

HARBOR CAPACITY STUDY
STATTER HARBOR IMPROVEMENTS
PROJECT
Juneau, Alaska

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SUMMARY

The Harbor Capacity Study was conducted to determine the demand and capacity for the Juneau area boat launch facilities, and to determine the effect of limited on-site parking at Statter Harbor on the boat launch operations.

With these goals in mind, the data collection effort was focused on the 2010 Golden North Salmon Derby, which was assumed to coincide with the peak boat launch demand. Boat launch traffic at all 7 area launch facilities was collected on Saturday, August 14th, during the Salmon Derby. In addition, launch activities were timed at Statter Harbor and Amalga Harbor on Friday, August 6th and Saturday, August 14th. This data provided launch capacity information and a comparison of the efficiency of launch operations between Statter Harbor and the more modern launch facilities at Amalga Harbor. Boat launch traffic data were also collected at both harbors the weekend after the Salmon Derby, on Saturday, August 21st.

Based on the data collected, the theoretical maximum launch capacity for the Juneau area is 140 launches or haul-outs per hour. During the peak hour of the Salmon Derby, the maximum launch usage was 109 launches or haul outs. However, based on the data collected at Statter and Amalga harbors the weekend after the Derby, the maximum launch demand did not occur during the Salmon Derby and could be as high as 136 launches per hour. This indicates that the area launch demand is at or above the area launch capacity.

The data and field observations indicate two effects of the limited on-site parking at Statter Harbor. The first is that boaters see the congestion and lack of parking at Statter Harbor and instead choose to continue on to Amalga Harbor. During peak times, this causes congestion and slower operations at Amalga Harbor.

The second effect is that portions of the launch operations are slower at Statter Harbor than at Amalga Harbor, which reduces the capacity of the launch ramps by as much as 4 boats per hour or 14 percent. To increase capacity at Statter Harbor and reduce the observed congestion at Amalga Harbor, we recommend expanding on-site parking at Statter Harbor.



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1 INTRODUCTION

In support of the Statter Harbor Improvements Project, PND Engineers has retained USKH Inc (USKH) to conduct a capacity, efficiency, and demand study of the Juneau area boat launch facilities. This information will help determine the quantity of boat launch facilities needed in the Juneau area and is necessary to support the environmental permitting processes.

The Juneau area has 7 public boat launch facilities, comprising a total of 10 individual ramps. The launches at South Douglas, Statter, and Amalga Harbors have two ramps and permanent boarding floats. The launch at North Douglas has a single ramp and a seasonal boarding float. The remaining locations (Echo Cove, Old South Douglas, and Harris Harbor) have single ramps and no boarding floats.

The purpose of this effort was three-fold: determine the overall peak boat launch demand, determine boat launch capacity, and determine the effect on launch operations at Statter Harbor caused by the current offsite parking situation.

2 DATA COLLECTION

To determine peak boat launch demand, traffic counts were conducted at all of the Juneau area boat launch facilities on the Saturday during the Golden North Salmon Derby. This was assumed by the project team to be the busiest boating day for the city. This data, referred to in the report as “usage data”, was also collected at Statter and Amalga Harbors on a Friday and a Saturday outside of the Salmon Derby to show usage patterns on normal days. Having data from multiple harbors for each of the data collection days enabled us to estimate usage patterns at the locations where data was only collected for a single day.

To determine boat launch capacity, we needed to know how long facilities were utilized to accomplish one boat launch or haul-out.

Launch Time: To determine how long a launch takes, data collectors recorded the time when a trailered boat arrived at the harbor, when the boat approached the ramp, when the empty trailer left the ramp, and when the boat left the boarding float. This data resulted in the amount of time boaters spend getting the boat ready (“make ready” time), actually launching, and then parking and embarking on their trip.

Haul-out Time: Similarly, to determine how long a haul-out takes, data collectors recorded the time a boat arrived at the boarding float, the time the trailer approached the ramp, when the trailer left the ramp with the boat, and when the trailered boat left the harbor area. This data provided the amount of time it took for a boater to retrieve his trailer (“vehicle retrieval” time), the amount of time it took to load the boat, and the amount of time spent getting the trailered boat ready for the road (“strap down” time).

These data would enable us to estimate how many boats could be launched and hauled-out during a given amount of time, which, given the number of facilities available, leads to overall launch capacity.

The effect of the parking situation at Statter Harbor was assumed to be included in the parking and trailer retrieval times measured under the capacity study. However, to observe the effect on launch efficiency we needed a control site for comparison. Amalga Harbor was selected as the control facility since it was recently reconstructed and features two ramps with a float, similar to Statter Harbor.

With this information we are able to determine the launch capacity of the facility and identify bottlenecks in the operation. The third portion of launch time and first portion of haul-out time, along with the layout of the parking area, tells us how the parking situation impacts launch efficiency, since the distance a driver has to park from the launch directly impacts how much time their boat spends tied up at the float during both launch and haul-out.

The data collection effort for this project was conducted over three days as follows:

- Friday, August 6, 2010 from 8 AM to 8 PM at Amalga and Statter Harbors
- Saturday August 14, 2010 from 6 AM to 9 PM at all public launches, including efficiency data at Amalga and Statter Harbors
- Saturday, August 21, 2010 from 8 AM to 8 PM at Amalga and Statter Harbors

Efficiency data were collected at Amalga and Statter Harbors on August 6 and 14. Usage data were recorded at all public launches on August 14, and just at Amalga and Statter Harbors on August 6 and 21.

3 DEMAND

Boat launch demand was estimated by counting all of the boat launches and haul-outs occurring during the Saturday of the Golden North Salmon Derby. The results are tabulated in Table 1.

Table 1- Boat Volumes on Derby Saturday, 8/14/2010

	Statter	Amalga	Harris	North Douglas	South Douglas		Echo Cove	Total
					New	Old		
6:00 AM	5	18		9	9	0	0	41
7:00 AM	12	13		10	14	0	0	49
8:00 AM	7	9	1	4	6	0	2	29
9:00 AM	3	12	1	6	19	2	3	46
10:00 AM	5	8	0	10	13	0	4	40
11:00 AM	9	17	0	6	9	0	5	46
12:00 PM	5	8	2	3	5	2	1	26
1:00 PM	6	7	2	6	22	3	3	49
2:00 PM	10	16	2	9	8	2	1	48
3:00 PM	8	10	2	8	8	6	2	44
4:00 PM	6	11	1	10	15	0	2	45
5:00 PM	11	23	0	18	16	2	4	74
6:00 PM	5	22	4	8	13	2	4	58
7:00 PM	16	28	5	20	9	3	0	81
8:00 PM	2	10	1	12	6	0	6	37
Total	110	212	21	139	172	22	37	713

Across the facilities, several usage trends were observed.

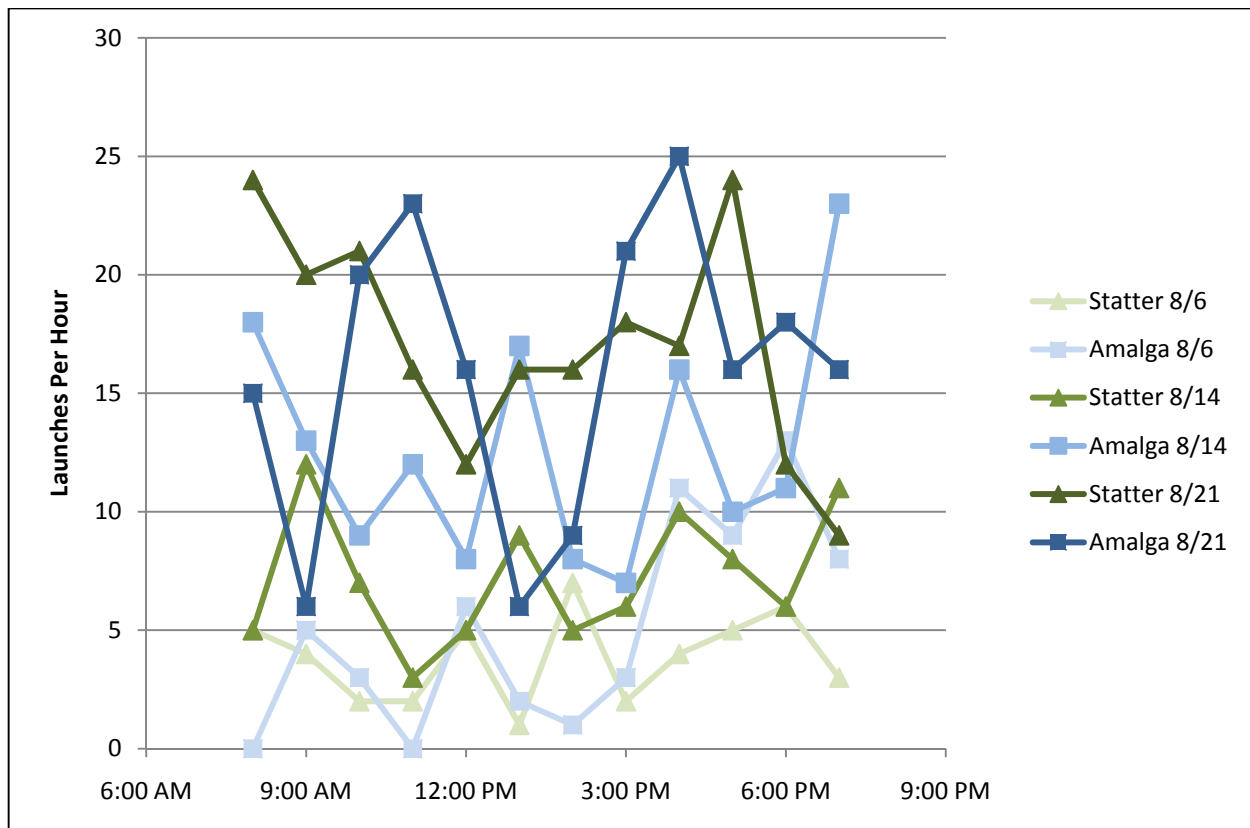
- The peak usage is from 7 PM to 8 PM. The 7 PM peak hour was likely caused by the 7 PM closure of the weigh-in stations for the fishing Derby.
- The highest usage occurred at Amalga Harbor and the New South Douglas launches, which are the City and Borough of Juneau’s (CBJ) most modernized launch facilities.
- The launches at Old South Douglas, Harris Harbor, and Echo Cove received less use than the other locations.

Additional usage data were collected at Statter and Amalga Harbors during Friday, August 6 and Saturday, August 21. The results are tabulated in Table 2 and shown graphically in Figure 1. Since data collection on the non-Derby days (August 6 and 21) did not start as early or continue as late as the data collection during the Derby (on August 14), the exhibits below only include data for times during which data was collected on all three days.

Table 2- Boat Volumes at Statter and Amalga Harbors

	Friday 08/06/2010		Saturday 08/14/2010		Saturday 08/21/2010	
	Statter	Amalga	Statter	Amalga	Statter	Amalga
8:00 AM	5	0	7	9	24	15
9:00 AM	4	5	3	12	20	6
10:00 AM	2	3	5	8	21	20
11:00 AM	2	0	9	17	16	23
12:00 PM	5	6	5	8	12	16
1:00 PM	1	2	6	7	16	6
2:00 PM	7	1	10	16	16	9
3:00 PM	2	3	8	10	18	21
4:00 PM	4	11	6	11	17	25
5:00 PM	5	9	11	23	24	16
6:00 PM	6	13	5	22	12	18
7:00 PM	3	8	16	28	9	16
Total	46	61	91	171	205	191

Figure 1- Boat Volumes at Statter and Amalga Harbors



The Friday usage volumes were much lower than the Saturday usage volumes. Contrary to expectations, the usage on the Saturday after the Salmon Derby was quite a bit higher than the usage during the Salmon Derby, particularly at Statter Harbor. There are a couple of reasons why the usage at Statter and Amalga Harbors was similar on some days and quite different on one day.

- The on-site analyst observed that Statter Harbor was very congested during the Derby (August 14), which is supported by the vehicular (non-boat) counts taken during the Derby. The analyst observed many boaters slowing down on the highway in the vicinity of Statter Harbor, and then speeding on down the road, likely continuing to Amalga Harbor after noting the congestion at the Statter Harbor parking lot.
- In addition, the low tide during the Derby Saturday was -1.4 feet mean lower low water (MLLW) at about 10:30 AM. When tides are lower than 0 or +1 feet mean lower low water (MLLW), the end of the Statter Harbor ramps are out of the water. Figure 2, taken August 14 at about 8:30 AM, shows how little boarding float is available even when the tide is + 4 feet MLLW at Statter Harbor. In contrast, the Amalga ramps extend to -4 feet MLLW. Observed boat traffic did not fluctuate with tidal actions, but local boaters would be aware of these ramp characteristics and be less likely to use the Statter Harbor launch on days when the tide is expected to drop below a useable level.

Figure 2 – Statter Harbor at +4 MLLW



4 CAPACITY

Efficiency data were collected over two days at both Amalga and Statter harbors. A total of 429 boat launch actions were observed and recorded. The results are tabulated in Table 3.

Table 3- Launch Action Times

	Launch			Haul Out		
	Make Ready	Launch	Park/ Leave	Get Truck	Load Boat	Strap Down/ Leave
Friday 8/6/2010						
Statter	8.65	3.81	12.87	6.00	5.33	6.44
Amalga	1.64	4.97	6.03	11.54*	5.14	7.04
Saturday, 8/14/2010						
Statter	3.72	4.07	14.78	10.62	4.67	4.78
Amalga	7.46	3.31	9.66	15.32*	3.95	7.56
* See explanation on page 7						

Overall, we are assuming the capacity will be constrained by the ramp operations. If people are slow during other parts of the load or haul-out procedure (make ready, strap down), other users can bypass them. However, the ramps are generally the bottle neck.

The time needed for launching and loading the boat are fairly consistent across the locations and days. People are a little bit faster at launching their boats than hauling-out their boats. In general, users were quicker on the busier day than the slower day. Overall, the average launch time was 3.79 minutes, while the average load time was 4.40 minutes, for a total average time per use of 4.08 minutes. This results in an average ramp capacity of 14 boats per hour per ramp. So, with two ramps, Statter Harbor and Amalga Harbor should be able to accommodate a boat every 2.1 minutes, or 28 boats per hour.

While it is not likely that the make-ready area or the float length constrains capacity, they do impact the operations of the facility. It makes sense to analyze the time necessary for the operations in these areas to help determine the appropriate facility sizing so as to provide smooth site operations. For these areas, 85th percentile capacity is included along with average capacity. In transportation engineering, the 85th percentile is commonly used as a design target. This ensures that most of the population will fit within the design criteria, but does not require facilities to be designed to unreasonable standards.

The average time for the make-ready movement varies over time and location, but with no discernable pattern. One would expect that it would take less time to prepare a boat for launch for a short evening outing compared to a day (or longer) trip. That could be a consideration if the facility is targeted to one type of user or another, but we will assume that is not the case and simply look at all make-ready actions. The overall average make-ready time was 5.7 minutes, and the 85th percentile make-ready time was 10 minutes. This results in a capacity of 6 boats per hour per make-ready spot. Given that an average ramp usage takes about 4 minutes, to match the capacity of a single launch ramp 2 to 3 make ready spots should be available per ramp.

Similarly, the average strap-down time was 6.7 minutes and the 85th percentile strap-down time was 10 minutes. This results in a capacity of 6 boats per hour per strap-down spot. In general, people can strap down anywhere, so having limited designated strap-down area may not constrain ramp capacity. But to minimize congestion and to match the average capacity of a single launch ramp, 2 to 3 strap-down spots should be available per launch ramp.

The amount of float space necessary to maximize ramp usage is dependent on the time it takes to park and retrieve the truck and trailer, how much time trailers spend queued up waiting to approach the water on haul-out, and how much time boaters leave their boats at the float while attending to land-based chores. This is discussed further in the next section. For analysis, the truck retrieval times from Amalga Harbor on Friday, August 6 have been omitted from analysis since Fish and Game was conducting a survey of anglers, which would have impacted the time required to retrieve the truck and trailers.

It should also be noted that on Derby Saturday (August 14), nearly twice the number of launches occurred at Amalga Harbor as occurred at Statter Harbor. This usage overwhelmed the Amalga Harbor parking lots, causing boaters to park along the access roads, as shown in Figure 3. The resulting congestion did slow the vehicle parking and retrieval actions. The overall average time a boat spent at the float was 11.8 minutes and the 85th percentile time was 18 minutes. This results in a capacity of 3 boats per hour per moorage. To match the average capacity of a single launch ramp, 5 moorage spaces should be available per launch ramp.

Figure 3 – Overflow Parking at Amalga Harbor



5 STATTER HARBOR OPERATIONS

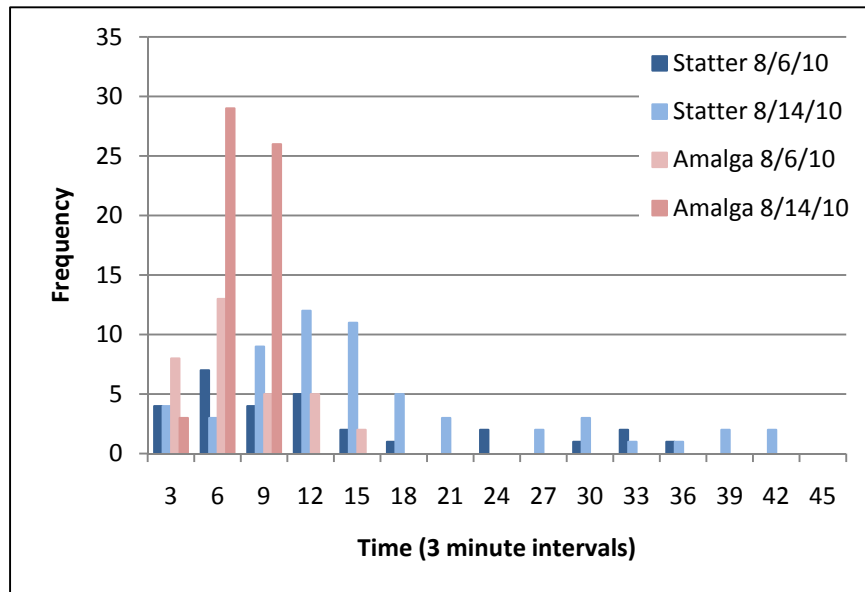
At Statter Harbor, the parking lot is undersized and is shared with passenger car parking for harbor businesses. This makes it relatively difficult for truck and trailer combinations to negotiate, and frequently results in boaters parking their trailers offsite. Offsite parking is on the side of Glacier Highway or at Auke Bay Elementary School, which is approximately 1,500 feet from the launch facility. As a result of the parking situation, it was assumed that launch operations, particularly the parking and vehicle retrieval actions, would take more time at Statter Harbor than Amalga Harbor.

5.1 Parking

The timing analysis of parking actions supported the initial assumption. The average parking time for Amalga Harbor was 6.03 minutes on Friday and 9.66 minutes on Saturday. The difference is fairly large, and was likely caused by the increased congestion at the harbor on Saturday compared to Friday. The increase may have also been caused by more boaters taking day-long trips on Saturday, which would require a little more preparation time. This assumes that the Friday trips would be shorter, after-work trips. Regardless, the overall average parking time at Amalga Harbor was 8.84 minutes. At Statter Harbor, the Friday average was 12.87 minutes and the Saturday average was 14.78 minutes. This follows the same trend seen at Amalga Harbor. The overall average parking time at Statter Harbor was 14.12 minutes. The difference in average parking times between Amalga and Statter harbors was 5.28 minutes.

To ensure that averaging the data did not hide any trends, a histogram of the parking operations was plotted for each location for the days data were collected and is shown in Figure 4.

Figure 4 - Parking Time Histogram



For the parking action, the data from Amalga Harbor produces distinct bell shapes for each day. This suggests that each parking action is pretty similar and the range of times the action takes is likely due to the randomness

of people’s behavior. The data are not as well distributed for the Statter Harbor parking times, which is likely due to the inconsistent distance to parking and the shops adjacent to the harbor. For Amalga Harbor, there is a shift in the times between the Friday and Saturday observation periods, but it is not large. Statter Harbor sees different time distributions on the different days, with a more traditional bell shape during the Saturday collection period. This could be caused by fewer boaters able to use the harbor parking area, which means everyone has to park offsite, as shown in Figure 5. Therefore, the parking times, while longer, are more consistent.

Figure 5- Overflow Parking at Auke Bay Elementary



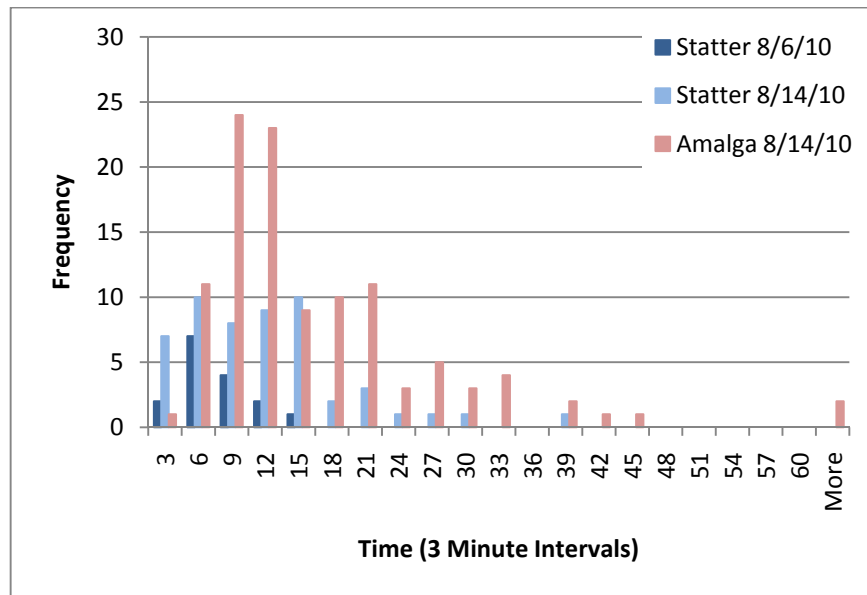
5.2 Vehicle Retrieval

The data for the vehicle retrieval actions did not align with our expectations. The vehicle retrieval times at Amalga Harbor were longer than at Statter Harbor for both the Friday and Saturday data collection periods. Further investigation revealed that during the Friday (August 6) count, the analyst observed that the Department of Fish and Game was conducting surveys of anglers as they arrived at the float. This would have increased the amount of time between when the boat docked and when the boater returned with the trailer, so these data cannot be used to compare operations between the two harbor facilities.

For the Saturday (August 14) count, the analyst observed that congestion in the parking areas at Amalga Harbor was affecting the operations of the launch facilities. Additionally, the demand for boarding float space was overwhelming capacity to the point that boats were queuing up in the harbor, waiting for their turn to even get to the boarding float. This congestion, both on land and the water, could have been reduced if there were more capacity available for parking at Statter Harbor.

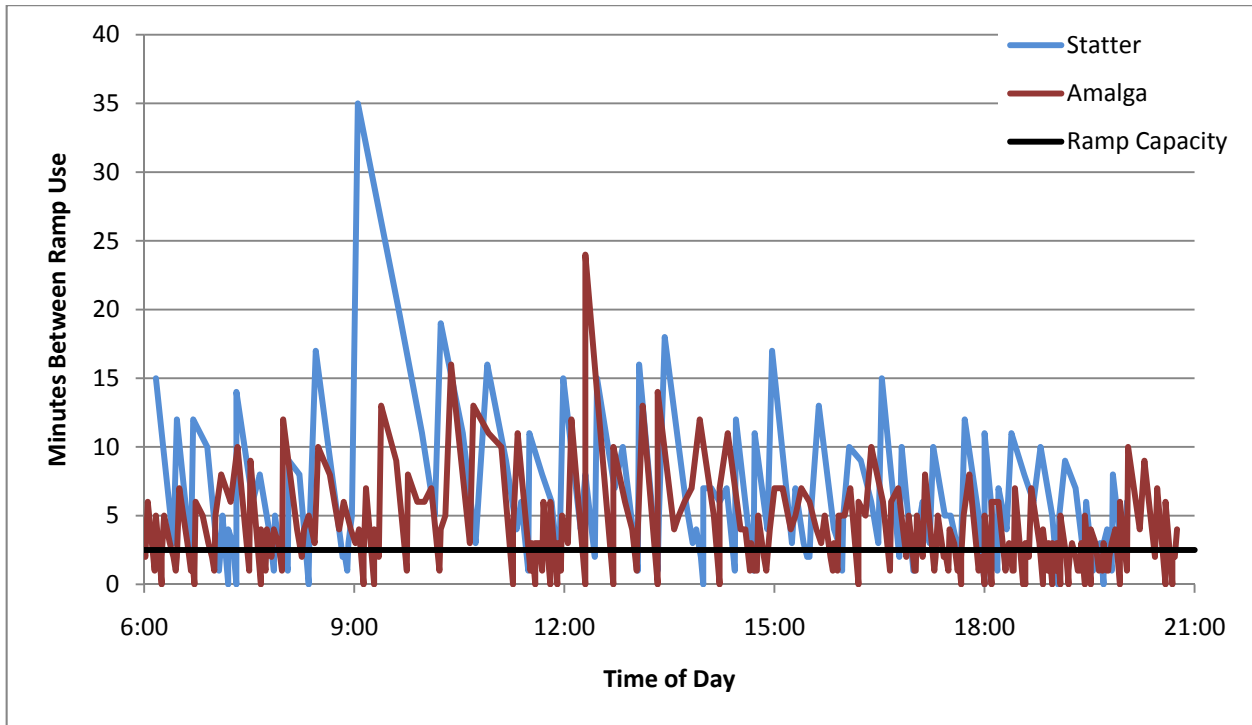
At Amalga Harbor, the average vehicle retrieval time was 15.32 minutes on Saturday (August 14), and at Statter Harbor the average vehicle retrieval time was 6.00 on Friday (August 6) and 10.62 on Saturday (August 14). A histogram of the vehicle retrieval times is shown in Figure 6.

Figure 6 – Vehicle Retrieval Time Histogram



Vehicle retrieval data do not follow standard distribution patterns very well. Some of that could be due to queuing for use of the launch ramps. As mentioned above, the capacity of the 2-ramp facilities is approximately 28 boats per hour, or one launch every 2.14 minutes. Figure 7 shows the usage patterns at the ramp facilities throughout the Saturday collection period. Whenever the “Minutes Between Ramp Use” falls below the ramp capacity, a queue will form to use the ramp. A “ramp capacity” line is shown at 2.5 minutes between use, to allow for some buffer between when a user leaves the ramp and the next user approaches the ramp. During periods of queuing, the time spent in the queue will lengthen the vehicle retrieval time. Since Amalga Harbor appears to have operated under queuing conditions for more of the day than Statter Harbor, we do not end up with an accurate representation of the effect of the parking situation on haul-out efficiency.

Figure 7 – Boat Ramp Usage Patterns, Derby Saturday



Even though the vehicle retrieval data will not reveal the impact of the Statter Harbor site constraints, the parking data will. Parking movements are not impacted by vehicle queuing at the launch, and should provide a solid base for determining how much extra time is spent launching at Statter Harbor.

The result is that the inadequate parking lot at Statter Harbor adds an extra 5.28 minutes of time for each boat to be moored at the float for both parking and vehicle retrieval operations on average. The actual time this adds to a specific boater’s action is more for the person who has to park out at the school or along the side of the highway. For someone who can park in the harbor parking lot, there is no extra time added to their launch or retrieval. That extra 5.28 minutes on average likely applies to vehicle retrieval actions as well, at least during times when both harbors are operating at similar volumes. During the Salmon Derby, Statter Harbor was being underutilized when compared to Amalga Harbor. The next weekend, when both harbors experienced similar traffic levels, there was a similar difference between the two sites for both parking actions and vehicle retrieval actions.

Those 5.28 minutes represent a reduction in capacity of 0.75 boats per hour per moorage space. For the moorage space to keep up with the launch ramp capacity, 6 moorage spaces would be needed instead of the 5 required to meet the 85th percentile conditions.

6 CONCLUSIONS

This capacity study was conducted to address three questions: what is the overall peak boat launch demand for the Juneau area, what is the existing boat launch capacity for the Juneau area, and what effect on launch operations does the parking situation have at Statter Harbor.

The data collected during this study indicate that each use of a boat ramp, either to launch or haul-out a boat, takes 4.08 minutes. This results in a capacity of 14 boats per hour per launch ramp. Since there are 10 launch ramps in the community, the theoretical capacity is 140 launches or haul-outs per hour. The actual number is likely lower since ramps without floats probably have lower capacities.

For peak demand, the assumption was that this condition occurs on the Saturday of the Golden North Salmon Derby. During the 2010 Derby, the launch demand was 723 boat launch or haul-out operations between 6 am and 8 pm. During the peak hour, there were 109 launch or haul-out operations. The peak hour demand may have actually been higher, since the launches at Amalga Harbor and South Douglas both were operating over capacity.

Counts conducted the weekend after the Salmon Derby indicate that the peak usage may not occur during the Derby. The Saturday after the Derby saw launch volumes of 396 at Statter Harbor and Amalga Harbor, compared with 322 launches at those two locations during the Derby. If that increase held across all facilities, the Juneau area peak demand would be 890 boats per day, with a peak hour launch demand of 136 launches. Assuming a community capacity of 140 launches per hour, this demand maxes out the available capacity. Peak hour demand recorded at both Statter and Amalga Harbors on the Saturday after the Salmon Derby was at or above capacity.

There are two effects of the limited on-site parking at Statter Harbor. The first is that boaters see the congestion and lack of parking at Statter Harbor and continue out the road to Amalga Harbor. During peak periods, this causes congestion at Amalga Harbor, both on the water and on the shore as people queue up on both ends of the over-capacity launch ramps.

The second, more direct impact of the limited on-site parking at Statter Harbor is that boaters have to spend more time parking and retrieving their vehicles, so the amount of time boats spend moored at the boarding float is extended by an average of 5.28 minutes. This extra time reduces the capacity of the launch by about 4 boats per hour. This reduction in capacity could be eliminated by increasing the on-site parking, which reduces the amount of time needed to park and retrieve vehicles, or by increasing the amount of moorage available at the boarding floats, to accommodate the longer parking and vehicle retrieval times.

Given the limited space available in Statter Harbor, there is not enough room to provide an extended boarding float and maintain safe boat maneuvering areas. We recommend expanding on-site parking at Statter Harbor to achieve the full capacity of the Statter Harbor boat ramps and to reduce the excess launch demand at Amalga Harbor.

Appendix A
Data



APPENDIX A CONTENTS:

Friday August 6 2010

Statter Harbor Efficiency	A1
Amalga Harbor Efficiency	A3

Saturday August 14 2010

Statter Harbor Efficiency	A5
Amalga Harbor Efficiency	A9
Harris Harbor Usage	A16
North Douglas Usage	A18
South Douglas (New) Usage	A20
South Douglas (Old) Usage	A22
Echo Harbor Usage	A24

Saturday August 21 2010

Statter Harbor Usage	A26
Amalga Harbor Usage	A28

Efficiency Data: Efficiency data includes information for launch and haul-out operations. For a launch, data collectors recorded the time when a trailered boat arrived at the harbor, when the boat approached the ramp, when the empty trailer left the ramp, and when the boat left the boarding float. For a haul-out, data collectors recorded the time a boat arrived at the boarding float, the time the trailer approached the ramp, when the trailer left the ramp with the boat, and when the trailered boat left the harbor area.

Usage Data: Usage data consists of the number of boats and other vehicles arriving at or leaving the specified location in a 15 minute period.

Date: 8/6/10

Location: Statter

Analysts: Kreg/Mickelson (Entrance), Miller (Launch)

Boat Description/Number	Time							
	Launch				Haul Out			
	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
1 AK2074AA	8:02	8:06 AM	8:11 AM	8:33				
2 Zodiac Red-float dinghy	8:03	8:09	8:15	8:17 AM				
3 Blue/silver alum. with canvas cover, "North River"	8:19	8:22	8:24	8:28				
4 "Whaler" white fiberglass open 2-seater ~16'	8:23	8:34	8:37	8:47	10:11	10:15	10:19	10:45
5 Alum. w/canvas cover, black/silver north river	8:42	8:42	8:44	9:35				11:54
6 "Whaler" white/blue fiber 32'				9:54	8:57			
7 AK1389AL wood/fiber cabin maroon/white enclosed					9:06	9:14	9:19	9:26
8 Forklift w/ bar		9:11	9:16					
9 AK8143M	9:47	9:50	9:53	10:05	19:04	19:10	19:15	
10 Green/silver alumaskiff alumaweld				10:04	9:55	9:58		
11 AK8554AF red canvas cover black/silver alum north river	9:58	10:22	10:26	10:35	14:20	14:26	14:31	14:34
12 AK4629J blue/white bayliner fiberglass	10:28	10:30	10:32	10:38	17:06	17:15	17:18	
13 AK4593AF white olympic/black	10:44	11:45	11:47	11:56				
14 AK5449N					11:47	11:50	11:54	
15 White CC 7370P "Billards Won"					12:08	12:18	12:23	12:24
16 8710AD "Instead of..." "Grady White"					12:09	12:18	12:22	12:24
17 1287AK blue/silver alum. w/canvas n. river					12:16	12:24	12:25	12:28
18 AK4477AA		12:25	12:30	12:39				
19 "sauty" 75607 black/silver alum, north river	12:32	12:39	12:40	12:45				
20 2 seat kayak on ramp					13:08		13:12	
21 AK3135P	12:40	13:46	13:47	14:18	14:38	14:44	14:49	14:54
22 AK8609M	14:01	14:05	14:07	14:13				
23 "kaytos" black/green/white cabin cruiser					14:40	14:43	14:46	
24 AK5805N	14:41	14:49	14:53	15:17				
25 YT532926					14:45	14:58	15:11	15:15
26 AK8219AE					14:53	14:58	15:00	
27 AK9582AC	15:00	15:08	15:20	15:53				
28 AK3710N Clearwater White/red sport fiber, enclosed	15:40	15:42	15:42	15:58				
29 AK7128N Blue Fish Rite Skiff	16:26	16:28	16:34	17:02				
30 AK5955AF Whaler-Navy & White	16:28	16:27	16:29	16:38	17:49	17:52	17:55	
31 KAYTOS Orca Tour Boat		16:42	16:45	16:46				
32 AK8754M		16:52	17:00	16:59				17:01
33 AK1469L		17:10	17:18	17:33				
34 AK9836N	17:15	17:19	17:21	17:55				
35 AK0630P	17:37	17:37	17:40	17:46				

Date: 8/6/10

Location: Statter

Analysts: Kreg/Mickelson (Entrance), Miller (Launch)

Boat Description/Number	Time							
	Launch				Haul Out			
	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
36 AK8675L	18:12	18:12	18:13	18:23				
37 AK8085N	18:12	18:13	18:15	18:21				
38 AK9046M	18:15	18:15	18:21	18:33				
39 AK3254AK	18:29	18:30	18:32	18:40				
40 AK0046R	18:31	18:33	18:35	18:39				
41 AK5034AF	18:53	18:59	19:04	19:03				
42 Grey zodiak				19:32	19:24			
43 AK5026P	19:26	19:26	19:33	19:39				
44 AK5122AF					19:35	19:35	19:43	19:50
45								

Date: 8/6/10
 Location: Amalga
 Analysts: Bill (Driveway), Isaac (Launch)

Boat Description/Number	Time				Time			
	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
1 White w/ Blue stripe			8:12	8:37				
2 Aluminum Skiff w/ maroon canopy, crab pot in the back	9:13	9:14	9:21	9:36				
3 White Sea sport w/ maroon stripe	9:17	9:17	9:23	9:28				
4 silver bouldton w/ silver canopy	9:25	9:24	9:30	9:36				
5 silver puh bonk with grey canopy	9:28	9:28	9:33	9:39				
6 Aluminum skiff w/ open top Ak	9:50	9:52	9:58	10:03				
7 Little bitty cream colored dore w/ blue bottom , black	10:05	10:05	10:15	10:32				
8 Silver w/ Metal top AK46921	10:20	10:21	10:23	10:34				
9 Alumaweld silver w/ blk canopy	9:45	10:22	10:28	10:34				
10 silver w/ Blue stripe	12:03	12:03	12:21	12:27				
11 Kelly green appollo white canopy	12:10	12:12	12:21	12:27				
12 white 1/2 canopy white AK5180AC	12:10	12:12	12:17	12:27				
13 silver boat, blue stripe, light great canopy					12:22	12:24	12:28	12:30
14 Sunnahae lodge w/ white green	12:20	12:22	12:25	12:28				
15 Blue Bayrunner white top w/ dingy	12:40	12:39	12:44	12:51				
16 white Grey bottom w/ blue strip dingy on rope					13:07	13:15	13:22	
17 white boat w/ white hard toe dingy on roof					13:40	13:43	13:47	
18 white boat blue bottom		13:57	14:00	14:10				
19 silver boat light grey					14:08	14:14	14:19	14:29
20 bayliner trophy	15:28	15:27	15:30	15:42				
21 ice baby, north river, red stripe grey canopy	15:48	15:49	15:58	16:02				
22 white strip, light grey canopy					14:52	16:11	16:16	16:20
23 bayrunner, not covered aluminum skiff blue interior	15:55	15:56	15:59	16:01				
24 Black canopy, white stripe alumaweld intruder					16:20	17:30	17:43	17:46
25 all aluminum, AK46921					16:20	16:34	16:54	17:10
26 "Little Bitty" red stripe blue bottom					16:27	16:30	16:33	16:40
27 bayrunner w/ black canopy	16:30	16:29	16:36	16:38				
28 maroon striped hewescraft					16:32	16:37	16:40	16:44
29 light gray canopy, boulton					16:40	16:44	16:46	17:00
30 red stripe, gray canopy icebaby					16:47	16:54	17:05	17:09
31 uncovered aluminum skiff					16:47	16:54	17:05	17:16
32 aluminum, fiberglass top, weldcraft	16:50	16:51	16:56	17:01				
33 livingston small white open topped boat	17:00	16:59	17:08	17:12				
34 small boat durobbot, open		17:11	17:16	17:19				
35 "boourisen: white boat, bluebottom baylinner					17:28	17:50	17:57	18:01

Date: 8/6/10
 Location: Amalga
 Analysts: Bill (Driveway), Isaac (Launch)

Boat Description/Number	Time							
	Launch				Haul Out			
	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
36 open aluminum skiff					17:30	17:34	17:38	17:45
37 open aluminum skiff w/ blue steering console	17:42	17:47	17:47	18:00				
38 silver boat w/ blue canopy	17:55	17:56	17:59	18:02				
39 all aluminum covered AK5316P	18:00	18:01	18:07	18:16				
40 blue open- taped skiff duroboat					18:09	18:12	18:14	18:20
41 red skiff- open top, lund	18:10	18:11	18:15	18:18				
42 blue hewescraft, fiberglass upper					18:16	18:20	18:23	18:26
43 AK2685 AL White covered	18:21	18:21	18:25	18:28				
44 cream colored, blue bottomed	18:22	18:22	18:27	18:34				
45 black stripe covered silver boat					18:24	19:02	19:06	19:16
46 fiberglass topped woolridge	18:26	18:26	18:30	18:34				
47 gray canopy aluminum stryker	18:29	18:29	18:35	18:46				
48 open aluminum skiff with railing	18:33	18:33	18:38	18:41				
49 black canopy, bayrunner					18:40	19:38	19:42	19:48
50 dark grey canopy, stryker, blue details	18:45	18:44	18:48	18:50				
51 white, white canopy trophy					18:46	18:52	18:55	19:00
52 white, red dingy on top, covered "sundrae lodge"					18:46	18:55	18:58	19:06
53 bayrunner w/ pink & blue open topped	18:51	18:51	18:53	19:01				
54 open topped lund					18:56	19:32	19:35	19:42
55 silver boat with fiberglass top					19:09	19:16:00	19:21	19:23
56 white olympic					19:14	19:17	19:21	19:26
57 open skiff w/ railing					19:16	19:26	19:30	19:35
58 grey canopy, stryker , blue detail					19:23	19:27	19:34	19:38
59 white soft half canopy green					19:25	19:31	19:32	19:59
60 white with linig gulf stream					19:24	19:31	19:37	19:45
61 fiberglass top aluminum					19:28	19:36	19:40	19:44
62 Teal hewescraft					19:40	19:45	19:47	19:55

Date: 8/14/2010
 Location: Statter Harbor
 Analyst: Bill (Entrance), Amanda/Isaac (Launch)

Boat Description/Number	Time							
	Launch				Haul Out			
	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
1 AK0333N	6:11	6:10 AM	6:12 AM	6:25				
2 AK9168P	6:23	6:25	6:26	6:33				
3 AK8527P	6:25	6:28	6:31	6:40				
4 AK2214N				6:40 AM				
5 AK1232AA	6:38	6:42	6:46	6:58				
6 AK9747AD	6:50	6:54	6:56	7:02				
7 AK4346H	7:03	7:04	7:06	7:06				
8 AK7640H	6:59	7:05	7:11	7:22				
9 AK2880AF	7:05	7:07	7:12	7:40				
10 AK3975AC	7:11	7:12	7:15	7:40				
11 AK2184M					7:12			
12 AK2184M				7:16				
13 AK1098N	7:18	7:19	7:21	7:30				
14 AK8527P					7:07	7:19	7:24	7:28
15 AK9094J		7:33	7:37	7:46				
16 AK8841AE	7:36	7:39	7:45	7:54				
17 AK2587N	7:45	7:47	7:49	7:58				
18 AK1876AG					7:43	7:51	7:56	7:58
19 AK9345AJ	7:51	7:52	7:55	8:05				
20 AK2134AG	7:54	7:57	8:00	8:14				
21 Silver & red aluminum skiff					7:59			
22 AK8792K	8:01	8:01	8:06	8:17				
23 Silver & red aluminum skiff				8:03				
24 AK5939K	8:01	8:04	8:09	8:22				
25 AK6454F	8:07	8:13	8:17	8:24				
26 AK3279AC				8:21				
27 AK3279AC					8:21			
28 AK644N	8:19	8:22	8:28	8:46				
29 AK7564AA	8:26	8:27	8:33	8:49				
30 AK9162P					8:44			
31 AK5737L	8:50							
32 AK9162P				8:52				
33 AK2394AL	8:48	8:54	8:57	9:10				
34 AK5737L								8:55
35 AK1658AF	8:59	8:58	9:02	9:32				
36 AK4032AJ		9:03	9:07	9:18				
37 AK4788L	9:41	9:38	9:43	10:16				

Date: 8/14/2010
 Location: Statter Harbor
 Analyst: Bill (Entrance), Amanda/Isaac (Launch)

Boat Description/Number	Time							
	Launch				Haul Out			
	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
38 AK9640N	10:00	9:58	10:08	10:37				
39 AK7455AB	10:05	10:09	10:12	10:51				
40 AK5121AE	10:06	10:14	10:20	10:32				
41 AK4827H	10:31	10:33	10:37	11:15				
42 AK3340AL	10:44							
43 AK9455H	10:33	10:47	10:49	11:00				
44 AK5133AG	10:39	10:54	11:01	11:04				
45 AK4104AG					11:08	11:10	11:13	11:20
46 AK2820N	11:13	11:19	11:22	11:29				
47 AK435F	11:14	11:23	11:29	11:37				
48 AK8315K	11:21	11:29	11:33	11:48				
49 AK4762N	11:24	11:30	11:40	11:42				
50 AK8527P	11:38	11:41	11:44					
51 AK8527P						11:49	11:52	11:56
52 AK6053P	11:50	11:55	11:58	12:11				
53 AK1831N	11:44	11:56	11:57	12:28				
54 AK9935J	11:54	11:59	12:02	12:15				
55 AK5121AE					12:03	12:14	12:25	12:29
56 AK6810H	12:15	12:18	12:24	12:40				
57 AK3340AL								12:26
58 AK9772AJ	12:25	12:28	12:32	13:09				
59 AK7743F	12:34	12:43	12:46	12:59				
60 AK2074AA		12:50	12:50	13:00				
61 AK1469AK					12:54	13:00	13:06	13:10
62 AK2074AA								13:03
63 AK5776AC	13:03	13:04	13:10	13:25				
64 AK7529AG					13:20			
65 AK5026P	13:20	13:21	13:25	13:40				
66 AK4032AJ					13:15	13:26	13:30	13:34
67 AK7602F					13:40	13:44	13:50	13:54
68 AK8012					13:50			
69 AK6056AD	13:50	13:53	13:56	14:15				
70 AK8012				13:57				
71 AK7529AG				13:59				
72 AK7564AA					13:36	13:59	14:04	14:08
73 AK8315K					13:58	14:06	14:10	14:11
74 AK4692P	14:07	14:13	14:16	14:29				

Date: 8/14/2010
 Location: Statter Harbor
 Analyst: Bill (Entrance), Amanda/Isaac (Launch)

Boat Description/Number	Time							
	Launch				Haul Out			
	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
75 AK7811AJ	14:17	14:19	14:23	14:26				
76 AK6737K	14:24	14:26	14:29	14:38				
77 AK7860AE					14:19	14:27	14:30	14:34
78 AK1831N					14:27	14:39	14:42	14:49
79 AK9383L	14:39	14:42	14:47	14:53				
80 AK3975AC					14:30	14:43	14:51	14:53
81 AK4725AG	14:51	14:54	14:56	15:08				
82 AK9168P					14:55	14:58	15:00	15:02
83 AK9952N	15:13	15:15	15:17	15:21				
84 AK5939K					15:02	15:18	15:23	15:26
85 AK1903J					15:09	15:25	15:32	15:35
86 AK4814N	15:25	15:28	15:31	15:46				
87 AK56376	15:30							
88 AK56376								15:32
89 AK1996AG					15:37	15:38	15:41	
90 AK8791AD	15:50	15:51	15:53	16:11				
91 AK5999AF	15:52	15:55	16:00	16:15				
92 AK1996AG		15:58	16:01	16:11				
93 AK2394AL					15:40	15:59	16:02	16:08
94 AK9935J					15:50	16:04	16:09	16:13
95 AK8792K								16:14
96 AK2880AF					16:10	16:23	16:26	16:31
97 AK8299H	16:27	16:29	16:34	17:00				
98 AK1098N					16:27	16:32	16:34	16:38
99 AK9287H					16:47			
100 AK2214N					16:48	16:49	4:58 PM	16:59
101 AK9287H				16:59				
102 AK4827H					16:32	17:00	17:03	17:08
103 AK2788L					16:50	17:01	17:04	17:11
104 AK5955AF	17:02	17:03	17:05	17:15				
105 AK435F					16:53	17:07	17:12	17:17
106 AK9407N					17:07	17:13	17:17	17:35
107 AK1798P		17:16	17:23	17:29				
108 AK9455H					17:15	17:26	17:32	17:56
109 AK5034AF					17:30	17:31	17:32	17:37
110 AK9571N					17:36			
111 AK6454F					17:26	17:39	17:46	17:49

Date: 8/14/2010
 Location: Statter Harbor
 Analyst: Bill (Entrance), Amanda/Isaac (Launch)

Boat Description/Number	Time							
	Launch				Haul Out			
	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
112 AK2134AG					17:21	17:40	17:45	17:48
113 AK9571N				17:43				
114 AK6778AJ					17:50	17:55	17:56	18:02
115 AK9048AG					17:56	18:00	18:05	18:08
116 AK8143M					18:00			
117 AK8143M				18:11				
118 AK8831F					18:09	18:12	18:21	
119 AK2844P					18:14	18:19	18:23	18:31
120 AK5955AF					18:16	18:23	18:27	18:28
121 AK3935M	18:34							
122 AK3935M								18:42
123 AK9383L					18:44	18:48	19:03	19:08
124 AK1232AA					18:46	18:58	19:02	19:06
125 AK7455AB					18:38	19:03	19:07	19:11
126 AK1798P								19:03
127 AK5488N					18:53	19:04	19:08	19:17
128 AK5999AF					19:00	19:09	19:17	19:21
129 AK3640H					19:00	19:18	19:22	
130 AK9772AJ					19:17	19:25	19:32	19:35
131 AK4788L					19:15	19:27	19:36	19:37
132 AK5026P					19:20	19:33	19:37	19:37
133 AK7640H								19:34
134 AK8875L					18:59	19:37	19:40	19:45
135 AK8299H					19:25	19:39	19:41	19:50
136 AK9640N					19:34	19:42	19:47	19:49
137 AK6737K					19:27	19:42	19:44	19:48
138 AK2587N					19:37	19:45	19:47	19:51
139 AK8841AE					19:36	19:49	19:52	19:58
140 AK8771N					19:40	19:50	19:55	19:58
141 AK3194K					19:54	19:58	20:01	20:06
142 AK8831F		20:00	20:13	20:54				
143 AK2570AA					20:00	20:02	20:05	20:09
144 AK3234AA					20:02	20:08	20:11	

Date: 8/14/10
 Location: Amalga Harbor
 Analysts: Kreg/Andrew (Entrance) James/Mari (Launch)

Boat Description/Number	Time							
	Launch				Haul Out			
	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
1 AK0048N		5:55 AM	5:57 AM	6:02				
2 AK8904C		5:57	5:58	6:06 AM				
3 AK5642C		6:01	6:03	6:07				
4 AK1396AJ		6:03	6:04	6:14				
5 AK1279N	6:05	6:09	6:14	6:20				
6 AK9300M		6:10	6:11	6:41				
7 AK2799AK	6:10	6:15	6:16	6:22				
8 AK9497AG	6:09	6:15	6:16	6:21				
9 AK5545H	6:11	6:17	6:18	6:22				
10 AK5044N	6:18	6:22	6:27	6:31				
11 AK7304N	6:18	6:25	6:28	6:45				
12 AK2989H	6:20	6:27	6:28	6:41				
13 AK7189AB	6:23	6:28	6:30	6:37				
14 AK1676L	6:23	6:30	6:31	6:36				
15 AK1529L	6:27	6:37	6:40	6:49				
16 AK4221AD	6:34	6:40	6:42	6:47				
17 AK3490K	6:35	6:41	6:43	6:50				
18 AK5296AK	6:35	6:43	6:46	6:50				
19 AK9162P	6:39	6:43	6:45	6:49				
20 AK8144J	6:35	6:44	6:46	6:50				
21 AK5909AA	6:41	6:50	6:54	7:02				
22 AK5045H					6:45	6:55	7:00	7:00
23 AK1151AJ	6:48	6:58	7:00	7:09				
24 AK0487N	6:51	7:00	7:04	7:20				
25 AK0861N	6:40	7:01	7:03	7:10				
26 AK1691N	6:58	7:06	7:08	7:17				
27 AK9249N	7:08	7:14	7:15	7:29				
28 AK3935N	7:15	7:20	7:24	7:31				
29 AK7434P	7:23	7:30	7:31	7:37				
30 AK7432J	7:19	7:31	7:33	7:39				
31 AK6122AJ	7:33	7:40	7:44	8:00				
32 AK9046N	7:33	7:40	7:43	7:54				
33 AK3526N	7:36	7:44	7:48	8:07				
34 AK2305AE	7:33	7:45	7:47	7:52				
35 AK3564P	7:45	7:49	7:50	8:18				

Date: 8/14/10
 Location: Amalga Harbor
 Analysts: Kreg/Andrew (Entrance) James/Mari (Launch)

		Time							
Boat Description/Number		Launch				Haul Out			
		Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
36	AK1422P	7:47	7:51	7:53	8:04				
37	AK3109J		7:55	7:58	8:24				
38	AK1255N		7:58	7:59	8:05				
39	AK1386AG	7:53	7:59	8:14	8:24				
40	AK4321AF	8:03	8:11	8:14	8:23				
41	AK6768N	8:06	8:15	8:17	8:41				
42	AK8923AF	8:09	8:17	8:25	8:35				
43	AK2314N	8:12	8:21	8:28	8:35				
44	AK2278AL	8:15	8:26	8:29	8:33				
45	AK7534AG	8:25	8:29	8:35	8:44				
46	AK7630AE	8:29	8:39	8:44	8:50				
47	AK0133M	8:44	8:47	8:56	9:10				
48	AK6647AE		8:51	8:59	9:13				
49	AK5547N	8:47	8:57	9:00	9:08				
50	AK7056N	8:50	9:01	9:03	9:06				
51	AK7628AJ		9:04	9:06	9:12				
52	AK4378AG	8:55	9:08	9:09	9:15				
53	AK0551K	8:56	9:08	9:16	9:26				
54	AK6018K	9:03	9:10	9:15	9:25				
55	AK7561AY	9:06	9:17	9:23	9:31				
56	AK2851P	9:06	9:17	9:19	9:31				
57	AK2711N	9:14	9:21	9:25	10:05				
58	AK5737L	9:11	9:23	9:28	9:34				
59	AK5073AL		9:36	9:38	9:52				
60	AK4533L	9:42	9:45	9:49	9:58				
61	AK7507J		9:46	9:51	10:06				
62	AK1263AK					9:37	9:54	10:01	10:04
63	AK7323AD		10:00	10:12	10:24				
64	AK1618AG	10:01	10:06	10:09	10:17				
65	AK3097AG	10:05	10:13	10:14	10:20				
66	AK0136R		10:14	10:17	10:21				
67	AK2761J					10:11	10:18	10:24	11:20
68	AK5316P	10:17	10:23	10:26	10:36				
69	AK7899AB	10:31	10:39	10:41	10:50				
70	AK7805AG	10:32	10:42	10:46	11:00				

Date: 8/14/10
 Location: Amalga Harbor
 Analysts: Kreg/Andrew (Entrance) James/Mari (Launch)

		Time							
Boat Description/Number		Launch				Haul Out			
		Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
71	AK1284AK	10:47	10:55	11:00	11:10				
72	AK3182AK	11:01	11:06	11:11	11:26				
73	AK9712AF	11:12	11:16	11:19	11:32				
74	AK8238M	11:10	11:16	11:21	11:28				
75	AK5239AK	11:13	11:20	11:24	11:31				
76	AK1730AK	11:28	11:31	11:34	11:43				
77	AK8674N	11:28	11:32	11:34	11:47				
78	AK7680L	11:28	11:35	11:37	11:48				
79	AK8348AE	11:28	11:35	11:38	11:47				
80	AK2389L	11:29	11:38	11:39	11:47				
81	AK5073AL					11:24	11:41	11:46	
82	AK1250J	11:35	11:42	11:46	11:59				
83	AK4417AK		11:48	11:53	11:57				
84	AK4251J	11:44	11:48	11:53	12:03				
85	AK8917AG	11:44	11:54	11:56	12:05				
86	AK5756N	11:50	11:54	11:57	12:05				
87	AK2418N		11:57	12:01	12:10				
88	AK8489		11:58	12:05	12:10				
89	AK5494AA		12:03	12:05	12:11				
90	AK6435NP	11:58	12:06	12:08	12:17				
91	AK5475P	12:15	12:18	12:24	12:35				
92	AK5026L	12:13	12:18	12:22	12:37				
93	AK4531AL	12:32	12:42	12:44	12:55				
94	AK1320N	12:20	12:42	12:46	13:03				
95	AK3340AL	12:50	12:52	12:55	13:08				
96	AK7875P	12:56	12:58	13:00	13:06				
97	AK4016AL					12:54	13:02	13:06	13:11
98	AK7432J					12:57	13:03	13:06	
99	AK7207M	12:56	13:07	13:10	13:12				
100	AK9168M	13:22	13:20	13:30	13:44				
101	AK8627P					12:36	13:20	13:24	13:31
102	AK3187AJ	13:32	13:34	13:35	13:43				
103	AK2799AK					13:28	13:38	13:41	13:46
104	AK7415AJ	13:43							
105	AK8770AJ	13:49							

Date: 8/14/10
 Location: Amalga Harbor
 Analysts: Kreg/Andrew (Entrance) James/Mari (Launch)

		Time							
Boat Description/Number		Launch				Haul Out			
		Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
106	AK8770AJ								13:56
107	AK8958AA					14:04	14:08	14:11	14:21
108	AK1115AG	13:55	14:13	14:15	14:27				
109	AK4737N		14:13	14:15	14:29				
110	AK5455AK	14:19	14:20	14:23	14:28				
111	AK5642C					14:26	14:31	14:34	14:36
112	AK1151AJ					14:28	14:35	14:38	14:49
113	AK6317K	14:31	14:39	14:42	14:50				
114	AK7056N					14:32	14:40	14:43	
115	AK8098J					14:34	14:43	14:52	14:52
116	AK5614AE	14:40	14:44	14:46	14:54				
117	AK1279N					14:42	14:45	14:55	14:55
118	AK1730AK					14:21	14:46		14:54
119	AK4748AD	14:46	14:51	14:52	14:57				
120	AK1576K	14:43	14:53	14:54	14:59				
121	AK3297M					14:50	14:54	14:57	15:05
122	AK4753N	14:37	14:56	14:59	15:12				
123	AK5055L	15:00							
124	AK1577L		15:07	15:10	15:16				
125	AK7628AJ					15:00	15:14	15:18	15:21
126	AK2565L					15:11	15:18	15:23	15:31
127	AK6023AJ	15:14	15:23	15:25	15:30				
128	AK2635P					15:30			
129	AK1422P					15:30	15:36	15:38	15:39
130	AK0861N					15:32	15:40	15:43	15:52
131	AK3159N	15:41	15:43	15:44	15:58				
132	AK9693N	15:48							
133	AK9693N								15:50
134	AK1848M	15:47	15:51	15:53	16:02				
135	AK9046N					15:35	15:54	15:57	16:05
136	AK3323M		15:55	15:57	16:05				
137	AK0048N					15:53	16:00	16:04	16:09
138	AK7680L					15:56	16:05	16:11	16:17
139	AK7868K	16:04	16:12	16:18	16:26				
140	AK5296AK					16:05	16:12	16:15	16:24

Date: 8/14/10
 Location: Amalga Harbor
 Analysts: Kreg/Andrew (Entrance) James/Mari (Launch)

Boat Description/Number	Time							
	Launch				Haul Out			
	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
141 AK4221AD					16:05	16:18	16:23	16:27
142 AK1225					15:00	16:23	16:28	
143 AK1255N								16:33
144 AK1618AG					16:34	16:39	16:43	16:55
145 AK4533L					16:26	16:40	16:44	17:07
146 AK7866P					16:39	16:46	16:52	16:56
147 AK7323AD					16:41	16:53	16:55	17:07
148 AK3109J					16:36	16:55	16:58	
149 AK7304N					16:45	17:00	17:02	17:07
150 AK9300M					16:55	17:01	17:05	
151 AK2809C	16:56	17:02	17:03	17:08				
152 AK4378AG					16:59	17:07	17:09	17:14
153 AK3182AK					16:56	17:09	17:12	17:23
154 AK7434P					16:48	17:17	17:20	17:26
155 AK8904C					17:08	17:18	17:22	17:29
156 AK2989H					17:13	17:20	17:25	
157 AK6435NP					17:19	17:25	17:27	17:32
158 AK5239AK					17:14	17:27	17:29	17:36
159 AK7507J					17:23	17:29	17:32	17:38
160 AK6246N	17:26	17:30	17:32	17:48				
161 AK6541AJ		17:34	17:42	17:46				
162 AK9497AG					17:25	17:37	17:38	17:43
163 AK8046AF					17:25	17:38	17:40	
164 AK4180AD					17:29	17:40	17:42	17:47
165 AK5316P					17:36	17:40	17:43	17:53
166 AK5165K					17:32	17:42	17:50	
167 AK7630AE					17:36	17:47	17:51	17:58
168 AK0551K					17:37	17:55	17:58	18:08
169 AK3564P					17:48	17:56	17:59	18:03
170 AK7561AY					17:51	17:58	18:00	18:08
171 AK2727AC	17:58	18:00	18:03	18:05				
172 AK9372N					17:40	18:00	18:07	18:08
173 AK6541AJ					17:58	18:05	18:12	
174 AK3097AG					17:55	18:06	18:12	
175 AK3935N					17:57	18:06	18:13	

Date: 8/14/10
 Location: Amalga Harbor
 Analysts: Kreg/Andrew (Entrance) James/Mari (Launch)

		Time							
Boat Description/Number		Launch				Haul Out			
		Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves
176	AK6768N					17:59	18:06	18:08	18:14
177	AK0133M					17:40	18:12	18:16	
178	AK1396AJ					17:52	18:18	18:20	
179	AK0487N					18:00	18:19	18:24	18:32
180	AK8348AE					18:09	18:21	18:24	
181	AK5026L					18:24			
182	AK5889					18:10	18:25	18:28	18:35
183	AK8917AG					18:15	18:26	18:29	18:41
184	AK3401F	18:33							
185	AK8144J					18:15	18:33	18:36	18:40
186	AK4321AF					18:15	18:35	18:41	
187	AK7189AB					18:25	18:35	18:45	18:51
188	AK5080M					18:33	18:38	18:40	
189	AK7899AB								18:40
190	AK5475P					18:27	18:47	18:53	19:32
191	AK2278AL					18:22	18:50	18:53	18:58
192	AK3401F					18:35	18:50	18:58	
193	AK4465M					18:45	18:50	18:54	
194	AK2711N					18:31	18:54	18:56	19:01
195	AK9162P					18:15	18:55	18:58	
196	AK3187AJ					18:32	18:58	18:59	19:01
197	AK5044N					18:47	18:58	19:05	19:04
198	AK9168M					18:46	19:01	19:03	19:04
199	AK4531AL					18:30	19:02	19:05	19:09
200	AK1115AG					18:28	19:05	19:08	19:19
201	AK5299					18:47	19:05	19:08	19:10
202	AK1917					18:48	19:05	19:09	
203	AK4756N					18:32	19:10	19:12	19:10
204	AK6023AJ					18:40	19:12	19:14	19:16
205	AK6122AJ					18:50	19:12	19:19	19:23
206	AK1205AB					18:45	19:13	19:18	19:18
207	AK6207					18:55	19:15	19:17	
208	AK7534AG					19:06	19:18	19:21	19:28
209	AK5547N					18:56	19:20	19:21	19:32
210	AK7207M								19:21

Date: 8/14/10
 Location: Amalga Harbor
 Analysts: Kreg/Andrew (Entrance) James/Mari (Launch)

		Time							
		Launch				Haul Out			
Boat Description/Number	Vehicle Arrives	Approach Ramp	Leave Water	Leave Float	Arrive Float	Approach Ramp	Leave Water	Vehicle Leaves	
211	AK1676L				18:58	19:22	19:25	19:41	
212	AK7356P				19:06	19:23	19:25	19:28	
213	AK6018K				19:10	19:26	19:30	19:50	
214	AK7415AJ				19:10	19:26	19:30	19:37	
215	AK5055L				19:12	19:31	19:32	19:39	
216	AK5737L				19:21	19:31	19:34	19:42	
217	AK7868L				19:25	19:35	19:41		
218	AK2389L				19:30	19:38	19:41	19:45	
219	AK7709P				19:39				
220	AK5494AA				19:30	19:41	19:44		
221	AK2314N				19:32	19:42	19:45	19:53	
222	AK9712AF				19:25	19:45	19:46	19:53	
223	AK5281L	19:27	19:46	19:48	19:52				
224	AK3238K				19:15	19:47	19:51	19:59	
225	AK7868K							19:49	
226	AK5909AA				19:34	19:52	19:55	20:04	
227	AK6647AE				19:46	19:56	20:02	20:14	
228	AK4251J				19:50	19:56	20:02	20:07	
229	AK3490K				19:53	20:02	20:05	20:11	
230	AK1284AK				19:38	20:03	20:10	20:21	
231	AK5455AK				20:10	20:13	20:16	20:23	
232	AK4732N				20:11	20:17	20:24		
233	AK8674N				20:15	20:26	20:29	20:37	
234	AK9249N				20:22	20:28	20:32	20:39	
235	AK6137K				20:25	20:35	20:40	20:50	
236	AK1691N				20:35				
237	AK4737N							20:41	
238	AK4121AG				20:41				
239	AK1529L				19:35	20:43	20:48	20:56	
240	AK6246N				20:39	20:45	20:53		
241	AK3159N				20:41	20:49	20:54		

Usage Data

Date: 8/14/10
 Location: Harris Harbor
 Analyst: J Hoyle

	Entering		Leaving	
	Cars	Boats	Cars	Boats
6:00 - 6:15 AM				
6:15 - 6:30 AM				
6:30 - 6:45 AM				
6:45 - 7:00 AM				
7:00 - 7:15 AM				
7:15 - 7:30 AM	3	1	0	0
7:30 - 7:45 AM	1	0	0	0
7:45 - 8:00 AM	0	0	2	0
8:00 - 8:15 AM	0	0	0	0
8:15 - 8:30 AM	0	1	1	0
8:30 - 8:45 AM	0	0	0	0
8:45 - 9:00 AM	1	0	0	0
9:00 - 9:15 AM	0	0	0	0
9:15 - 9:30 AM	1	0	0	0
9:30 - 9:45 AM	0	0	0	0
9:45 - 10:00 AM	0	1	0	0
10:00 - 10:15 AM	0	0	1	0
10:15 - 10:30 AM	0	0	0	0
10:30 - 10:45 AM	0	0	0	0
10:45 - 11:00 AM	2	0	1	0
11:00 - 11:15 AM	0	0	0	0
11:15 - 11:30 AM	0	0	0	0
11:30 - 11:45 AM	2	0	0	0
11:45 - 12:00 PM	0	0	0	0
12:00 - 12:15 PM	0	0	0	0
12:15 - 12:30 PM	1	0	2	0
12:30 - 12:45 PM	0	1	0	0
12:45 - 1:00 PM	0	1	0	0
1:00 - 1:15 PM	0	0	0	0
1:15 - 1:30 PM	1	2	0	0
1:30 - 1:45 PM	0	0	0	0
1:45 - 2:00 PM	0	0	1	0

Usage Data

Date: 8/14/10
 Location: Harris Harbor
 Analyst: J Hoyle

	Entering		Leaving	
	Cars	Boats	Cars	Boats
2:00 - 2:15 PM	0	1	0	0
2:15 - 2:30 PM	0	0	0	0
2:30 - 2:45 PM	0	1	0	0
2:45 - 3:00 PM	0	0	0	0
3:00 - 3:15 PM	0	0	0	0
3:15 - 3:30 PM	0	0	0	0
3:30 - 3:45 PM	0	1	0	1
3:45 - 4:00 PM	2	0	0	0
4:00 - 4:15 PM	0	0	0	0
4:15 - 4:30 PM	0	0	0	1
4:30 - 4:45 PM	0	0	0	0
4:45 - 5:00 PM	0	0	1	0
5:00 - 5:15 PM	0	0	1	0
5:15 - 5:30 PM	0	0	0	0
5:30 - 5:45 PM	0	0	0	0
5:45 - 6:00 PM	0	0	0	0
6:00 - 6:15 PM	0	1	0	0
6:15 - 6:30 PM	0	1	0	0
6:30 - 6:45 PM	0	0	0	0
6:45 - 7:00 PM	0	2	0	0
7:00 - 7:15 PM	0	0	0	1
7:15 - 7:30 PM	0	0	0	2
7:30 - 7:45 PM	0	0	0	2
7:45 - 8:00 PM	0	0	0	0
8:00 - 8:15 PM	0	1	0	0
8:15 - 8:30 PM	0	0	0	0
8:30 - 8:45 PM	0	0	0	0
8:45 - 9:00 PM	0	0	0	0

Usage Data

Date: 8/14/10

Location: North Douglas

Analyst: M Vaughan

	Entering		Leaving	
	Cars	Boats	Cars	Boats
6:00 - 6:15 AM	0	2	0	0
6:15 - 6:30 AM	0	3	0	0
6:30 - 6:45 AM	0	2	0	0
6:45 - 7:00 AM	0	2	0	0
7:00 - 7:15 AM	2	2	0	0
7:15 - 7:30 AM	1	2	0	0
7:30 - 7:45 AM	0	2	0	0
7:45 - 8:00 AM	2	4	0	0
8:00 - 8:15 AM	1	0	1	1
8:15 - 8:30 AM	0	0	0	0
8:30 - 8:45 AM	0	0	0	0
8:45 - 9:00 AM	0	3	0	0
9:00 - 9:15 AM	0	3	0	0
9:15 - 9:30 AM	0	1	0	0
9:30 - 9:45 AM	1	1	0	0
9:45 - 10:00 AM	0	1	0	0
10:00 - 10:15 AM	0	2	1	0
10:15 - 10:30 AM	0	2	0	0
10:30 - 10:45 AM	0	3	0	0
10:45 - 11:00 AM	0	2	0	1
11:00 - 11:15 AM	0	1	0	0
11:15 - 11:30 AM	1	1	0	1
11:30 - 11:45 AM	1	3	0	0
11:45 - 12:00 PM	0	0	0	0
12:00 - 12:15 PM	0	0	0	0
12:15 - 12:30 PM	0	1	0	0
12:30 - 12:45 PM	1	0	0	0
12:45 - 1:00 PM	1	2	0	0
1:00 - 1:15 PM	2	4	0	0
1:15 - 1:30 PM	0	0	2	2
1:30 - 1:45 PM	0	0	1	0
1:45 - 2:00 PM	0	0	0	0

Usage Data

Date: 8/14/10
 Location: North Douglas
 Analyst: M Vaughan

	Entering		Leaving	
	Cars	Boats	Cars	Boats
2:00 - 2:15 PM	2	2	0	1
2:15 - 2:30 PM	0	1	1	2
2:30 - 2:45 PM	0	1	1	1
2:45 - 3:00 PM	1	0	0	1
3:00 - 3:15 PM	0	2	1	3
3:15 - 3:30 PM	3	0	0	1
3:30 - 3:45 PM	0	0	0	1
3:45 - 4:00 PM	0	0	1	1
4:00 - 4:15 PM	0	1	0	2
4:15 - 4:30 PM	1	1	1	0
4:30 - 4:45 PM	2	2	1	2
4:45 - 5:00 PM	2	1	0	1
5:00 - 5:15 PM	1	0	0	1
5:15 - 5:30 PM	0	1	1	2
5:30 - 5:45 PM	0	5	0	4
5:45 - 6:00 PM	0	2	0	3
6:00 - 6:15 PM	0	1	1	0
6:15 - 6:30 PM	0	1	0	2
6:30 - 6:45 PM	5	1	0	0
6:45 - 7:00 PM	0	2	0	1
7:00 - 7:15 PM	0	4	0	5
7:15 - 7:30 PM	0	1	2	3
7:30 - 7:45 PM	2	3	1	2
7:45 - 8:00 PM	2	2	1	0
8:00 - 8:15 PM	1	1	2	5
8:15 - 8:30 PM	1	0	1	4
8:30 - 8:45 PM	0	0	1	1
8:45 - 9:00 PM	0	1	0	0

Usage Data

Date: 8/14/10

Location: S Douglas New

Analyst: M Stuart

	Entering		Leaving	
	Cars	Boats	Cars	Boats
6:00 - 6:15 AM	3	3	0	3
6:15 - 6:30 AM	0	1	0	1
6:30 - 6:45 AM	0	0	0	0
6:45 - 7:00 AM	1	1	0	0
7:00 - 7:15 AM	0	1	1	0
7:15 - 7:30 AM	1	0	0	1
7:30 - 7:45 AM	1	3	0	2
7:45 - 8:00 AM	0	3	0	4
8:00 - 8:15 AM	0	0	3	0
8:15 - 8:30 AM	0	1	0	1
8:30 - 8:45 AM	2	0	0	0
8:45 - 9:00 AM	0	4	2	0
9:00 - 9:15 AM	0	1	1	4
9:15 - 9:30 AM	0	2	0	3
9:30 - 9:45 AM	1	0	2	0
9:45 - 10:00 AM	3	5	2	4
10:00 - 10:15 AM	3	3	1	3
10:15 - 10:30 AM	2	2	2	2
10:30 - 10:45 AM	2	1	3	1
10:45 - 11:00 AM	5	0	6	1
11:00 - 11:15 AM	3	1	3	1
11:15 - 11:30 AM	1	0	1	0
11:30 - 11:45 AM	1	1	2	0
11:45 - 12:00 PM	1	1	4	5
12:00 - 12:15 PM	2	0	1	0
12:15 - 12:30 PM	1	0	1	1
12:30 - 12:45 PM	1	0	0	1
12:45 - 1:00 PM	0	1	3	2
1:00 - 1:15 PM	0	5	2	2
1:15 - 1:30 PM	1	2	2	3
1:30 - 1:45 PM	1	4	3	4
1:45 - 2:00 PM	4	0	4	2

Usage Data

Date: 8/14/10

Location: S Douglas New

Analyst: M Stuart

	Entering		Leaving	
	Cars	Boats	Cars	Boats
2:00 - 2:15 PM	0	1	1	0
2:15 - 2:30 PM	2	2	2	1
2:30 - 2:45 PM	1	0	4	2
2:45 - 3:00 PM	2	1	2	1
3:00 - 3:15 PM	2	1	2	1
3:15 - 3:30 PM	2	0	4	1
3:30 - 3:45 PM	1	1	2	2
3:45 - 4:00 PM	2	1	1	1
4:00 - 4:15 PM	2	1	1	4
4:15 - 4:30 PM	0	1	0	3
4:30 - 4:45 PM	2	1	1	3
4:45 - 5:00 PM	1	0	2	2
5:00 - 5:15 PM	0	1	0	6
5:15 - 5:30 PM	1	1	1	3
5:30 - 5:45 PM	5	0	3	3
5:45 - 6:00 PM	0	0	3	2
6:00 - 6:15 PM	3	1	4	2
6:15 - 6:30 PM	0	0	3	3
6:30 - 6:45 PM	2	0	5	2
6:45 - 7:00 PM	1	0	1	5
7:00 - 7:15 PM	4	0	2	4
7:15 - 7:30 PM	2	0	5	1
7:30 - 7:45 PM	1	0	2	2
7:45 - 8:00 PM	1	1	1	1
8:00 - 8:15 PM	2	0	4	2
8:15 - 8:30 PM	1	0	1	0
8:30 - 8:45 PM	1	0	2	1
8:45 - 9:00 PM	0	1	0	2

Usage Data

Date: 8/14/10

Location: S. Douglas Old

Analyst: D Kyser

	Entering		Leaving	
	Cars	Boats	Cars	Boats
6:00 - 6:15 AM	2	0	1	0
6:15 - 6:30 AM	3	0	1	0
6:30 - 6:45 AM	1	0	0	0
6:45 - 7:00 AM	1	0	1	0
7:00 - 7:15 AM	2	0	2	0
7:15 - 7:30 AM	2	0	0	0
7:30 - 7:45 AM	2	0	3	0
7:45 - 8:00 AM	7	0	3	0
8:00 - 8:15 AM	0	0	0	0
8:15 - 8:30 AM	4	0	2	0
8:30 - 8:45 AM	8	0	3	0
8:45 - 9:00 AM	4	0	2	0
9:00 - 9:15 AM	9	0	3	0
9:15 - 9:30 AM	8	0	5	0
9:30 - 9:45 AM	6	0	3	0
9:45 - 10:00 AM	7	1	1	1
10:00 - 10:15 AM	13	0	4	0
10:15 - 10:30 AM	12	0	9	0
10:30 - 10:45 AM	12	0	10	0
10:45 - 11:00 AM	12	0	10	0
11:00 - 11:15 AM	10	0	1	0
11:15 - 11:30 AM	14	0	7	0
11:30 - 11:45 AM	14	0	12	0
11:45 - 12:00 PM	10	0	13	0
12:00 - 12:15 PM	16	1	14	0
12:15 - 12:30 PM	14	0	9	0
12:30 - 12:45 PM	9	0	7	0
12:45 - 1:00 PM	18	1	10	0
1:00 - 1:15 PM	17	0	15	0
1:15 - 1:30 PM	20	1	17	0
1:30 - 1:45 PM	18	0	13	1
1:45 - 2:00 PM	17	0	13	1

Usage Data

Date: 8/14/10
 Location: S. Douglas Old
 Analyst: D Kyser

	Entering		Leaving	
	Cars	Boats	Cars	Boats
2:00 - 2:15 PM	17	1	11	0
2:15 - 2:30 PM	15	1	10	0
2:30 - 2:45 PM	17	0	19	0
2:45 - 3:00 PM	13	0	13	0
3:00 - 3:15 PM	26	0	15	0
3:15 - 3:30 PM	30	2	30	2
3:30 - 3:45 PM	27	1	19	1
3:45 - 4:00 PM	18	0	15	0
4:00 - 4:15 PM	15	0	10	0
4:15 - 4:30 PM	15	0	15	0
4:30 - 4:45 PM	22	0	19	0
4:45 - 5:00 PM	26	0	25	0
5:00 - 5:15 PM	21	0	15	0
5:15 - 5:30 PM	15	0	12	0
5:30 - 5:45 PM	19	1	23	1
5:45 - 6:00 PM	12	0	15	0
6:00 - 6:15 PM	19	1	30	0
6:15 - 6:30 PM	17	0	23	1
6:30 - 6:45 PM	12	0	11	0
6:45 - 7:00 PM	16	0	13	0
7:00 - 7:15 PM	2	1	13	1
7:15 - 7:30 PM	5	0	10	1
7:30 - 7:45 PM	11	0	11	0
7:45 - 8:00 PM	17	0	12	0
8:00 - 8:15 PM	7	0	11	0
8:15 - 8:30 PM	9	0	10	0
8:30 - 8:45 PM	3	0	8	0
8:45 - 9:00 PM	2	0	11	0

Usage Data

Date: 8/14/10

Location: Echo

Analyst: Delgado

	Entering		Leaving	
	Cars	Boats	Cars	Boats
6:00 - 6:15 AM	37	9	0	0
6:15 - 6:30 AM	0	0	0	0
6:30 - 6:45 AM	0	0	1	0
6:45 - 7:00 AM	1	0	1	0
7:00 - 7:15 AM	0	0	0	0
7:15 - 7:30 AM	1	0	1	0
7:30 - 7:45 AM	0	0	0	0
7:45 - 8:00 AM	1	0	0	0
8:00 - 8:15 AM	0	0	0	0
8:15 - 8:30 AM	0	0	1	0
8:30 - 8:45 AM	0	2	0	0
8:45 - 9:00 AM	0	0	0	0
9:00 - 9:15 AM	1	2	0	0
9:15 - 9:30 AM	0	0	1	0
9:30 - 9:45 AM	2	1	0	0
9:45 - 10:00 AM	2	0	1	0
10:00 - 10:15 AM	0	0	1	1
10:15 - 10:30 AM	5	1	1	0
10:30 - 10:45 AM	0	2	4	0
10:45 - 11:00 AM	1	0	2	0
11:00 - 11:15 AM	1	0	0	2
11:15 - 11:30 AM	0	0	0	2
11:30 - 11:45 AM	5	1	3	0
11:45 - 12:00 PM	4	0	4	0
12:00 - 12:15 PM	5	1	2	0
12:15 - 12:30 PM	4	0	3	0
12:30 - 12:45 PM	2	0	2	0
12:45 - 1:00 PM	0	0	0	0
1:00 - 1:15 PM	1	1	1	0
1:15 - 1:30 PM	2	0	2	0
1:30 - 1:45 PM	8	1	2	0
1:45 - 2:00 PM	3	0	5	1

Usage Data

Date: 8/14/10

Location: Echo

Analyst: Delgado

	Entering		Leaving	
	Cars	Boats	Cars	Boats
2:00 - 2:15 PM	7	0	1	0
2:15 - 2:30 PM	6	0	7	0
2:30 - 2:45 PM	3	0	1	0
2:45 - 3:00 PM	6	0	5	1
3:00 - 3:15 PM	3	0	3	0
3:15 - 3:30 PM	2	0	2	0
3:30 - 3:45 PM	5	0	2	2
3:45 - 4:00 PM	7	0	6	0
4:00 - 4:15 PM	6	0	3	0
4:15 - 4:30 PM	7	1	7	0
4:30 - 4:45 PM	2	0	4	0
4:45 - 5:00 PM	5	0	6	1
5:00 - 5:15 PM	1	0	1	0
5:15 - 5:30 PM	2	1	2	0
5:30 - 5:45 PM	2	0	7	2
5:45 - 6:00 PM	3	0	1	1
6:00 - 6:15 PM	5	0	2	3
6:15 - 6:30 PM	5	1	3	0
6:30 - 6:45 PM	1	0	1	0
6:45 - 7:00 PM	2	0	2	0
7:00 - 7:15 PM	0	0	0	0
7:15 - 7:30 PM	2	0	2	0
7:30 - 7:45 PM	6	0	2	0
7:45 - 8:00 PM	0	0	0	0
8:00 - 8:15 PM	3	0	3	1
8:15 - 8:30 PM	0	1	0	1
8:30 - 8:45 PM	11	0	11	1
8:45 - 9:00 PM	11	1	0	1

Usage Data

Date: 8/21/10
 Location: Statter
 Analyst: Delgado

	Entering		Leaving	
	Cars	Boats	Cars	Boats
6:00 - 6:15 AM	0	0	0	0
6:15 - 6:30 AM				
6:30 - 6:45 AM				
6:45 - 7:00 AM				
7:00 - 7:15 AM				
7:15 - 7:30 AM				
7:30 - 7:45 AM				
7:45 - 8:00 AM				
8:00 - 8:15 AM	95	17	4	0
8:15 - 8:30 AM	6	2	5	0
8:30 - 8:45 AM	6	2	7	1
8:45 - 9:00 AM	13	1	7	1
9:00 - 9:15 AM	14	2	7	1
9:15 - 9:30 AM	8	1	8	0
9:30 - 9:45 AM	10	2	3	1
9:45 - 10:00 AM	20	7	11	6
10:00 - 10:15 AM	16	2	20	3
10:15 - 10:30 AM	15	4	20	3
10:30 - 10:45 AM	9	1	9	2
10:45 - 11:00 AM	13	4	6	2
11:00 - 11:15 AM	14	5	13	4
11:15 - 11:30 AM	15	0	14	2
11:30 - 11:45 AM	17	2	15	1
11:45 - 12:00 PM	17	0	11	2
12:00 - 12:15 PM	16	3	13	1
12:15 - 12:30 PM	14	0	16	1
12:30 - 12:45 PM	19	1	12	0
12:45 - 13:00 PM	18	3	19	3
13:00 - 13:15 PM	15	2	8	3
13:15 - 13:30 PM	15	2	5	3
13:30 - 13:45 PM	21	1	17	1
13:45 - 14:00 PM	15	3	14	1

Usage Data

Date: 8/21/10
 Location: Statter
 Analyst: Delgado

	Entering		Leaving	
	Cars	Boats	Cars	Boats
14:00 - 14:15 PM	12	1	12	4
14:15 - 14:30 PM	18	2	20	2
14:30 - 14:45 PM	15	4	5	1
14:45 - 15:00 PM	17	0	12	2
15:00 - 15:15 PM	13	2	18	1
15:15 - 15:30 PM	16	3	14	2
15:30 - 15:45 PM	19	1	20	2
15:45 - 16:00 PM	13	5	20	2
16:00 - 16:15 PM	17	1	21	3
16:15 - 16:30 PM	16	0	14	1
16:30 - 16:45 PM	15	2	18	3
16:45 - 17:00 PM	12	3	12	4
17:00 - 17:15 PM	23	2	23	2
17:15 - 17:30 PM	14	4	20	3
17:30 - 17:45 PM	9	1	25	2
17:45 - 18:00 PM	14	4	17	6
18:00 - 18:15 PM	14	2	18	2
18:15 - 18:30 PM	16	3	11	3
18:30 - 18:45 PM	8	0	3	0
18:45 - 19:00 PM	9	1	8	1
19:00 - 19:15 PM	17	1	17	0
19:15 - 19:30 PM	16	2	37	1
19:30 - 19:45 PM	12	1	31	2
19:45 - 20:00 PM	6	0	22	2
20:00 - 20:15 PM	0	0	0	0
20:15 - 20:30 PM	0	0	0	0
20:30 - 20:45 PM	0	0	0	0
20:45 - 21:00 PM	0	0	0	0

Usage Data

Date: 8/21/10

Location: Amalga

Analyst: M Stuart

	Entering		Leaving	
	Cars	Boats	Cars	Boats
6:00 - 6:15 AM				
6:15 - 6:30 AM				
6:30 - 6:45 AM				
6:45 - 7:00 AM				
7:00 - 7:15 AM				
7:15 - 7:30 AM				
7:30 - 7:45 AM				
7:45 - 8:00 AM				
8:00 - 8:15 AM	5	2	4	0
8:15 - 8:30 AM	2	3	3	1
8:30 - 8:45 AM	0	1	0	1
8:45 - 9:00 AM	0	4	0	3
9:00 - 9:15 AM	0	1	0	2
9:15 - 9:30 AM	1	0	1	0
9:30 - 9:45 AM	0	0	0	0
9:45 - 10:00 AM	0	3	0	0
10:00 - 10:15 AM	1	2	0	2
10:15 - 10:30 AM	0	0	0	1
10:30 - 10:45 AM	1	6	0	0
10:45 - 11:00 AM	1	6	1	3
11:00 - 11:15 AM	1	3	0	5
11:15 - 11:30 AM	1	4	1	3
11:30 - 11:45 AM	0	1	0	2
11:45 - 12:00 PM	1	3	0	2
12:00 - 12:15 PM	3	2	0	1
12:15 - 12:30 PM	0	1	0	2
12:30 - 12:45 PM	0	4	0	1
12:45 - 13:00 PM	3	3	2	2
13:00 - 13:15 PM	3	2	1	0
13:15 - 13:30 PM	1	0	0	0
13:30 - 13:45 PM	4	1	1	0
13:45 - 14:00 PM	1	3	3	0

Usage Data

Date: 8/21/10

Location: Amalga

Analyst: M Stuart

	Entering		Leaving	
	Cars	Boats	Cars	Boats
14:00 - 14:15 PM	10	0	1	3
14:15 - 14:30 PM	2	1	3	2
14:30 - 14:45 PM	7	0	2	1
14:45 - 15:00 PM	3	2	4	0
15:00 - 15:15 PM	3	1	3	3
15:15 - 15:30 PM	5	1	5	5
15:30 - 15:45 PM	10	3	2	2
15:45 - 16:00 PM	5	3	6	3
16:00 - 16:15 PM	4	4	0	5
16:15 - 16:30 PM	8	0	6	5
16:30 - 16:45 PM	0	1	1	3
16:45 - 17:00 PM	4	3	10	4
17:00 - 17:15 PM	1	0	0	8
17:15 - 17:30 PM	2	1	3	4
17:30 - 17:45 PM	1	0	1	1
17:45 - 18:00 PM	1	0	1	2
18:00 - 18:15 PM	3	0	5	6
18:15 - 18:30 PM	1	1	0	5
18:30 - 18:45 PM	2	0	2	2
18:45 - 19:00 PM	5	0	2	4
19:00 - 19:15 PM	1	2	3	3
19:15 - 19:30 PM	1	0	0	3
19:30 - 19:45 PM	2	0	0	4
19:45 - 20:00 PM	1	0	0	4
20:00 - 20:15 PM	0	0	0	0
20:15 - 20:30 PM	0	0	0	0
20:30 - 20:45 PM	0	0	0	0
20:45 - 21:00 PM	0	0	0	0