.6
Trailers	11.0	33.0
Insurance	134.3	414.4
Repairs	187.6	619.1
Accessories	178.2	550.2
Taxes	45.2	128.8
Total	**914**	**3,701**

Total Spending

TABLE 1C - Total Trip Spending by Different Size Boats Using the Launch Sites (000's $)

CATEGORY	Boat Size		Total	PCT
	Power <25'	Power 25'+		
Lodging	227.24	32.83	260.07	5%
Marina services	205.39	143.18	348.57	7%
Restaurant	541.88	249.89	791.77	15%
Groceries	646.76	169.63	816.39	15%
Boat fuel	900.22	601.92	1,502.14	28%
Auto fuel	952.66	204.29	1,156.95	22%
Repair & Maintenance	-	-	-	-
Marine supplies	-	-	-	-
Recreation & Entertainment	139.84	39.22	179.06	3%
Shopping	104.88	36.48	141.36	3%
Other services	-	-	-	-
Other goods	91.77	29.18	120.95	2%
Total	**3,811**	**1,507**	**5,317**	**100%**

TABLE 1D - Total Craft Spending by Different Size Boats Using the Launch Sites (000's $)

CATEGORY	Boat Size Power <25'	 Power 25'+	Total	PCT
Slip	887.11	747.84	1,634.95	2%
Loan Payments	14,080.14	16,903.01	30,983.15	42%
Motors	677.35	178.75	856.10	1%
Trailers	480.70	300.96	781.66	1%
Insurance	5,868.91	3,779.33	9,648.24	13%
Repairs	8,198.12	5,646.19	13,844.31	19%
Accessories	7,787.34	5,017.82	12,805.16	17%
Taxes	1,975.24	1,174.66	3,149.90	4%
Total	**39,955**	**33,749**	**73,703**	**100%**

TABLE 1E - Numbers of Boats, Boating Days and Craft and Trip Spending by Different Size Boats Using the Launch Sites

CATEGORY	Boat Size Power <25'	 Power 25'+	Total
Number of boats	43,700	9,120	52,820
Annual craft spending per boat	$914	$3,701	-
Total craft spending (000's $)	$39,955	$33,749	$73,703
Average days per boat	1	1	-
Total boat days	43,700	9,120	52,820
Average trip spending per boat day	$87	$165	-
Total trip spending per boat per year	$87	$165	-
Total trip spending (000's $)	$3,811	$1,507	$5,317
Total craft & trip spending per boat per year	$1,002	$3,866	-
Total craft & trip spending (000's $)	$43,766	$35,255	$79,021
Pct of spending by boats	55%	45%	100%
Pct of boats	83%	17%	100%
Pct of boat days by boats	83%	17%	100%
Pct of spending on trips by boats	9%	4%	7%

Economic Impact Result/Tables

TABLE 2 - Economic Impacts of Trip Spending by Boats Using the Launch Site

Sector/Spending category	Sales (000's $)	Jobs	Labour Income (000's $)	Value Added (000's $)
Direct Effects				
Lodging	260.1	5.3	113.7	184.1
Marina Services	348.6	6.7	127.9	214.4
Restaurant	791.8	19.9	311.2	351.5
Recreation &Entertainment	179.1	3.4	65.7	110.1
Repair &Maintenance	-	-	-	-
Grocery Stores (Margin &Sales)	206.5	4.3	84.1	112.2
Gas Service Stations (Margin &Sales)	593.0	7.1	229.5	298.3
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margins &Sales)	90.0	2.2	42.6	59.5
Wholesale Trade (Margins &Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	2,469.0	48.9	974.6	1,330.1
Secondary Effects	1,244.2	14.8	403.9	692.5
Total Effects	**3,713.2**	**63.7**	**1,378.5**	**2,022.6**

TABLE 3 - Economic Impacts of Craft Spending by Boats Using the Launch Site

Sector/Spending category	Sales (000's $)	Jobs	Labor Income (000's $)	Value Added (000's $)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	1,635.0	31.4	600.0	1,005.5
Repairs	13,844.3	99.8	2,644.3	6,077.7
Insurance	1,929.6	25.6	945.5	1,678.8
Credit Intermediaries	402.8	2.0	165.1	318.6
Retail Margins*	5,531.5	132.3	2,622.9	3,635.9
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trailers, Accessories	-	-	-	-
Total Direct Effects	23,343.2	291.0	6,977.9	12,716.4
Secondary Effects	10,623.8	122.5	3,443.6	5,725.9
Total Effects	**33,967.0**	**413.5**	**10,421.4**	**18,442.3**

TABLE 4- Economic Impact of both Craft and Trip Spending by Boats Using the Launch Site

Sector/Spending category	Sales (000's $)	Jobs	Labour Income (000's $)	Value Added (000's $)
Direct Effects				
Lodging	260.1	5.3	113.7	184.1
Marina Services	1,983.5	38.1	728.0	1,219.9
Restaurant	791.8	19.9	311.2	351.5
Recreation & Entertainment	179.1	3.4	65.7	110.1
Repair & Maintenance	13,844.3	99.8	2,644.3	6,077.7
Insurance & Credit	2,332.4	27.6	1,110.7	1,997.4
Gas Service	593.0	7.1	229.5	298.3
Other Retail Trade	5,828.0	138.8	2,749.5	3,807.5
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	25,812.2	340.0	7,952.4	14,046.5
Secondary Effects	11,868.0	137.3	3,847.5	6,418.4
Total Effects	**37,680.2**	**477.2**	**11,799.9**	**20,464.9**