Assessing demand for recreational boat launching on the Fraser River, British Columbia

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Executive Summary

Recreational boating is a popular leisure activity among residents of Metro Vancouver and the Fraser Valley Regional District. Currently, access to the Fraser River varies along its course, which is partially influenced by disproportionate spatial demand. Present knowledge of the regional demand, as well as an understanding of patterns of use is quite limited, preventing the development of effective management strategies.

This study aims to improve knowledge on use of recreational boat launching facilities along the Fraser River through a variety of research methods. To gain understanding of this issue, first a literature review was conducted, followed by visits to a number of sites, next an online user survey was administered targeting a diverse array of users, finally two expert interviews were conducted to obtain a broader, more general scale of knowledge.

The research concluded that fishing is by far the most popular activity along the Fraser River with highest demand for launching facilities occurring in the summer and fall. Furthermore, parking capacity was identified as a major constraint of a site's overall capacity, having a large influence on the varying levels of use between sites. A desire from users for greater access to the mid reaches section of the river was identified, supported by the stretch of the river having fewer launch sites than other sections of the river, as well as limited parking at the currently existing sites.

Based on the findings of this study, it is recommended that organizations that support recreational boating in the region work together to improve access to the mid reaches section, particularly on the north side. This can effectively be improved simply through increased parking capacity at existing locations.

Introduction

The Lower Mainland is home to a variety of regional and local parks, as well as a number of water bodies that offer many outdoor activities. Among the approximately 2.5 million people living in Metro Vancouver and the Fraser Valley Regional District (FVRD) more than 50% participate in some sort of outdoor activity throughout the year (Metro Vancouver, 2011: 14). Given the importance of recreational activities to residents of the region, knowledge of the demand for leisure facilities and how they are used is necessary for proper planning and management. The need for understanding use patterns is compounded by the significant growth the region is expected to see in the next 30 years.

Metro Vancouver and the FVRD are expected to see a combined growth of about 35,000 persons per year, totaling about 1,000,000 new residents by 2040 (Metro Vancouver, 2011: 6). While increasing density will accommodate much of this growth, the increased population will no doubt put stress on recreational areas and facilities if not properly managed. With these challenges in mind, one area of particular interest is the Fraser River, given its finite area and a variety of uses. The Fraser is a popular destination for fishing, touring, and other recreational boat uses, however access points along the river (Map 1) are limited. Additionally existing access sites vary widely in quality and capacity, influencing access to the river for these uses. This study aims to assess the demand for boat launches along the Fraser River and gain an understanding of patterns of use, such as launch points vs. destinations on the river, and the factors that influence from where a user chooses to launch.

Previous research conducted by Metro Vancouver that utilized phone interviews to gauge the relative popularity of different recreational activities in the region suggests that a significant portion of the region's residents participate in boating of some kind. Of the leisure activities participated in on the Fraser River, non-motorized boating such as canoeing and kayaking was the most popular with 31% of the 600 respondents from Metro Vancouver and 32% of the 200 respondents from the FVRD indicating that they had participated in the activity in the last 12 months (Metro Vancouver, 2011: 14). Motorized boating was also quite popular having a 28% participation rate in Metro Vancouver and a 43% rate in the FVRD (15). Fishing, which is an activity popular among boaters, had a 23% participation rate in Metro Vancouver and a 34% participation rate in the FVRD (15).

In addition to being polled on their relative participation in various recreation activities, respondents were also asked what activities, if any, they planned on taking up in the next year. Results from this portion of the survey follow a similar pattern as current participation rates with non-motorized boating having the highest interest with 4% of Metro Vancouver and 5% of FVRD residents planning on taking up the activity (Metro Vancouver, 2011: 17). Additionally, motorized boating had a future interest rate of 3% in Metro Vancouver and less than 1% in the FVRD (17). Finally fishing had a future interest rate of only 1% in Metro Vancouver and 5% in the FVRD (17). Though the results of this survey show only a minimal increase in these activities as a percentage of the population, the already mentioned substantial growth expected in the region strengthens the need to better understand usage patterns, overall demand, and what areas have the highest demand in order to better meet future demand.

Analyzing demand for this type of facility is very dependent on the specific geographic and spatial context of the area being studied. For this reason reviewing literature had a minimal influence on the study, as many similar studies that have been published cannot be easily applied elsewhere. However despite this limitation, a literature review was useful for identifying a general approach to the topic and areas that should garner more focus.

A study conducted by The Regional District of North Okanagan (RDNO) (2011) concluded that the primary factor determining where a user launched, was proximity of the launch to their home. However another important factor in determining launch location was the facilities available at locations, most importantly parking (50). The importance of proximity is unsurprising; however parking is something that warrants greater attention. Parking capacity acts as a constraint on the number of users who are able to launch at a given site on a given day. In some cases it may be more appropriate to increase parking capacity rather than considering construction of a new ramp if the existing parking availability does not align with a ramp's general capacity to launch and retrieve 50 boats per day (California Department of Boating and Waterways, 1991: 5). In addition to providing insight into what factors help to determine a users launch location, the study conducted by the RDNO determined that users are willing to travel, on average up to 21 km from where their boat is stored to a launch location.

Another study conducted in Parkland County, Alberta by EDA collaborative Inc. (2103) to assess boat launch demand was useful in identifying some other factors contributing to users' launch locations. Proximity to home was again the main contributing factor, with parking also being important, however the study identified that

water depth, supporting amenities, multiple lanes and good access were all important (23). The information obtained from reviewing this literature played an important role in guiding the development of this study's surveys.

Methods

The methods for this study are broken into three sections, first a number of sites were visited to make a firsthand visual assessment of the locations and gain some understanding of the variation between sites. Secondly an online survey was developed targeted at recreational boaters in the region. Finally, two expert interviews were conducted, one with a manager of a popular launch site, as well as another with an employee of a local boat dealership.

For the site visits, 10 sites in total were visited and a number of characteristics were recorded for each one; half of the sites were privately owned and operated, while the other half were owned and operated by a variety of public entities. Characteristics recorded include: ramp surface (paved or unpaved), number of launching lanes, an estimation of parking capacity for trailers, and presence of various amenities (washrooms, day use areas, garbage receptacles etc.). Identifying these characteristics was important for determining how locations vary in these characteristics, so that they could be compared with survey results showing relative use levels of these and other locations.

The primary purpose for the survey was to gain an understanding of where users launched from, what factors influenced their choice of launch location, what activities they participated in on the river, and so on. The survey included 13 questions, 4 of them

were demographical questions, and the other 9 were focused more specifically on boat use and launching on the Fraser River. The survey was posted on a number of online discussion forums, some focused on specific activities such as fishing, rowing or kayaking, and others with a more general discussion focus. However all of the discussion forums are specific to the lower mainland or British Columbia as a whole in order to specifically target users from the region. A copy of the administered survey can be found in Appendix A of this report.

Finally, interviews were conducted both with a manager of the largest capacity and most used launch site on the river, as well as an employee of a local boat dealership. The site manager interview was structured to gain an understanding of larger patterns particularly on an annual timescale and was useful for being able to obtain information on fluctuations in demand, the various types of users and boats, and their relative proportions. Additionally the interview was useful in gaining a better understanding of the sites daily maximum capacity and how that compares to usage rates. A list of questions asked in this interview can be found in Appendix B of this report. Managers of other popular launch locations were contacted to participate in an interview however only the one included in this report expressed interest in participating.

The interview conducted with the boat dealership employee was designed to obtain some general information on boating in the region, such as the various types of activities pursued by boat owners and their relative popularity, as well as information such as types and lengths of boats purchased and any long term trends or changes to these trends that have been observed. A list of questions asked in this interview can be found in Appendix C of this report.

Results

The information collected from site visits indicates a significant variability between locations. First of all, of the 10 sites, 6 of them were paved and 8 had only one launching lane. Parking had the largest variation with 2 having no formal parking spots for trailers, 4 having between one and five spots, 2 having between six and ten spots and only 2 having more than ten spots. Finally, most of the sites offered no additional amenities, and the ones that did (2/10) only offered day use areas and publically accessible washrooms. The insufficient parking observed during these visits suggest that parking improvements could be an easy way to increase capacity of existing locations.

The online survey garnered 166 responses, with 165 or the respondents being male. The majority of the respondents fell in the age groups 35-44 and 45-54 with very few being in the 16-24 age group. Respondents were fairly well spread out in the region, with higher proportions residing in Surrey, Langley, Maple Ridge and Chilliwack.

To determine the proportion of casual and frequent users, respondents were asked to select from four options indicating on average how many times per year they launch. 101 (61%) respondents indicated that they launch more than 12 times, 30 (18%) launch between 8 and 12 times, 28 (17%) between 4 and 7 times, and finally 7 (4%) between only 1 and three times per year. Activities that these users participate in on the river include fishing (95.8%), recreational boating (58.6%), wildlife/scenic viewing (33.7%), paddle sports such as canoeing or kayaking (7.2%), water skiing (2.4%), and jet skiing (0.6%).

Respondents were asked to select locations that they had launched at from a list of 13 sites provided in the survey, respondents were asked to select all sites that they had

used. The four most popular locations were Kilby Provincial Park, Island 22 Regional Park, Mission Bridge, and Dewdney Slough (Table 1).

Location	Frequency	Location	Frequency
Kilby Provincial Park	102	Maquabeak Park	33
Island 22	100	Derby Reach	29
Mission Bridge	85	Deroche Regional Park	27
Dewdney Slough	74	Surrey Bend/Barnston Ferry	16
Steveston	42	Blackie Spit	6
Grant Narrows	41	Ewen Slough	1
McDonald Rd (Sea Island)	36	Other	64

Table 1. Number of respondents who have launched at each site.

In addition to the 13 sites included in the survey, users selecting "other" identified 8 other sites. Of these sites, Fort Langley, Gill Road, Barrow Town, and Haney Marine were the most notable with 24, 15, 10, and 10 mentions respectively.

Exploring factors that are important in determining where a user decides to launch from, respondents were asked to select from a list of any factors they took into consideration when making their decision. Out of the 8 options provided, the most frequently selected factor was the proximity of the launch site to the user's destination on the river (Table 2).

Factor	Frequency
Proximity to river destination	141
Parking availability	108
Proximity to home/boat storage	94
Water depth	74
Cost	71
Ease of turnaround/access	46
Number of launching lanes	24
Additional amenities	18
Other	19

Table 2. Factors used in deciding launch location.

Other factors that were frequently selected included: parking availability, proximity to the user's home, water depth, and cost to launch.

Next to identify users' perception of crowding, respondents were asked to gauge how crowded they felt at launch locations for each season using a five point scale (not at all, not very, satisfactory, somewhat, very). Winter had the lowest perception of crowding with 57% selecting not at all and 29% selecting not very. Spring was a little more balanced with the three most popular selections being not very, satisfactory, and somewhat, with 21%, 28%, and 21% respectively. Summer had the greatest perception of crowding with 60% of respondents indicating they felt very crowded and 26% indicating they felt somewhat crowded. Finally fall also had a fairly high perception of crowding with 39% feeling very crowded, 28% feeling somewhat crowded and 21% indicating that crowding was satisfactory.

Lastly respondents were asked to indicate what stretch of river that they felt had the greatest need for improved access, respondents could only choose one option for this question. The river was divided into three sections to choose from: coastal (west of the Patullo Bridge), mid reaches (between the Patullo Bridge and Mission Bridge), and fresh water (east of Mission Bridge) (Map 1). The mid reaches section had the highest frequency of selections with 72 (43.4%), followed by the fresh water section with 60 (36.1%), and finally the coastal section with 34 (20.5%).

The first interview was conducted with a manger at the Island 22 Regional Park Launch. The survey results indicate that this is one of the most heavily used launches in the region, and the discussion with the manager there suggests that its use levels exceed that of the other busy launches identified by the survey. The interview was useful for gaining insight into specific details on capacity and use at this location: the site has 10-12 launching lanes while the next greatest capacity in this regard is only 2 lanes at a couple

of locations, additionally the site can accommodate 160 launches in a day supported by its parking capacity. At peak times, particularly during a large sockeye salmon run, the demand for launching exceeds the sites capacity and the manager confirmed that another boat launch in the area of equal quality with sufficient capacity would certainly be well used.

The second interview was conducted with an employee of a local boat dealership and was useful for gaining some broader insight on boating in the region. The main conclusion here was that, as suggested by the survey findings, fishing is by far the most predominant activity on the Fraser River. Additionally, the substantial over-representation of males in the survey was supported by this is interview as the employee confirmed that it is very rare for a female to purchase a boat on her own. One final finding that was of interest was a noticed increase in younger males purchasing boats and taking up fishing in recent years.

Discussion

It is important to note that this research was conducted during the winter, which is not the ideal season given low usage rates at this time. Additionally, the majority (61%) of the survey's respondents are regular users of these facilities (launching 12+ times per year), meaning that the survey was not able to capture a large number of the more casual users who likely make up a large portion of users during the relatively short peak times. However despite these limitations some useful insights were gained on the patterns of use and the influential factors governing use.

First of all, the most heavily used locations as identified from the user survey are all well-managed, offer sufficient parking, charge for their use, and offer some level of

security by way of having staff onsite. Additionally the four most heavily used sites are located within the fresh water section of the river, which is a result of the section having excellent fishing creating a demand for good access. This observation is supported by the fact that proximity to river destination was the most important factor in choosing a launch site followed by parking capacity. This observation can be supported by looking at the fresh water section, because the fishing is so great, the section has the busiest launch locations. Furthermore, of the many sites located in that section, the ones that have the highest use are the ones with the greatest capacity, which is almost entirely constrained by parking availability.

For the reasons outlined above, it seems that to improve access in other stretches of the river it may be sufficient to just increase parking capacity at some sites, rather than to invest in the construction of a new location. For example the mid reaches section, which was identified in the survey as the area in greatest need improvement, could improve its access through a higher parking capacity partially funded through parking fees.

Recommendations/Further Research

With the limitations of this research as outlined above in mind, it is recommended that improving access be looked into in the mid reaches section of the river, particularly on the north side where there is a disproportionate number of sufficient capacity launches. Given that there is no single managing body for recreational boating and boat launching, groups that support recreational boating in the region should work together to improve access primarily though increase parking capacity.

This initiative would be most successful with further research conducted to gather quantitative data on the varying capacity and condition of launches in the region followed by research to identify locations that are most suitable to improvement.

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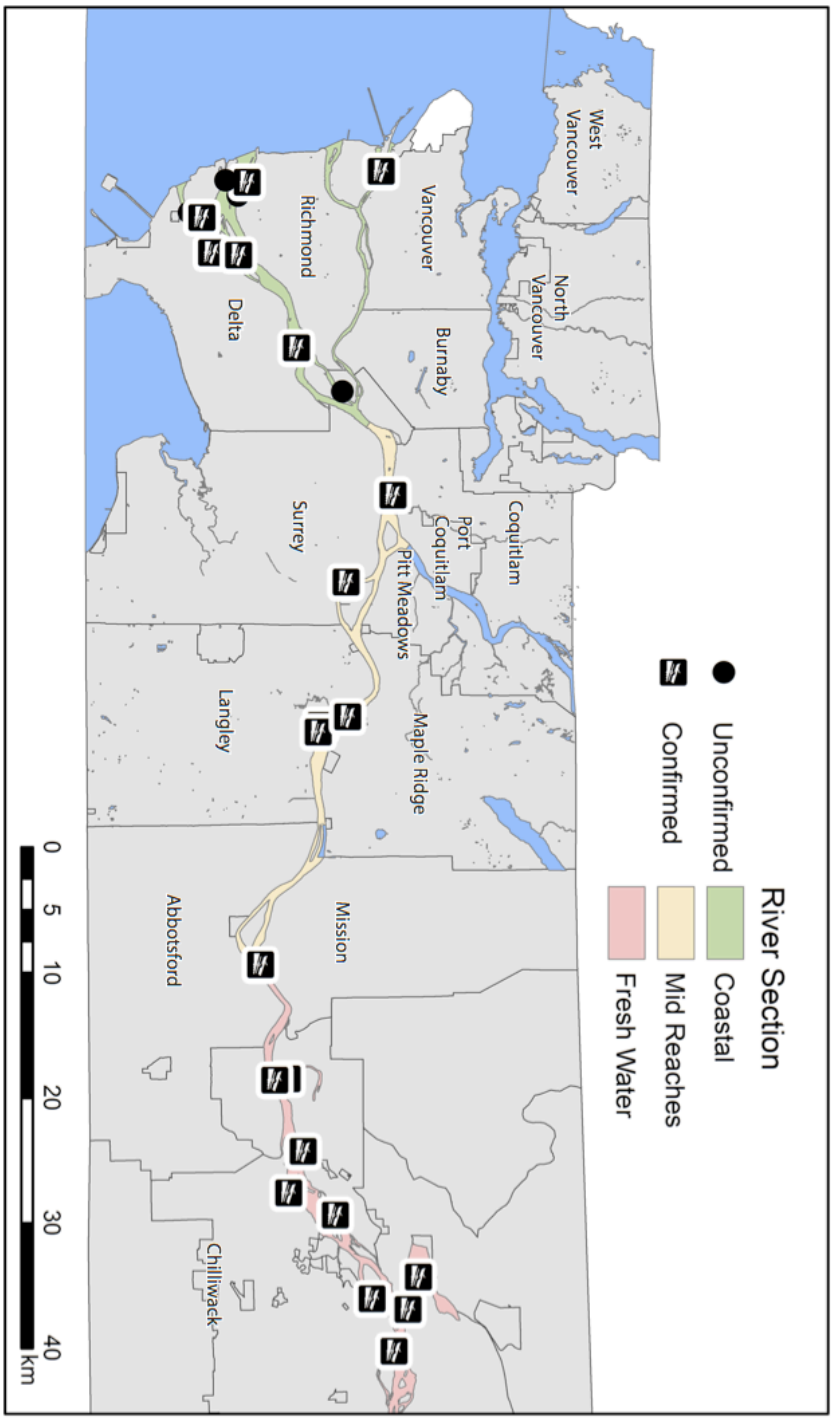
Maps



Map 1. Existing launch locations on the Fraser River.

Appendix A: User Survey

Boat Launch User Survey

Instructions

Answer questions as they relate to you. For most answers, check the box(es) most applicable to you or fill in the blanks.

About You

1. Your Age

(Select only one.)

- ! 16-24
- ! 25-34
- ! 35-44
- ! 45-54
- ! 55-74
- ! 75 or older

2. Your Gender

- ! Female
- ! Male
- ! Other

3. City of Residence

_____

4. Postal Code

_____

Launching Locations

5. What locations do you/have you launched from?

(Select all that apply.)

- ! Maquabeak Park
- ! Island 22 Regional Park
- ! Kilby Provincial Park
- ! Deroche Regional Park
- ! Surrey Bend/Barnston Ferry
- ! Grant Narrows
- ! Mcdonald Slough
- ! Ewen Slough
- ! Steveston
- ! Blackie Spit

! Other _____

1

6. What factors determine where you launch from?

(Select all that apply.)

- ! Parking availability
- ! Proximity to home/boat storage
- ! Proximity to river destination
- ! Water Depth
- ! Number of launch lanes
- ! Ease of turn around and access
- ! Cost
- ! Additional amenities (washrooms, day use areas, fish cleaning stations etc.)

- ! Other _____

7. How far are you willing to drive to a launch site?

- ! Less than 5 km
- ! 5-10 km
- ! 10-15 km
- ! 15-20 km
- ! 20-25 km
- ! 25 km or more

8. What stretches of the river would you like to see improved access?

- ! Coastal (west of Patullo bridge)
- ! Mid reaches (between Patullo and Mission bridges)
- ! Freshwater (east of Mission bridge)

General Boating Information

9. What activities do you participate in on the river?

(Select all that apply.)

- ! Fishing
- ! Recreational boating/cruising
- ! Canoeing, Kayaking or rowing
- ! Jet Skiing
- ! Water Skiing
- ! Wildlife or scenic viewing

- ! Other _____

10. How many times a year do use a boat launch?

- ! 1-3
- ! 4-7
- ! 8-12
- ! More than 12

11. What length boat do use own/use?

_____

12. For each season how crowded have you felt at launch locations

Spring

- ! 1 Not at all
- ! 2 Not Very
- ! 3 Satisfactory
- ! 4 Somewhat
- ! 5 Very

Summer

- ! 1 Not at all
- ! 2 Not Very
- ! 3 Satisfactory
- ! 4 Somewhat
- ! 5 Very

Fall

- ! 1 Not at all
- ! 2 Not Very
- ! 3 Satisfactory
- ! 4 Somewhat
- ! 5 Very

Winter

- ! 1 Not at all
- ! 2 Not Very
- ! 3 Satisfactory
- ! 4 Somewhat
- ! 5 Very

Appendix B: Site Manager Interview Questions

- How does use vary throughout the year?
- What activities are users at your site participating in? What activities are most popular
- How many launch lanes does your facility have?
- How many launches per day can your site manage?
- How many trailers can your parking facilities hold at one time?
- Are you regularily/often at capacity for parking during peak times?
- Where on the river are most users heading from your site?

Appendix C: Boat Dealership Interview Questions

- What activities do most customers purchase boats for?
- What are the general demographic characteristics of customers (age, gender)?
- What length of boat is commonly purchased for use on the Fraser River?