

## **Robson Bight (Michael Bigg) Ecological Reserve Visitor Management Program**

### **1995 Seasonal Report**

November, 1995



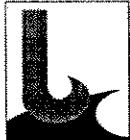
**bion research inc.**  
*environmental consultants and engineers*

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**bion research inc.**  
*environmental consultants and engineers*

Mr. Rik Simmons  
B.C. Parks - Strathcona District Office  
P.O. Box 1479  
Parksville, B.C.  
VN9 2H4

November 17th, 1995

Dear Mr. Simmons:

- RE: RBMBER Visitor Management Program 1995

We are pleased to provide you with a copy of the RBMBER Visitor Management Program 1995 seasonal report. This report details the objectives and methodologies for the 1995 season and includes summaries of the raw data. Appendices contain printouts of the validated data and summaries of the whale and vessel monitoring data. Digital copies of the data files are included on 3.5" floppy disks in Microsoft Excel 5.0 format. Photocopies of the original field logs were submitted at intervals throughout the field season.

The whale/vessel interaction component added for this season was very successful in terms of data collection. Preliminary results can be expected from the UBC Marine Mammal Institute some time in the Spring of 1996.

We trust you are pleased with the operations of the warden and research programs this season and the contents of this final report. Please feel free to call us at 322-9200 or fax 322-4907 if you have any questions.

Sincerely,  
*BION RESEARCH INC.*



Edward Gregr, B.Sc., A.Sc.T.  
*Project Coordinator*

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## ACKNOWLEDGMENTS

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The following groups provided support for this project by provided much appreciated supplies and/or facilities: **Telegraph Cove Resorts**, **Mountain Equipment Coop**.

## VOLUNTEERS

Many thanks to **Bruce Patterson** and **Padraig Whooley**, who both devoted their entire summer to the project and were instrumental in it's success.

## PROJECT STAFF

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Special Thanks to **Dr. Andrew Trites** of the UBC Marine Mammal Unit and to **Dr. David Bain** from the University of Washington for their invaluable direction of the research component of this project.

## 1. Introduction

Located on the northeast coast of Vancouver Island, Johnstone Strait is well known as one of the best locations in the world to observe killer whales (*Orcinus orca*) (Figure 1). Since the early 1970's, researchers have conducted monitoring of killer whale abundance, behaviour and activity (Bigg et al. 1976, 1987; Briggs 1991; Duffus and Dearden, 1987; Ford, 1980, 1984; Ford and Fisher 1982; Jacobsen 1980, 1990, Taylor 1988a and Ford, Ellis and Balcomb, 1994). The 1993 census estimated the B.C. northern resident killer whale population at  $200 \pm 5$  individuals (G. Ellis., pers. comm. 1993). Despite an apparently extensive range, a large percentage of the northern killer whale community can be consistently found in the Johnstone Strait/Blackfish Sound area between June and October. The killer whales return annually to feed on salmon and to socialize. They also spend a considerable amount of time rubbing on pebble beaches and resting in the Robson Bight area. The predictability of killer whale activity in Western Johnstone Strait has resulted in this area being identified as a "core habitat" for the northern resident killer whales (JSKWC, 1991). Increased vessel activity in the area has prompted concerns that disturbance of killer whales through habitat encroachment may threaten their continued use of this "core habitat" (Darling, 1986, Blood et al., 1988, Briggs 1991).

In 1995, BC Parks combined the Mount Derby, Tsitika Mountain, and Robson Bight (Michael Bigg) Ecological Reserves with a large portion of upland area and established Robson Bight (Michael Bigg) Provincial Park. The new Class A park totals 5,323 ha of upland area and 1,248 ha of foreshore area. The protected area status represents BC Parks' commitment to the preservation of wildlife habitat and distinctive ecosystems.

Robson Bight (Michael Bigg) Ecological Reserve (RBMBER), now within the new Park, is under special management by BC Parks due to its status as a unique killer whale "core habitat" (Figure 2). Since the establishment of the reserve (in 1982), the province has maintained a volunteer warden service. During 1987, 1989, and 1990, visitor management programs were conducted on-site. These programs were designed to direct vessel traffic away from RBMBER, monitor visitor use, whale encounters, assist researchers and to provide information to boaters and visitors in the vicinity of the reserve (Taylor, 1988a,b; Taylor and Parsons, 1989).

BION Research Inc. was contracted for the period 1991-96 to expand this program to include whale/vessel activity monitoring and land-based visitor education components. A visitor survey was implemented by BION to provide visitor information and to compile meaningful visitor statistics. The main objective of this program was to provide mitigation of potential vessel impacts on whale activity in RBMBER, and to collect and report information to assist in the development of future management plans of the Reserve. A preliminary analysis of this data has been completed by the UBC Marine Mammal Unit and has identified some correlations between certain types of vessel traffic and whale behaviour.

This report details the work conducted during the summer of 1995.

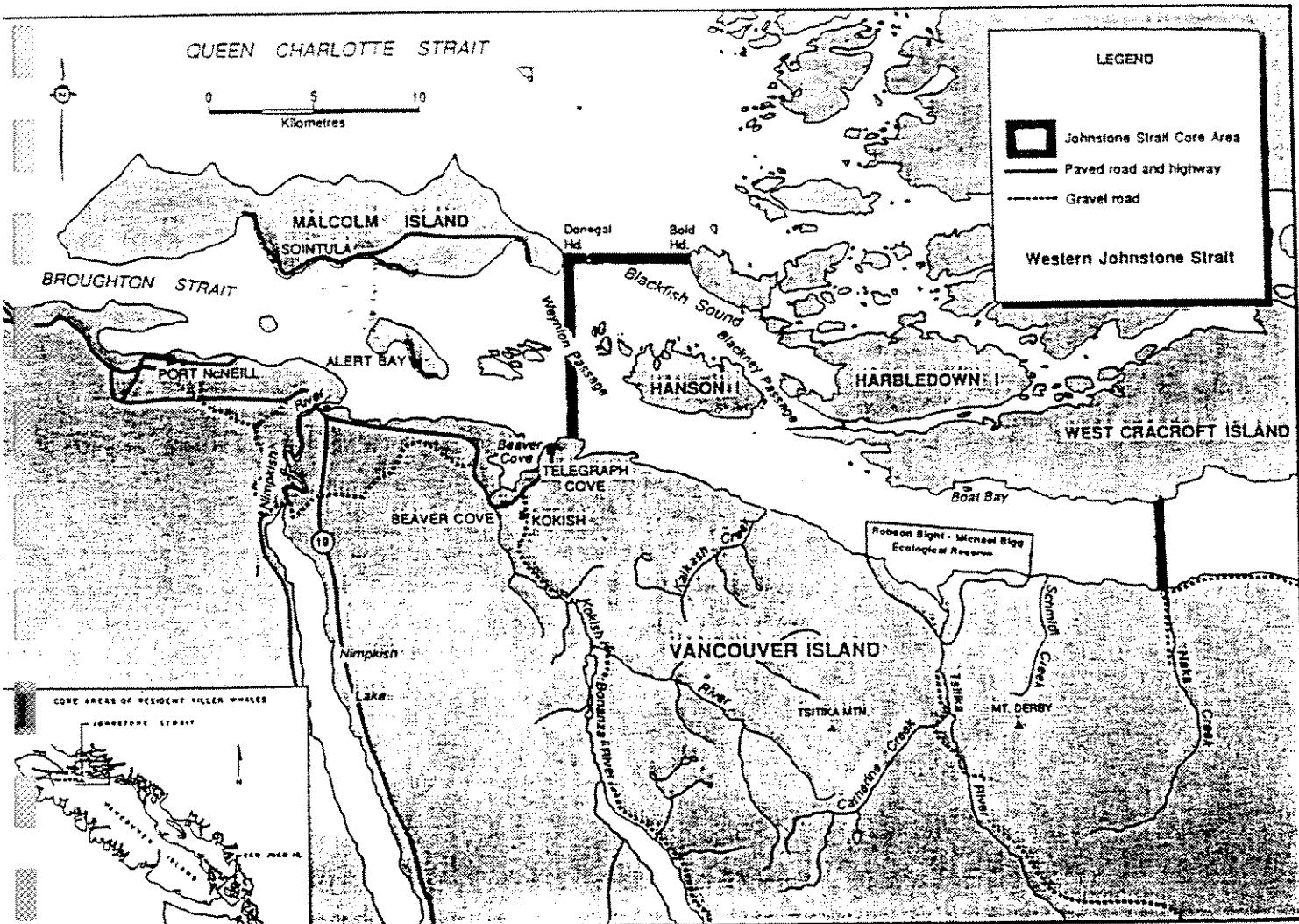


Figure 1 Western Johnstone Strait showing the location of the Robson Bight-Michael Bigg Ecological Reserve (RBMBER) and surrounding area (after JSKWC, 1991).

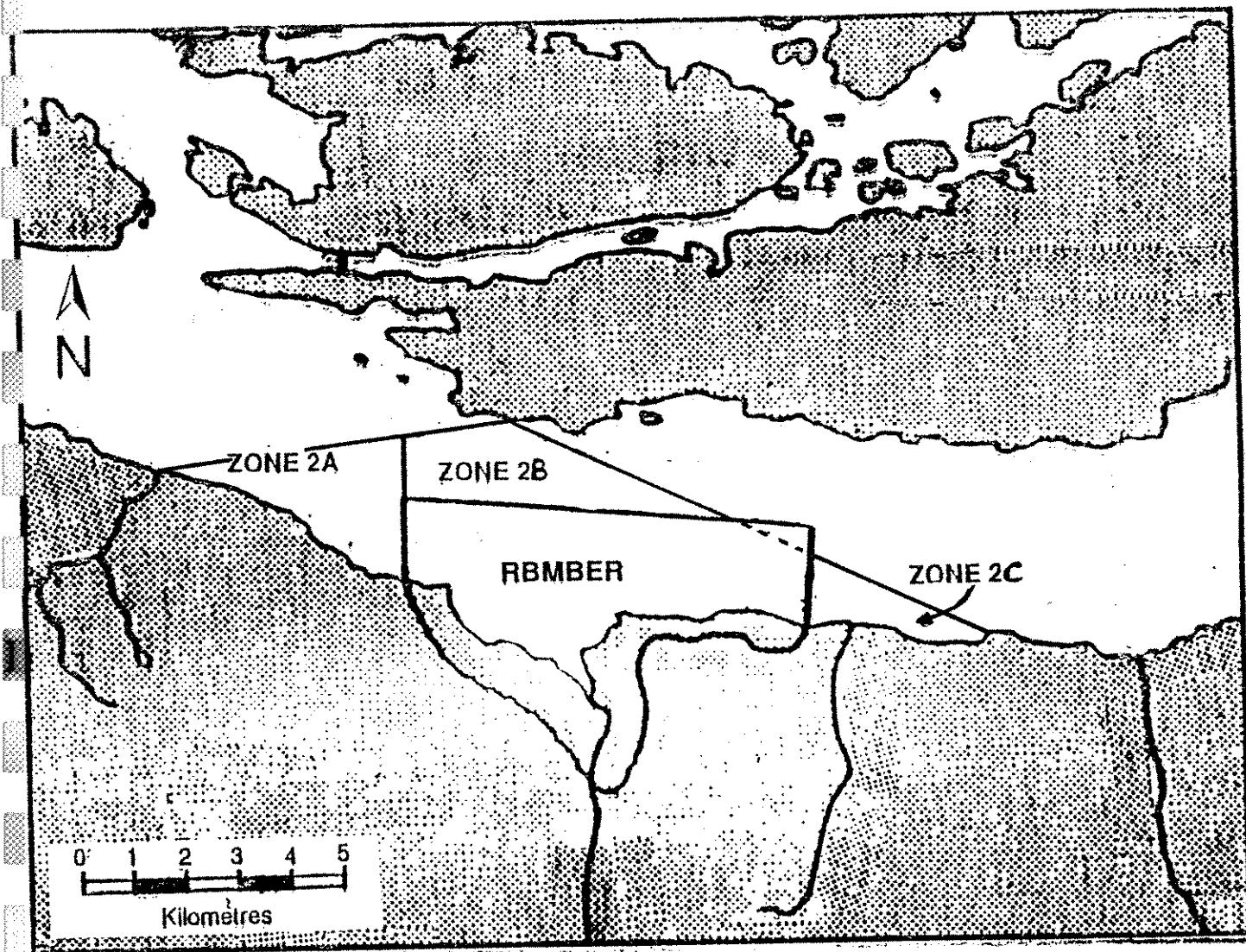


Figure 2 Johnstone Strait showing the locations of Zones 2 A, B and C.

## 1.1 Objectives

The goals for the 1994-1997 program are to:

- Mitigate potential disturbance of whales within the ecological reserve;
- Enhance public understanding of the RBMBER and whale watching guidelines and to generate public support for the program through on-water contacts;
- Conduct vessel/whale monitoring to assist in the development of long term management strategies.

In order to meet these goals the following objectives were defined:

1. Patrol the marine reserve boundary and greet boaters entering the RBMBER, distribute information provided by B.C. Parks, answer questions, request that boaters stay out of the reserve, request compliance with whale observation guidelines and maintain RBMBER signage as directed.
2. Monitor whale and vessel activities in the study area in a manner consistent with past programs and present verified data in a standard format with well defined methodology.
3. Present paper and electronic copies of all data, including a report detailing the operations of each individual year and an explanation of the latest research methodologies used.

## 2. Methods and Materials

A field crew was based in Boat Bay on West Cracroft Island. Warden service was conducted from June 26 to September 4, 1995. Basic whale/vessel monitoring was conducted from July 1 to August 31, 1995. Theodolite tracking of whales and vessels was conducted for 17 days, primarily in August.

### 2.1 Warden Program

Except during extreme weather and fog conditions, warden crews patrolled RBMBER and adjacent area from 0800 and 2000 hrs, utilizing 15' and 17' rigid hull Zodiac inflatables. Daily scheduling was dictated by the level of whale and visitor activity and weather conditions. Warden logs detailing time on and off the water, sea state and visitor contact information were completed daily by each vessel. Appendix D presents a sample data log.

#### 2.1.1 Visitor Contacts

All visitor encounters were made in a cheerful, friendly and informative manner. Wardens wore distinctive uniforms (i.e. gray shirts with ecological reserve flashes and orange mustang cruiser suits). The wardens informed visitors of the purpose of RBMBER and of ongoing research activities in the area. The boundaries of RBMBER were outlined to all visitors using physical landforms. The boundaries were detailed precisely to visitors equipped with radar and marine charts and the relevant distances were provided in both kilometres and nautical miles.

All visitors were provided with pamphlets on the ecological reserve program, and on the RBMBER. These pamphlets provide some natural history of the area and outline whale watching guidelines.

During each contact wardens collected information on RBMBER visitors as outlined in the standard visitor survey form presented in Appendix D. Data regarding vessel type, vessel origin and destination, trip objectives and RBMBER knowledge was collected.

### **2.1.2 Warden Guidelines**

Priorities for the warden program were established in consultation with BC Parks. The document detailing the priorities is presented in Appendix F. The priorities are summarized below:

1. Ensure that no boaters approach whales in the ecological reserve.
2. Ensure that no vessels follow the whales into the reserve.
3. Minimize vessel traffic within the boundaries of the reserve.
4. Educate as many boaters as possible about the reserve, the boundaries the "no entry" policy, and proper whale watching guidelines.
5. Conduct interpretive sessions as often as possible, to as many people as possible.

### **2.1.3 Warden Operating Protocol**

All wardens were required to adhere to a standard operating protocol. This is particularly important because the number of warden vessels used (either one or two) has a direct effect on the operating protocol. This further ensured that the all wardens provided consistent service consistent throughout the summer. The details of the operating protocol is presented in Appendix F, and is summarized below:

#### **1. Vessel Approaches**

- a) Slow and safe approach from stern quarter (VHF contact was used if direct approach was considered unsafe),
- b) Greeting and identification,
- c) Information exchange and interpretation,
- d) Voluntary compliance request.

#### **2. Commercial Traffic**

Wardens were not expected to intercept commercial traffic transiting the reserve. If commercial crews were engaged in recreational activities within the reserve, contact was initiated at the discretion of the warden.

### 3. Landings in the Reserve

Any group camping or lighting fires on shore must be approached and have BC Parks policy explained. Compliance with the Ecological Reserves Act should be requested. Belligerent or repeat offenders are to be reported to BC Parks.

#### 2.1.4 Non-compliance

Visitors in violation of reserve guidelines were requested to comply with the RBMBER *no entry policy* and landing prohibition within the reserve. Those repeatedly refusing to comply were reported to BC Parks with boat name, number and/or description, date, time and a description of the events leading to the continued non-compliance.

Commercial fishing vessels and other commercial or government vessel engaged in non-whale oriented activities were exempted from the "no entry policy". Commercial fishing vessels anchored within RBMBER, prior to and between fishing openings, were approached and informed about RBMBER and the policies associated with it.

#### 2.1.5 Campsite Visits (Blinkhorn Penn. and Kaikash Ck.)

Wardens conducted weekly interpretive talks at Kaikash Creek, the most popular destination for kayakers in the area. The talks were designed to educate kayakers about whale watching guidelines and the no entry policy regarding RBMBER. The wardens also answered questions about the natural history of the area, wildlife, local attractions, historic sites, water supplies and other general inquiries.

#### 2.1.6 Information Shelters and Signs

Type II information shelters located at Boat Bay, Blinkhorn, Kaikash Creek and Naka Creek as well as the boundary signs located at the east and west boundary of the RBMBER were inspected and maintained in a safe and fully functional condition. Wardens ensured shelters were free from garbage, debris, litter, cobwebs, leaves, weeds, encroaching vegetation and foreign materials.

### 2.2 Whale and Vessel Monitoring Program

Monitoring was conducted from 0800 - 2000 hrs for zones 2-6 depending on the weather. Monitoring data included scan times, subpod/group, direction of travel and activity (resting, rubbing or other). A spotting scope and binoculars were used to identify vessel types and identify groups of whales. Monitoring was not conducted during periods of foul weather. Foul weather was defined as periods of rain or fog which prevented the consistent discrimination between Zones 3-6 and/or rough seas which made boat landings difficult or restricted vessel/whale observations. Instances where fog or rain were periodic are noted as comments on vessel data logs. Sample data logs for vessel and whale monitoring are presented in Appendix D.

Monitoring observations were made from a cliff approximately 45 m above sea level located opposite the RBMBER on West Cracroft Island. Demarcation of zone boundaries was based on land references firmly established over the past five years of data collection. These land references are identified below and shown in Figure 3:

- Zone 2: The area immediately adjacent to the RBMBER extending from Schmidt Creek in the east to Kaikash Creek in the west (please see figure 2 for location of subzones).
- Zone 3: West Reserve Boundary to Robson Point.
- Zone 4: Robson Point to Critical Point of Robson Bight.
- Zone 5: Critical Point to West Beach.
- Zone 6: West Beach to East RBMBER boundary.

Several methods were used to aid in the zone discrimination. Standardized visual reference points were aided by referencing a warden vessel equipped with LORAN, dead reckoning along compass bearings, and observing radar equipped charter vessels traveling along the northern boundary of the Reserve.

### **2.2.1 Whale Monitoring**

Whale occurrence was monitored using "whale scans" at intervals of 15 or 30 minutes, depending on the level of activity. This modification to the monitoring program from previous years was intended to recognize the fact that the whales are not visible continuously. This effectively minimizes observer effort while at the same time increasing the quality of the data.

Data recorded includes subpod/group identity, number of individuals, location (by Zone), behaviour, direction of travel and degree of dispersion. A standard log form is presented in Appendix D.

Whale activity was categorized as rubbing, resting, traveling, foraging and socializing as per Ford (1994). Rubbing behaviour was recorded when whales entered either of the rubbing beach areas (i.e. within 50 m of the shore fronting the beaches) or when bubbles or splashing was observed in the vicinity. Resting behaviour was recorded when whales were observed in a resting line as described in Ford (1984). Traveling was defined as a whale or whales swimming consistently in the same direction for three or more surfacings. Foraging was characterized by a group which was loosely organized and demonstrating frequent directional changes. Socializing included frequent signs of surface active behaviour such as spyhopping, breaching and splashing. Previous years have not characterized traveling, foraging and socializing behaviours because they were considered to be difficult to differentiate. It was included in 1995 in an effort to construct a more complete behavioural budget. Compatibility with past data is easily maintained by grouping these three categories together as "other".

Whales were tracked as "groups". A group of marine mammals was defined as any number of animals in the same geographic area engaged in the same activity, without regard for family relationship. Subpods, groups, and individuals were identified by a combination of methods including; dorsal fin identification, subpod size discrimination and "whale network" information.

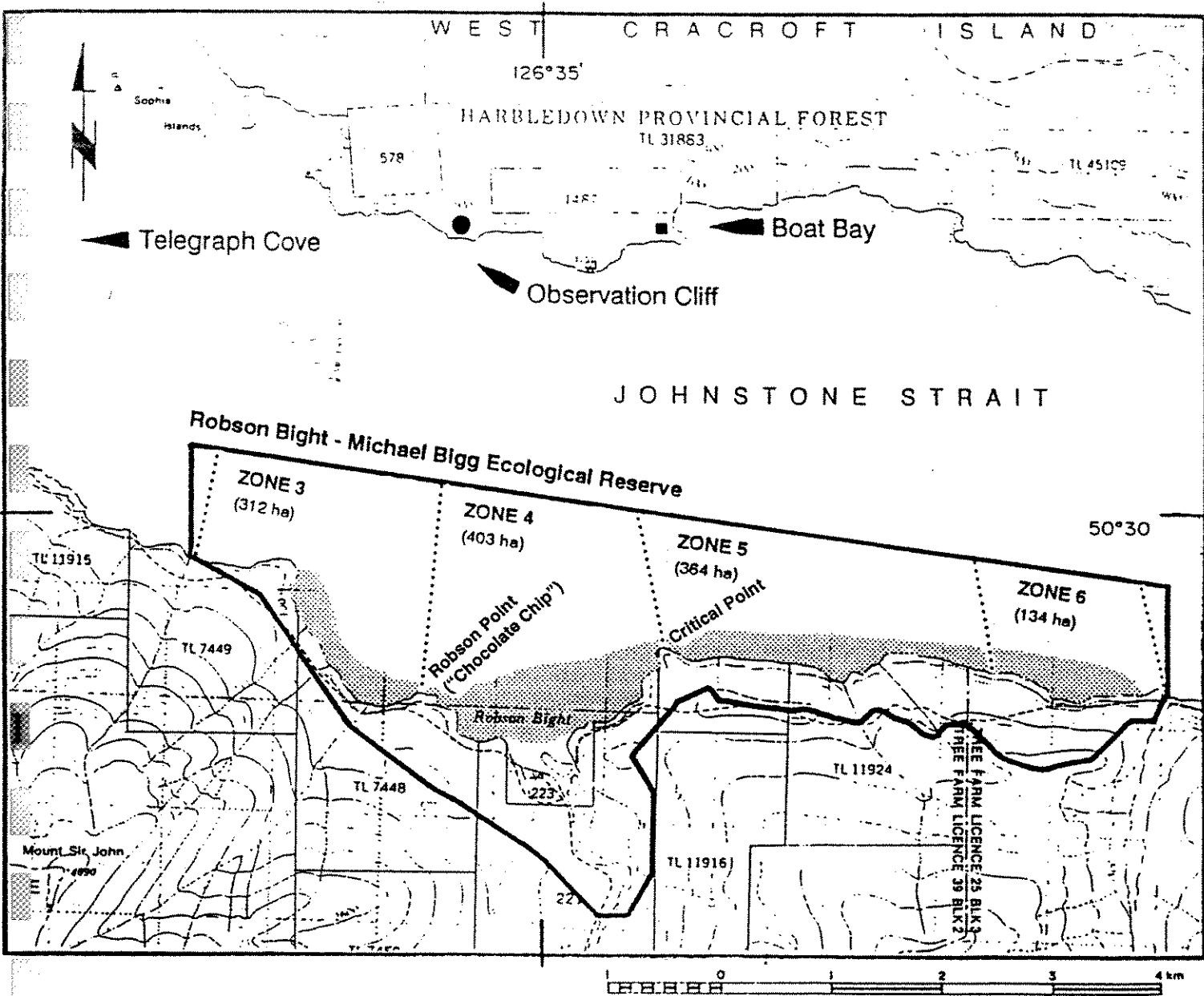


Figure 3 Robson Bight-Michael Bigg Ecological Reserve (RBMBER) showing location of Zones 3,4,5 and 6, Boat Bay field camp and observation cliff. Zone boundaries are referenced using a LORAN equipped reference vessel and dead reckoning along compass bearings (NTS No.92L/7, 10E).

Whale occurrence was measured by whale-hours (*wh*) within each zone. Whale-hours were calculated using the following formula:

$$wh = T_1 \times N_s \times N_w$$

Where:  $wh$  = whale hours  
 $T_1$  = mean duration between scans  
 $N_s$  = number of scans  
 $N_w$  = mean number of whales per scan.

## 2.2.2 Vessel Monitoring

Vessels traffic was monitored using two methods. The first method was used to quantify traffic through the Strait. This was accomplished by recording the number of vessels crossing a line drawn between the cliff and Robson Point (the zone 3-4 boundary). Observers recorded the time, vessel type, direction of travel and noted whether the vessel was inside the Reserve at the time it crossed the line. The second method involved conducting boat counts for each zone at 15 minute intervals. During periods of intense vessel activity (i.e. fisheries openings) or when staff were allocated to theodolite tracking monitoring, boat counts were conducted at 30 minute intervals. This accommodated the high level of effort required for data collection. Standard log forms are presented in Appendix D.

## 2.2.3 Whale/Vessel Interactions

Analysis of 1991 - 1994 data (Trites, 1994) has shown some correlations between vessel traffic and whale occurrence within the reserve. This has prompted interest in collecting detailed data on whale/vessel interactions to investigate potential cause and effect relationships.

Past whale/vessel interaction studies have focused on the observation and interpretation of whale behaviour. This type of study is often criticized as being inherently subjective due to the subjectiveness of whale behaviour interpretation. The two main objectives of the 1995 interaction study can be defined as: Quantification of whale/vessel occurrence to investigate the level of vessel traffic which may be correlated to whale avoidance behaviour; and the identification of specific vessel activities which result in avoidance behaviour by whales.

The method involved the use of an electronic theodolite connected to a laptop computer using custom software. The interaction methodology included the selection of a focal animal, typically the most distinctive male in the group for which the fewest tracks had already been made. Selection of a different focal animal based on proximity to the cliff was made at the discretion of the head researcher. In addition to electronically recording the position of the focal animal, observers also recorded the positions of boats within 500 m of the focal whale. Additional data collected includes: focal animal respirations; changes in behaviour (rest, travel, forage, etc.); surface activity (spy hopping; fluke slapping, etc.) by focal and non-focal animals in the same group and directional changes. Vessel data includes: boat type; directional orientation relative

to the focal animal; behaviour (active, passive, chase, transit, fishing); distance from the focal whale and direction of travel.

## 2.3 Zone 2 Monitoring

The modifications to the data collection methodology permitted Zone 2 data to be collected consistently throughout the summer. The four subzones (A,B,C and X) are shown in figure 2 and provide vital information on the activity of whales and boats in the areas directly adjacent to the RBMBER.

## 3. Results and Discussion

Brief summaries of the data collected during the 1995 field season are provided below. Detailed summaries and analysis are beyond the scope of this report, but will be available through follow up work to be conducted by the UBC Marine Mammal Unit.

Photocopies of the original data sheets were provided to BC Parks throughout the field season. In addition, a digital record of the data sheets was compiled and supplied to BC Parks on a monthly basis.

### 3.1 Warden Program

A total of 503 vessel contacts and 1,800 individual visitors were contacted by the RBMBER warden program. The number of vessel and individual contacts is comparable to previous years (i.e. 1994 values were 451 vessels and 1,987 visitors).

The number of vessels contacted within the RBMBER (52%) was comparable to 1994 (49%) and significantly lower than in 1993 (72%). Reported prior knowledge of RBMBER (59%) and voluntary compliance (95%) both decreased marginally from 1994 values of 66% and 96% respectively. Reported knowledge of the reserve boundaries and the "no entry" policy remained low at 25% and 48% respectively (1994 values were 28% and 45% respectively).

The greatest proportion of visitors reported originating from the USA (31.5%) and Vancouver (15.4%). These values represent a decrease from 1994 values of 33.3% and 27.4% respectively. The compiled data for the visitor survey is included in Appendix C.

Many commercial fishing vessels were contacted over the course of the season. Most of the commercial fishing vessels were receptive to the information provided concerning the RBMBER and whale watching guidelines. Some self policing by the fishing fleet was observed on several occasions where the wardens were contacted with reports of skiffs on the rubbing beaches and one incident of firearm discharge. Generally, however, knowledge of RBMBER management appeared low among the fleet. This indicates a need for more information distribution by the Department of Fisheries and Oceans.

Several commercial ocean liners were contacted, using VHF radio, in circumstances where the commercial ocean liners were in the reserve or whale watching aggressively. All reported no

prior knowledge of the reserve. Commercial ocean liners frequently entered the Reserve to enhance whale watching opportunities for their passengers. It was agreed with the local maritime community that commercial ocean liners be contacted only when engaged in whale watching activities. BC Parks is requested to provide clear guidelines for dealing with commercial ocean liners within the Reserve, particularly in the presence of whales.

### 3.1.1 Non-compliance

Landings within the reserve during the 1995 season were limited. All recreational landings responded to by wardens were met with voluntary compliance. Relationships with the fishing fleet were cultivated to improve communication with and education of the commercial fishers. All commercial fishing vessel landings were contacted in an informative rather than enforcement manner.

We recommend that BC Parks actively solicits the continued and increased cooperation of the two main commercial users of the RBMBER: the commercial fishing fleet and the commercial ocean liners. These are the vessels which most commonly enter the marine portion of the reserve. Increased communication and cooperation may be forthcoming through discussions with DFO, the Commercial Fishing Vessel Owners Association, the Pacific Pilotage Association and the Coast Guard.

### 3.1.2 Campsite Visits (Kaikash Creek)

For the 1995 season, the roving warden patrol was limited to weekly visits to Kaikash Creek. Rather than gather groups together, a Warden was dropped off for periods of up to 4 hours and walked the beach, contacting individual groups separately. Wardens had the opportunity to contact kayakers who do not paddle further towards the reserve and inform them of whale watching guidelines. However kayakers who continued on to the reserve boundaries were invariably contacted again.

The program may have greater potential if regular scheduling and increased resources can be combined. However it is believed that Telegraph Cove is the preferred venue for organised, standard presentations due to the larger and more diverse groups that could be contacted.

## 3.2 Whale Monitoring Data

A total of 726 observation hours over 62 days (1994 = 699 h over 67 d) logged a total of 3,104.5 whale hours (*wh*) (1994 = 2,570 *wh*) for Zones 2-6 and 1,372.75 *wh* (1994=1,172 *wh*) for the RBMBER. The mean *wh/d* for the RBMBER was calculated at 26.4 *wh/d* (1994 = 20.1 *wh/d*). These values should be treated cautiously, however, as modifications were made in the data collection protocol for the 1995 season. Further information will be available upon completion of the analysis component by the UBC Marine Mammal Unit.

Days for which monitoring was conducted but for which visibility was compromised for a majority of the observation period was not included in the data summary. Days in which periods of poor visibility were brief (i.e. less than two hours) were retained and are noted in the

comments section for the data summary. Since behaviours were summarized as a percentage of total observations, and not by continuous observation, it is expected that these values are more reliable than for previous years, where the methods provided conservative estimates of whale hours. The compiled raw data is presented in Appendix A.

### **3.3 Vessel Monitoring Data**

A total of 726 (1994 = 688) observation hours were conducted over 62 (1994 = 69) monitoring days. Monitoring data included vessel visits and boat count data. Subsequent analysis will focus on the relationship between boat counts and vessel traffic to the overall usage of the Strait.

#### **3.3.1 Boat Counts**

A total of 49,526 boat observations were made comprising a total of 14,919.75 boat hours (*bh*). A total of 4,633.75 *bh* (31%) were recorded within the RBMBER, while 10,286.0 *bh* (69%) were in the zones adjacent to the Reserve. Data recorded for boat counts include vessel type and number in each zone. The activity of commercial fishing vessels was recorded when they were actively engaged in fishing activities.

Boat hours are calculated using the same formula used for whale-hours. The compiled boat count data is presented in Appendix B1.

#### **3.3.2 Vessel Traffic**

A vessel traffic log was used for the first time during the 1995 season. This component of the program was designed to assess the general traffic pattern in the Strait. This year, a total of 6,449 vessels were observed to cross the cliff/chocolate chip line. Of these, 2,778 (43%) were traveling west (up island), while 3,671 (57%) were observed traveling east (down island). The majority of these vessels (5,245, 81%) were in transit outside the reserve while only 1,204 (19%) were inside the RBMBER. The compiled vessel traffic data is presented in Appendix B2.

### **3.4 Whale/Vessel Interactions**

Whale/Vessel interaction monitoring was conducted on a total of 17 days out of a possible 21 days where sufficient staff was allocated to the research component.

The data collected during the 1995 season consists of 42 separate tracks (each over 30 minutes in length). These tracks include 14 different males and provide a total of approximately 31 hours of useable theodolite tracks.

This study, through the use of a theodolite with computer support, eliminates much of the subjectivity associated with previous attempts to investigate whale/vessel interactions, but by its nature requires more sophisticated analysis. The data are stored as series of angles and will therefore demand time consuming analysis and plotting before they are meaningful. This

analysis will be conducted separately from the analysis of the basic monitoring component by the UBC Marine Mammal Research Unit.

## 4. Conclusions and Recommendations

### 4.1 Warden Program

- a) Knowledge of the reserve boundaries and the "no-entry" policy is generally low and is not expected to increase substantially until the RBMBER is shown on marine charts.
- b) The boundaries of the RBMBER, BC Park's "no entry" policy for recreational traffic, and the penalties for non-compliance, should be communicated to all user groups, in particular DFO and the Pacific Pilotage Association.
- c) BC Parks should encourage DFO to implement a roving warden program for the entire Special Management zone to ensure that whale watching guidelines are distributed to all vessels in the area, not just those approaching the RBMBER.
- d) The on shore boundary signs should be modified to more clearly reflect BC Parks policy, and to effectively inform boaters. An example of what the notice could read is: "The land and marine portions of the RBMBER are closed to Recreational Activity. All vessels are required to remain 1 km North OF THIS POINT for the next 9 km East (or West)."
- e) Information shelters were recently upgraded with the "no-entry" policy. Any future policy changes regarding the RBMBER should be added. Naka Creek and Boat Bay information shelters should be moved to higher traffic areas (e.g. local marinas, Growler Cove).

### 4.2 Monitoring Program

- a) During the 1995 season, the observation cliff had an unprecedented amount of visits from the public. This is largely due to the establishment in 1994 of a footpath from Growler Cove. The height of the cliff, and the uneven terrain at the viewing area make it potentially hazardous to the public and research crews. Ways to ensure the safety of the people using the observation cliff should be sought. One option may be for BC Parks to develop the cliff as a land-based whale watching platform for the public while at the same time improving the facilities for the research program.
- b) Subsequent analysis of this season's data is required before detailed recommendations for improvement can be made. The consensus of the research team, however, was that the modifications made for the 1995 season represented a significant improvement over previous years. The data collection process has been made more reliable while maintaining compatibility with historic data sets.

## References

- Bigg, M.A., I.B. MacAskie and G. Ellis. 1976. Abundance and Movements of Killer Whales off Eastern and Southern Vancouver Island with Comments on Management. Preliminary Report, Arctic Biological Station, Quebec. 20p.
- Bigg, M.A., G. Ellis, J.K.B. Ford, and K. Balcomb. 1987. Killer Whales. A Study Of Their Identification, Genealogy and Natural History in British Columbia and Washington State. Phantom Press and Publishers Inc.. Nanaimo, B.C. 79p.
- Bion Research Inc. 1993. Robson Bight-Michael Bigg Ecological Reserve Visitor Management Program - (1991-93). Prepared for BC Parks, Miracle Zone. 24p.
- Bion Research Inc. 1994. Robson Bight Michael Bigg Ecological Reserve Visitor Management Program - 1994. Prepared for BC Parks, Miracle Zone. 13p. plus data appendices.
- Blood, D.A., I.B. MacKaskie and C.J. Low. 1988. Robson Bight Ecological Reserve - Background Report. Prepared by D.A. Blood and Associates, for B.C. Ecological Reserves Program, Ministry of Environment and Parks, Victoria, B.C. 96p.
- Briggs, D. 1991. Impact on Killer Whales. British Columbia Ministry of Parks, Victoria. 37p.
- Darling, J.D. 1986. An Assessment of the Impacts of Human Activities on the Killer Whales of Robson Bight Ecological Reserve with Management Guidelines. West Coast Whale Research Foundation, Vancouver, B.C. 83 p. with appended literature.
- Duffus, D. and P. Dearden. 1987. Non-consumptive Use and Management of Whales, Robson Bight Study Area, 1986. Preliminary Report. Department of Geography, University of Victoria. 40p.
- Ellis, G. 1993. Personal Communication Regarding Northern Resident Killer Whale Population Estimates 1991-93 (December 17, 1993). Dept. of Fisheries and Oceans Canada, Pacific Biological Station, Nanaimo B.C.
- Ford, J.K.B. 1980. Data and Comments an the Use by Killer Whales of The Robson Bight and Northern Johnstone Strait Areas. Dept. of Zoology, University of British Columbia.
- Ford, J.K.B. 1984. Call Traditions and Dialects of Killer Whales (*Orcinus orca*) in British Columbia. Ph.D. Thesis. Dept. of Zoology. University of British Columbia. 435p.
- Ford, J.K.B. and H.D. Fisher. 1982. Killer Whale (*Orcinus orca*) Dialects as an Indicator of Stocks in British Columbia. Report Int. Whale Comm. 32: 671-679.
- Ford, J.K.B., G.M. Ellis K.C. Balcomb. 1994. Killer Whales - The Natural Genealogy of *Orcinus orca* in British Columbia and Washington Strait.
- JSKWC. 1991. Background Report. BC Parks and Fisheries and Oceans Canada.
- Jacobsen, J. 1980. The behaviour of the Killer Whales in (*Orcinus Orca*) in the Johnstone Strait, B.C., Presented at Orca Symposium, American Cetacean Society, Seattle Wash.
- Jacobsen, J. 1990. Association and Social Behaviour Among Killer Whales (*Orcinus Orca*) in the Johnstone Strait, B.C. (1979-1986), M.Sc. Thesis Humboldt State University, California. 106 p. + Appendix.
- Taylor, R.E. 1988a. The Use of a Marine Mammal Reserve by Researchers and Photographers. Research paper, Natural Resource Management Program, Simon Fraser University. 41 p. + appendices.
- Taylor, R.E. 1988b. Visitor Program at Robson Bight Ecological Reserve, Summer 1987. Report prepared for Ecological Reserves Program, Victoria. 27p.
- Taylor, R.E. and H.J. Parsons. 1989. Report on 1989 Robson Bight Visitor Program. Prepared by BUFO Inc., Vancouver, B.C., for Ministry of Parks, Strathcona Zone, Black Creek, B.C. 22p. + app
- Trites, A.W. and W. Hochachka. 1994. Killer Whales and Vessel Activity in Robson Bight from 1991 to 1993. . Report prepared for BC Parks, Victoria. 46p

**LIST OF APPENDICES**

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**APPENDIX A****Whale Scan Data**

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**Interpretive Notes:****A) Abbreviated Headings**

- No. Kws: Number of killer whales in the recorded school  
Individual/Pod Ids: Records information relating to the animals or subpods known to be in the study area and believed to be part of the recorded school. See below.  
Degree of Disp.: Degree of dispersion. Three categories were used: Tight, loose, and dispersed.

**B) Record Layout**

Days are separated by double solid lines. Single solid lines represent occasions when the animals left the study area and returned at a later time.

**B) Individual/Pod ID Interpretation**

This field is used to identify the whales in a particular scan as closely as possible. The most straightforward use is the designation of a single animal (i.e. A30).

If an entire pod is moving together as a single school, then the subpod designation is used. Subpod ID is distinguished from individual ID by the addition of an "s" (i.e. A30s).

During high whale traffic time, it is often very difficult to identify all the whales in a particular school during every scan. The field is then used to record:

- i) All the subpods known to be in the area; and
- ii) a description of the school. For example, a group of 4 animals may have the ID "FMJC". This implies that the group is composed of a female, a mature male, a juvenile and a calf.

Due to the skills of different observers, and the variable distinctiveness of the animals, all of the above codes are used on an adhoc basis, wherever they were deemed most appropriate at the time the scan was conducted.

## Appendix A - Whale Scan Data

1995 Whale Scan Data								
Date	Time	No. KWS	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
2-Jul	8:00	6	A30s	2A	R	W	tight	
	8:15	6	A30s	2A	R	W	tight	
	8:30	6	A30s	2A	R	W	tight	
	8:45	6	A30s	2A	R	W	tight	
	16:30	2	A30s	2A	T	SE	tight	
	17:00	5	A30s	2A	R	E	tight	
	17:15	6	A30s	3	R	E	tight	
	17:30	6	A30s	4	R	SE	tight	
	17:45	6	A30s	4	R	NE	tight	
	18:00	6	A30s	5	R	E	tight	
	18:15	6	A30s	5	R	E	tight	
	18:30	4	A30A50A54 1M	6	B		tight	
		1	A30s	6	F		disp	
	18:45	2	2M	6	T	W	disp	
		3	A30A50A54	6	B		disp	
		1	1M		lost			
	19:00	4	A30A50A54 1M	6	F		disp	
		1	1M	5	F		disp	
		1	1M		lost			
	19:15	4	A30A50A54 1M	6	R		disp	
		1	1M	2B	F		disp	
		1	1M		lost			
	19:30	4	A30A50A54 1M	5	T	W	disp	
	19:45	1	A38	5	T	W		
	20:00	2	2M	4	T	W		
		1	1M	2B	T	W		
		3	A30A50A54	4	F	W		
8-Jul	10:45	4	R2R3R7R13	2C	T	W		
	11:00	4	R2R3R7R13	2C	T	W		
	11:15	4	R2R3R7R13	6	B			
	11:30	4	R2R3R7R13	5	T	W		
	11:45	4	R2R3R7R13	5	T	W		
	12:00	4	R2R3R7R13	4	T	W		
	12:15	4	R2R3R7R13	3	T	W		
	12:30	4	R2R3R7R13	3	F			
	12:45	4	R2R3R7R13	3	F			
	13:00	4	R2R3R7R13	3	T	W		
	13:15	4	R2R3R7R13	2A	T	W		
	13:30	4	R2R3R7R13	2A	T	W		
	13:45	4	R2R3R7R13	2A	T	W		
	14:00	4	R2R3R7R13	2A	F			
9-Jul	14:30	4	A36s	2B	F	W		
	14:45	4	A36s	2B	F	NW		
	15:00	4	A36s	2A	F	W		
	15:15	4	A36s	2A	T	W		
	15:30	4	A36s	2A	F	W		
	15:45	4	A36s	2A	T	W		
10-Jul	8:00	4	R2R7R13R3	2A	T	W	disp	
	8:15	4	R2R3R7R13	2A	T	W	disp	
	17:45	4	A36s	2A	T	E	tight	
	18:00	4	A36s	2A	T	E	tight	
	18:15	rain-can not see						
	18:30	4	A36s	3	T	E	tight	
	18:45	4	A36s	3	F		tight	
	19:00	2	A32A46	4	T	E	tight	
		2	A36A37	4	T	E	tight	
	19:15	2	A32A46	5	T	E	tight	
		2	A36A37	4	T	E	tight	
	19:30	4	A36s	5	R		tight	
	19:45	1	A37	6	F			
		1	A32	6	R			
	20:00	2	A36A46	6	T	E	tight	
		2	A32A37	6	F		disp	
11-Jul	10:15	3	A36A32A37	2A	F	E	disp	
		1	A46		lost			
	10:30	2	A32A37	2A	F	NW	tight	
		2	A36A46		lost			
	10:45	3	A36A32A37	2A	T	W	loose	
		1	A46		lost			
	14:45	3	A36A37A46	2A	T	E	tight	
		1	A32	2A	T	E		
	15:00	4	A36s		T	SE	disp	
	15:15	2	A36A37	2B	T	E	tight	entering reserve
		2	A32A46	2B	T	E	loose	entering reserve
	15:30	2	A32A46	3	T	E	loose	slow speed no boats
		2	A36A37	3	T	E	loose	slow speed no boats
	15:45	3	A32A37A46	3	T	E	tight	slow/mod speed no boats
		1	A36	3	T	E	slow/mod speed no boats	slow/mod speed no boats
	16:00	3	A37A32A46	3	T	NE	loose	slow speed no boats
		1	A36	3	F			
	16:15	4	A36s	5	F	E	disp	slow/mod speed no boats
	16:30	2	A36A37	6	B		tight	no boats
		1	A46	5	T	E		no boats
	16:45	4	A36s	6	B		loose	no boats
	17:00	2	A37A32	6	T	E	disp	A32 slow A37 mod speed no boats
								slow speed no boats

		Pod IDs			degree of disp.	Comments
17:15	3	A36A37A46	6	F	disp	slow speed no boats
17:30	1	A32	2C	F		slow speed no boats
	1	A46	6	F		slow speed no boats
	1	A32	2C	F		slow speed no boats
17:45	1	A46	6	lost		slow speed no boats
	1	A32	2C	F		slow speed no boats
	2	A36A37	lost			slow speed no boats
18:00	1	A32	2C	T	E	mod speed no boats
	3	A36A37A46	lost			
12-Jul	18:00	1	A32	5	T	W
18:15	1	A32	5	T	W	no boats
	1	A46	2B	T	W	no boats
18:30	1	A46	2B	T	W	no boats
	1	A32	4	T	W	no boats
18:45	2	A37A36	4	T	W	disp
	1	A32	3	T	W	no boats
19:00	3	A46	2A	T	W	no boats
19:15	3	A32A36A37	3	T	W	loose
	3	A32A36A37	2A	T	W	loose
13-Jul	8:45	4	A36s	5	R	tight
9:00	4	A36s	2B	T	NE	no boats
9:15	4	A36s	2B	T	W	tight
9:30	2	A37A46	2B	F	disp	CCV 300-500m
	2	A32A36	lost			CCV
9:45	1	A37	2B	T	S	mod speed
	3	A32A36A46	lost			
10:00	2	A37A46	2B	F	S	loose
	2	A36A32	lost			
10:15	3	A37A32A46	2B	T	E	loose
	1	A36	lost			
10:30	1	A36	6	B		
	1	A32	6	T		
10:45	2	A37A46	5	T		
11:00	4	A36s	6	B		
11:15	4	A36s	5	T	W	loose
11:30	4	A36s	5	T	W	loose
11:45	4	A36s	4	T	W	disp
12:00	4	A36s	4	T	W	disp
12:15	2	A37A36	3	T	W	disp
	2	A32A46	2A	T	NW	loose
12:30	2	A37A36	3	T	W	loose
	2	A32A46	2A	T	W	no boats
12:45	4	A36s	2A	T	W	loose
13:00	4	A36s	2A	T	W	loose
13:15	4	A36s	2A	T	W	RSV-400m active 6
	3	A36A37A32	lost			
14:00	3	A36A37A32	2A	T	E	tight
14:15	3	A36A37A32	2A	R	E	tight
14:30	3	A36A37A32	2A	R	NE	tight
	1	A46	2A	T	W	tight
14:45	4	A36s	2A	T	SE	
	3	A36sC5s	lost			disp
15-Jul	8:45	3	A36sC5s	6	T	W
9:00	3	A36sC5s	5	T	W	tight
9:15	4	A36sC5s	4	T	W	loose
	1	A36sC5s	2B	F		loose
9:30	6	A36sC5s	3	F		
	3	A36A37A46	2B	F		
9:45	3	A36sC5s	2B	T	W	loose
	6	A36sC5s	2A	T	W	loose
10:00	6	A36sC5s	2A	T	W	disp
	3	A36sC5s	2B	T	W	disp
10:15	6	A36sC5s	2B	T	W	disp
10:45	2	A36sC5s	2A	F		disp
11:45	8	A36sC5s (not A46)	2A	T	E	
12:00	8	A36sC5s (not A46)	2A	T	E	disp
12:15	8	A36sC5s (not A46)		T	E	disp
12:30	8	A36sC5s (not A46)		R	E	loose
12:45	8	A36sC5s (not A46)		R	E	loose
13:00	8	A36sC5s (not A46)	3	T	E	light
	1	A46	2A	F	E	disp
13:15	8	A36sC5s (not A46)	3	T	E	disp
	1	A46	3	F	E	
13:30	8	A36sC5s (not A46)	4	T	E	disp
	1	A46	4	F	E	loose
13:45	8	A36sC5s (not A46)	5	T	E	loose
	1	A46	4	T	E	
14:00	9	A36sC5s	5	T	W	disp
14:15	9	A36sC5s	4	T	W	disp
14:30	7		4	S		disp
	2		3	S		disp
14:45	8	A36sC5s	3	S		disp
15:00	1	A46	2A	T	W	disp
	3	C10C17C20	3	T	W	
	5	C13C10A36A32A37	3	T	W	disp
15:15	3	C10C17C20	2A	T	W	disp
	6	C13C10A36s	3	T	W	disp
15:30	9	A36sC5s	2A	T	W	disp
15:45	9	A36sC5s	2A	T	W	loose
16:00	9	A36sC5s	lost			
16:15	8	A36sC5s (not A46)	2A	T	W	loose
16:30	8	A36sC5s (not A46)	2A	T	W	loose

## Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
	18:15	can not see 2A-glares						
		5	C5s	3	T	E	loose	
		1	A32	3	T	E		
	18:30	5	C5s	3	T	E	tight	
		1	A32	3	T	E		
		5	A30s	2A	T	E	tight	
	18:45	6	C5sA36sA30sA25s	4	T	E	disp	
		2	C5sA36sA30sA25s	3	T	E	loose	
		5	C5sA36sA30sA25s	2A	T	E	disp	
	19:00	6	C5sA36sA30sA25s	4	T	W	loose	
		5	C5sA36sA30sA25s	2A	T	E	loose	
		6	C5sA36sA30sA25s	3	T	E	tight	
	19:15	5	C5sA36sA30sA25s	5	T	E	loose	
		1	C5sA36sA30sA25s	4	F			
		1	C5sA36sA30sA25s	4	T	E		
		6	C5sA36sA30sA25s	2B	T	E	disp	
		3	C5sA36sA30sA25s	4	T	E	loose	
		2	C5sA36sA30sA25s	5	T	E	tight	
	19:30	6	C5sA36sA30sA25s	6	B	E		
		2	C5sA36sA30sA25s	6	T	E	disp	
		3	C5sA36sA30sA25s	5	T	E	loose	
		6	C5sA36sA30sA25s	2B	T	E	disp	
		1	C5sA36sA30sA25s	6	T	E		
		1	C5sA36sA30sA25s	6	T	E		
	19:45	1	C5sA36sA30sA25s	6	T	E		
		3	C5sA36sA30sA25s	6	T	E	disp	
		6	C5sA36sA30sA25s	6	B			
		3	C5sA36sA30sA25s	6	T	E	tight	
		1	C5sA36sA30sA25s	2B	T	N		
		2	C5sA36sA30sA25s	6	T	SW	disp	
		2	C5sA36sA30sA25s	6	T	S	disp	
	20:00	1	C5sA36sA30sA25s	2C	T	W		
		2	C5sA36sA30sA25s	2C	T	E	tight	
		6	C5sA36sA30sA25s	6	B	E		
		4	C5sA36sA30sA25s	6	F		disp	
		5	C5sA36sA30sA25s		lost			
16-Jul	8:00	1	A30s	2A	T	W		
		5	A30s	2B	T	W	disp	
	8:15	1	A30s	2B	I	W		
		4	A30s	2A	T	W	tight	
	8:30	5	A30s	2A	T	W	disp	
	8:45	5	A30s	2A	T	S	disp	
	9:00	4	A30s	2A	T	S	disp	
	9:15	1	A30s	2A	F			A6 out of study area
		3	A30s	2A	T	W	tight	
		4	A23s	2B	T	W	loose	
	9:30	4	A30s	2B	T	W	disp	
17-Jul	10:45	3	B7B13B14	2B	T	W	tight	
	11:00	6	A12s	4	T	E	loose	
		8	B7s	2B	T	E	loose	
	11:15	8	B7s	2B	T	E	disp	
		6	A12s	4	T	E	loose	
	11:30	8	B7s	2B	T	E	loose	
		5	A12s	5	T	E	disp	(1 lost)
	11:45	8	B7s	2B	T	E	disp	
		6	A12s	5	T	E	disp	
		4	A23s	2A	T	E	loose	
	12:00	6	A12s	6	B			
		4	A23s	2B	T	E	loose	
		8	B7s		out of study area			
	12:15	4	A23s	2B	T	E	loose	
		6	A12s	6	T	W	disp	
	12:30	4	A23s	2B	T	E	tight	
		6	A12s	5	T	W	disp	
	12:45	3	A12s	4	T	W	tight	
		7	A23s+1 A12	2B	T	NW	disp	
	13:00	3	A23s	2B	T	W	tight	
		3	A34A55A62	4	T	W	tight	
		1	A27	2B	F			
		2	A12s	2B	T	W	loose	
	13:15	4	A12,A34s	3	T	W	disp	
		3	A23s	2B	T	W	tight	
		2	A31A33	2B	T	W	loose	
		1	A27		lost			
	13:30	3	A23s(not A27)	2B	T	E	tight	turned back E. at C.P.
		4	A12,A34s	3	F			
		2	A31A33	2B	F			
		1	A27	2B	T	E		
	13:45	1	A27	2B	T	E		
		3	A34s	4	T	E	tight	
		2	A31A33	5	F			
		1	A12		lost			
		3	A23s		out of study area except A27			
	14:00	2	A31A33	5	F			
		3	A34s	4	T	NE		
		4	A23s		out of study area			(including A27:turned W at Boat Bay)
		1	A12	5	T	E		
	14:15	3	A31A33A12	5	T	E	loose	A23s turned E again at Boat Bay
		3	A34s	5	T	E	tight	
	14:30	3	A34s	5	T	E	tight	
		2	A12 and 1M	2B	T	E	tight	
		1	1M (A31orA33)	2A	T	E		
	14:45	4	A34s and 1M	6	T	E	tight	

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
			A12, 1M and A23s E of study area					
	15:00	4	A34s and 1M	6	T	E	disp	
	15:15	4	A34s and 1M	2C	T	E		
	15:30		all whales out of study area					
18-Jul	8:00	6	B7s	2B	F		tight	
		9	C5s and A36s	2B	R	E	tight	
	8:15	8	B7s	2B				
		9	C5s and A36s	2B	R	E	tight	
	8:30	5	B7B10B13B14	2B	R	NE	tight	
		9	C5s and A36s	2B	T	NW	loose	
		3	B1B2B12	2B	T	NE	tight	
	8:45	5	B7B10B13B14	2B	R	NE	tight	
		3	B1B2B12	2B	R	NE	tight	
		9	out of study area					
	9:00		all out of study area					
	12:15	1	1M from B7	2C	T	W		
	12:30	1	B8	5	T	W	disp	
		1	B10	6	T	W		
	12:45	2	B8B10	5	T	W	disp	
	13:00	4	B7B10B13B14	5	T	W	disp	
		1	B8	4	T	W		
	13:15	8	B7s	4	T	W	disp	
	13:30	2	B1B12	3	T	W	disp	
		3	B7B13B14	4	R	E	tight	
		3	B2B8B10	4	T	W	disp	
	13:45	8	B7s	4	T	E	disp	
	14:00	3	B7B13B14	5	R	E	disp	
		5	B1B2B8B10B12	4	T	E	disp	
	14:15	8	B7s	4	T	W	disp	
	14:30	3	B2B12B8	3	F		disp	
		4	B7B10	4	F		disp	
	14:45	6	B7B12B8B10B2...	4	F		loose	
		1	B8	3	F			
	15:00		B12	4	F			
		6	B2B7B8B10B13B14	3	T	W	disp	
	15:15	6	B2B7B8B10B13B14	2A	T	W	disp	
	15:30	6	B2B7B8B10B13B14	2A	T	W	disp	
		1	B12	4	T	NW		
	15:45	6	B2B7B8B10B13B14	2A	T	W	disp	
		2	B1B12	2B	T	NW	disp	
	16:45	1	B1	2B	T	E		
		1	B12	2A	T	E		
	17:00	1	B1	2B	T	E		
		1	B12	2A	T	E		
	17:15	1	B7	2B	T	E		
		7	B7s-B7	2A	T	E	disp	
	17:30	8	B7s	2B	T	E	disp	
	17:45	1	B2	2B	T	E		
		5	B7B13B14...	4	T	E	loose	
		1	B8	3	T	E		
		1	B1 out of study area					
	18:00	1	B1	6	T	SE		
		7	B7s-B1	4	T	E	disp	
	18:15	5		4	T	SW	disp	
		2	B2B8	4	T	E	disp	
	18:30	8	all whales lost					
	18:45	7	B7s-B1	4	T	W	disp	
	19:00	7	B7s-B1	3	T	W	disp	
	19:15	1	B12	2B	T	W		
		2	B2B8	2A	T	W	loose	
		4	B7B8B10	3	T	W	loose	
		1	B1	2B	T	W		
	19:30	1	B1	2B	T	W		
		7	B7s-B1	2A	T	W	disp	
	19:45	1	B1	2B	F			
		7	B7s-B1	2A	T	W	disp	
	20:00	1	B1	2B	F			
		7	B7s-B1	2A	T	W	disp	
19-Jul	15:00	6	A46A32A37...	6	T	NW	disp	
	15:15	6	C5sA36s	5	F		disp	
	15:30	1		4	F			
		2		4	T	SW	loose	
	15:45	2		4	T	W	disp	
	16:00	9	C5sA36s	3	F		disp	
	16:15	9	C5sA36s	3	F		disp	
	16:30	3		X	F		disp	
		6		3	T	W	disp	
	16:45	8	C5sA36s	X	T	W	disp	
	17:00	9	C5sA36s	X	T	W	disp	
	17:15		glare					
	17:30		glare					charter vessels still in 2A and X
								charter vessels out of study area
20-Jul	14:45	3		2B	R	W	tight	
		3		X	T	W	tight	
	15:00	3		X	T	W	tight	
		3		X	T	W	tight	
		1	A27	X	T	W		
		4		3	T	W	tight	
	15:15	9	A36sC5s	6	B		disp	
		11	A8sA23sA25sA12s	X	T	W	disp	
	15:30	11	A8sA23sA25sA12s	west of study area				
		3	C5sA36s	5	F		tight	
		2	C5sA36s	2B	T	W	loose	
		4	C5sA36s	6	F		loose	

Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
	15:45	2	C5sA36s	5	T	W		
		7	C5sA36s	5	T	W	loose	
	16:00	4	C5sA36s	5	F		disp	
	16:15	4	C5sA36s	5	T	W	disp	
		2	C5sA36s	2B	T	NW	loose	
	16:30	5	C5sA36s	4	T	SW	loose	
		2	C5sA36s	4	F		tight	
	16:45	5	C5sA36s	2B	T	W	disp	
	17:00	4	C5sA36s	2B	T	NW	disp	
		2	A36A37	2B	F			
	17:15	6	C10C13C17C20A32A46	2B	T	E	loose	
		3	A36A37C5	out of study area				
	17:30	6	C10C13C17C20A32A46	2B	F		disp	
	17:45	3	A32...	2B	T	E	loose	
	18:00	A36s and C5s out of study area						
	18:30	10	A23sA12s	2B	R	E	loose	
		7	A8sA25s	X	R	E	tight	
	18:45	10	A23sA12s	2B	R	E	tight	
		7	A8sA25s	X	R	E	tight	
	19:00	3	A37(C5sA36s)	5	T	NW	disp	
		4	A23s	2B	R	E	tight	
		6	A12s	2B	R	E	tight	
		7	A8sA25	X	R	E	tight	
	19:15	10	A23sA12s	2B	R	E	tight	
		7	A8sA25s	X	R	E	tight	
		3	C5sA36s	6	F		disp	
		2	C5sA36s	6	T	W	loose	
	19:30	7	A8sA25s	3	R	E	tight	
		10	A23sA12s	2B	R	E	tight	
	19:45	4	A23s	2B	R	E	tight	
		6	A12s	5	R	E	tight	
		7	A8sA25s	3	R	E	tight	
	20:00	4	A23s	2B	R	E	tight	
		6	A12s	5	S	N	disp	surfing on wake of COL
		7	A8sA25s	4	R	E	tight	
21-Jul	13:00	10	A5A4A30A12R915R7R2		X	T	E	disp
		11		X	T	E	loose	
		7		X	T	E	loose	
		6		X	T	E	loose	
	13:15	16		2B	T	E	loose	
		7		X	T	E	loose	
		8		X	T	NE	disp	
	13:30	7		2A	T	W	disp	
		20		2B	T	E	disp	
	13:45	8		2A	T	NW	loose	
		33		2B	T	E	disp	
	14:00	7		2A	S		disp	one whale out of study area
		20		2B	T	E	disp	
	14:15	10		6	B			
		6		2C	T	E	disp	8 west of study area
		3		4	T	E		3 east of study area
		4		6	T	E	tight	
		4		6	T	E	tight	
	14:30	3		5	T	E	loose	
		2		2B	T	NE	loose	
		1		2B	T	E	tight	
		10		6	B		loose	
		1		2B	T	E		
	14:45	1		2B	T	S		
		20		6	B		loose	
	15:00	25		6	B		loose	
		3		5	T	E	tight	
	15:15	5		5	T	E		
		3		6	B			
		20		6	B			
	15:30	8		6	F			
		7		6	B			
		4		6	R			
		4		6	B			
	15:45	17		5	T	W	disp	
		4		5	R	W	tight	
	16:00	10		4	T	W	disp	
		8		5	T	W	loose	
		5		4	T	W	disp	
	16:15	2		3	F			
		4		3	T	W	disp	
		11		5	T	W	loose	
		3		2B	T	W	disp	
		5		2B	T	NW	disp	
	16:30	5		2B	T	W	disp	
		2		X	T	W	disp	
		8		3	T	W	disp	
		1		3	T	E		
		1		2B	F			
		6		4	R	W	tight	
		1		2B	R	NW	tight	
	16:45	6		2B	R	E	tight	
		7		2B	R	SE	tight	
		7		2	T	E		

			Pod IDs			disp.
10			A4s	2B	R	tight
5				4	R	tight
17:15	6			2B	R	tight
5				2B	R	tight
3			A4s	5	T	tight
7			A4s	4	T	disp
17:30	4			2B	T	loose
3				5	T	tight
4				5	T	tight
17:45	10		A4s	2B	T	loose
7				5	R	tight
3				2B	R	tight
1				6	T	
18:00	3			2B	R	tight
4				6	R	tight
6			A12s	2B	R	tight
18:15	9		A12s+3others	2B	R	tight
3				2C	R	tight
18:30	6		A12s	2B	R	tight
18:45	all whales out of study area					
17:45	5		A30s	X	T	disp
18:00	6		A30s	X	R	tight
18:15	5		A30s	X	T	loose
18:30	5		A30s	X	T	disp
18:45	5		A30s	X	T	disp
19:00	5		A30s	X	T	disp
19:15	5		A30s	X	T	disp
19:30	3		A30A50A54	X	F	tight
19:45	2		A38A6	2B	F	disp
19:45 all whales out of study area						
22-Jul	8:00-12:17 all zones obscured by fog					
12:45	6		A30s	6	R	w
13:00	6		A30s	6	B	
13:15	6		A30s	5	T	w
13:30	4		A30A50A54 and 1M	4	T	w
2			2M	5	T	w
13:45	6		A30s	4	T	w
14:00	4		3M and A54	3	T	w
14:15	5		A30s - A6	3	T	w
1			A6	X	T	w
14:30	6		A30s	X	T	w
14:45	5		A30s - A6	X	T	w
15:00	all whales west of study area					A6 out of study area
18:30	4		A34s and A33	X	T	loose
18:45	6		A12s	X	T	disp
19:00	6		A12s	X	T	disp
19:15	6		A12s	3	T	disp
19:30	6		A12s	3	T	disp
19:45	2		A33 and A12	3	T	loose
4			A31 and A34s	3	F	disp
20:00	6		A12s	4	F	disp
23-Jul	6:00	4		2B	R	sw
	16			X	T	w
8:15	12		R9R1R7R12A5A26	2A	R	w
8:30	11		A30s	X	R	sw
	12		R1R12R13R2R7A5A26	2A	T	NW
8:45	all whales out of study area					
14:00	2		A32A46	6	T	s
14:15	3		A32A37A46	5	T	sw
14:30	4		A36s	4	T	sw
14:45	2		A36A37	4	F	loose
2			A32A46	4	T	w
15:00	4		A36s	3	T	w
15:15	4		A36s	X	F	
15:30	4		A36s	X	T	w
15:45	4		A36s	X	T	w
16:00	4		A36s	X	T	w
16:15	4		A36s	X	T	w
16:30	4		A36s	X	T	w
16:45	A36s out of study area					
19:30	4		A36s	2A	T	SE
19:45	4		A36s	2A	T	E
20:00	4		A36s	lost		
16:00	5		B10B12B2	6	T	sw
16:15	7		C5s+	5	F	disp
2			B12+	5	T	loose
16:30	13		B7sC5s	5	T	w
16:45	13		B7sC5s	4	T	disp
17:00	13		B7sC5s	2B	T	NW
17:15	8		C5s B7sB8B10	2B	T	NW
17:30	8		C5s B7sB8B10	2A	T	NW
17:45	8		C5s B7sB8B10	lost		5 lost in zone 3
18:00	8		C5s B7sB8B10	lost		5 lost in zone 3
18:15	13		B7sC5s	2B	S	E
18:30	13		B7sC5s	2B	S	SE
18:45	13		B7sC5s	2B	R	SE
19:00	6		C5s B8	3	R	SE
7			B7s - B8	3	T	tight
19:15	6		C5s B8	4	R	SE
7			B7s - B8	3	T	loose
19:30	13		C5sB7s	4	T	E
19:45	13		C5sB7s	5	T	disp
20:00	13		C5sB7s	5	T	disp

## Appendix A - Whale Scan Data

Date	Time	No. KWS	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
24-Jul	8:00	3	B7B13B14	2B	R	E	tight	
		13	A4s B1B2B12	2A	R	E	tight	
	8:15	3	B7B13B14	2B	R	E	tight	
		10	A4s	2B	R	E	tight	
	8:30	3	B7B13B14	4	R	E	tight	
		10	A4s	2B	R	E	tight	
		1	B2	2A	T	W		
	8:45	10	A4s	2B	R	E	tight	
		3	B7B13B14	2B	T	W	loose	
		3	B1B2B12	2A	T	W	disp	
	9:00	10	A4s	2B	R	E	tight	
		4	B7B13B14B10	2B	R	E	tight	
		3	B1B2B12	2A	T	W	disp	
	9:15	10	A4s	2B	R	E	tight	
		4	B7B13B14B10	2B	R	E	tight	
		3	B1B2B12	2B	T	E	disp	
	9:30	10	A4s	5	R	SE	tight	
		4	B7B13B14B10	2B	R	E	tight	
		2	B1B12	2B	S	E	tight	
		2	B8B2	2A	T	E	disp	
	9:45	10	A4	6	B		loose	
		4	B7B13B14B10	2B	R	E	tight	
		2	B1B12	2B	S	E	tight	
		2	B8B2	2A	F	E	disp	
	10:00	10	A4	6	B		loose	
		4	B7B13B14B10	2B	R	E	tight	
		2	B1B12	2B	T	E	tight	
		1	B8	2A	F		disp	
		1	B2	2B	T	E	disp	
	10:15	3	A24	6	B		loose	
		7	A11s	6	T	E	loose	
		2	B1B12	2B	T	E	tight	
		1	B2	2B	T	E	disp	
		4	B7B13B14B14	2B	T	E	loose	
	10:30	3	B7B13B14	4	R	S	tight	
		1	B10	4	T	W	disp	
		9	A4s - 1	6	B		loose	
		1	one of A4s	6	T	W	disp	
	10:45	9	A4s	6	B		loose	
		1	A4s	6	T	W	disp	
		2	B1B12	2B	T	SE	tight	
		1	B8	2B	F		disp	
		1	B2	2B	T	E	disp	
		2	B7B14	3	R	W	tight	
		1	B10	4	F	W	disp	
	11:00	1	B8	3	T	W	disp	
		3	B7B13B14	3	T	W	tight	
		1	B10	4	T	W	disp	
		2	B1B12	2B	T	W	tight	
		10	A4s	5	T	W	loose	
	11:15	10	A4s	5	T	W	loose	
		1	B2	2B	T	W	disp	
		2	B1B12	2B	T	W	tight	
		1	B8	X	T	W	disp	
		3	B7B13B14	3	T	W	tight	
		1	B10	3	T	W	disp	
	11:30	3	A24s	2B	T	W	loose	
		1	B2	2B	T	W	disp	
		2	B1B12	2B	T	W	tight	
		4	B7B13B14B10	X	T	W	loose	
		7	A11s	2B	T	NW	loose	
		1	B8	X	T	W	disp	
	11:45	7	A11s	2B	T	NW	disp	
		5	B7B13B14B10B8	X	T	W	disp	
		1	B2	2A	T	W		
		2	B1B12	2A	T	W	disp	
	12:00	7	A11s	2B	T	NW	disp	
		5	B7B13B14B10B8	X	T	W	disp	
		2	B1B12	2A	T	W	tight	B2 lost
	12:15	5	B7B13B14B10B8	X	T	W	disp	
		2	B1B12	2A	T	W	tight	
		1	B2	2B	T	W		
	12:30	3	B7s	X	T	W	loose	B2 lost
	12:45	5	A8sA5	2B	T	W	tight	A26 lost
	13:00	6	B7s - 2	2A	R	E	loose	
	13:15	7	B7s - 1	2A	R	E	loose	
	13:30	1	1M from B7s	2A	T	E		other B7s out of study area
		1	A26	2A	T	W		
	13:45	all whales out of study area						
	16:45	whales in 2A but obscured by rain						
	17:45	6		2A	T	SE	loose	
		4		3	T	E	disp	
	18:00	5		3	T	E	disp	
		3		2A	T	E	disp	
		4		2A	T	SE	light	
		4		2A	T	E	light	
		1		2A	T	S		
	18:15	3		2A	T	E		
		1		4	T	E	disp	
		1		3	F			
		1		3	T	E		
		3		2B	T	E	disp	
		17		2A	T	E	disp	
	18:30	2		2B	T	E	loose	Zone 2C obscured by rain

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		2		5	T	E	loose	
		12		2B	T	E	disp	
		1		3	T	E		
		3		4	T	E	disp	
		2		2B	T	E		
18:45		5		2B	F		disp	
		2		5	T	E		
		2		2B	T	E	tight	
		1		2B	F			
		8		2B	T	E	loose	
19:00		1	A32	5	F			Zone 6 and 2C obscured by rain
		16		2B				
		3		2B	T	E	tight	
		5		2B	T	S	loose	
19:15 - 20:00 all zones obscured by rain								
25-Jul	13:15	5		3	T	E	disp	
		7		2B	T	E	disp	
		7	I15s	2B	T	SE	tight	
		1	A26	2B	T	E		
		1	A5	2B	T	E		
13:30		4		4	T	E	tight	
		4		4	T	SE	loose	
		8	I15s	2B	T	E	tight	
		4		2B	T	E	tight	
		1		2B	T	E		
		2		2B	T	E	tight	
		3		2B	T	E	disp	
		3		2B	T	E	loose	
		1	A5	2B	F			
13:45		9	I15s	2B	T	E	tight	
		3		2B	T	E	tight	
		3		2B	T	E	light	
		2		2B	T	E	tight	
		2	A26A5	2B	F		disp	
		2		2M	5	T	E	disp
14:00		9	I15s	2B	T	E	tight	
14:02 - 17:45 all zones obscured by fog								
17:45		28	A12sA4sI15s	3	T	W	disp	
18:00		7		3	T	NW	loose	
		21		X	T	NW	disp	
18:15		5	A12s	X	T	W	loose	
		13	A4sI15s	2A	T	NW	disp	
		9	A12sA24	X	T	NW	loose	
		13	A11I15s	2A	T	NW	disp	
		6	A12s	X	T	W	loose	
		7	A4I15s	2A	T	NW	disp	
		6	A12s	X	T	W	loose	
		6	A12s	X	T	W	loose	
26-Jul	8:30	7		2B	R	W	tight	
		1	A31	2B	T	NE		
		3		5	T	W	tight	
8:45		1		3	T	W		
		6		4	T	W	disp	
		7	A12sA8s	2B	R	W	tight	
		2		2B	F		disp	
		2		2B	T	NW	tight	
		3	A25s	4	T	W	tight	
9:00		4	I15s	2B	T	W	loose	
		1	A5	2B	T	W		
		7	A12sA8s	2B	T	W	loose	2 breaches, 3 fluke slaps by A31
		1		X	T	W		
		1		2B	T	W		
		3		2B	T	NW	tight	
		11		3	T	W	disp	
		7	I4+	2B	T	W	disp	
9:15		4		2A	T	W	tight	A5 and some I15s out of study area
		3	A12A31A33	2A	T	W	tight	
		7	I15s	2B	T	SW	loose	
		1		2B	T	W		
		3	A25s	2A	T	NW	tight	
		5		X	T	NW	disp	
		1		X	T	W		
		5		X	T	NW	loose	
		2		X	T	W	loose	
9:30		2		X	T	W	loose	
		1	M	2A	F			
		10		2A	T	NW	loose	
		2	2M	2A	T	NW	disp	
		3		2A	T	W	loose	
		1	M	2A	T	W		
		6	I15s	2A	T	NW	loose	
9:45		7		2A	T	NW	disp	
		3		2A	T	W	disp	
10:00 all whales out of study area								
13:00		2		X	T	E	tight	
		1	M	X	F	E		
13:15		8		2A	R	E	tight	
		2		2A	T	S	loose	
		3	A25s	X	F		tight	
13:30		3		X	F		loose	
		4		X	T	E	tight	
		3		X	T	E	loose	
		6		2A	R	E	tight	

## Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		6		2A	T	E	loose	
	13:45	3	A25s	3	F	E	loose	
		3		X	T	E	disp	
		2		2A	T	NE	loose	
		3		2A	F	E	loose	
		3		2A	T	E	loose	
		1		X	T	E		
	14:00	3		4	T	E	loose	
		3		3	T	E	loose	
		7	A5s	2A	T	E	disp	
		1	M	2A	T	E		
		1	F	2B	T	E		
		1	F	2B	T	E		
		3		3	T	E	loose	
		7		2B	T	E	disp	
		4		4	T	E	loose	
		1		3	T	E		
	14:15	1	M	2B	T	E		
		1	F	3	T	E		
		2	2M	2B	T	SE	disp	
		3		2B	T	E	tight	
		2		2B	T	E	loose	
		5		4	F			
		6		3	T	E	disp	
		2	A11A56	2B	T	E	tight	
		2		2A	T	E	loose	
		6	some l15s	2B	T	E	loose	
		2		2B	T	E	tight	
	14:30	5		4	T	E	disp	
		5		5	T	E	loose	
		1		2B	T	E		
		4		2B	T	E	tight	
		3		2B	T	E	disp	
	14:45	8		2A	T	E	disp	
		2		4	T	E	tight	
		2		2B	T	E	loose	
		5		6	B			
		7		2B	T	E	loose	
		2		5	T	E	loose	
	15:00	2		5	T	E	tight	
		5		5	T	E	loose	
		7		6	B			
		4		2A	T	E	tight	
		3		2B	T	E	disp	
	15:15	4		2B	F			
		13		6	B			
		6	A30s	2A	R		tight	
		1		2A	T	N		
	15:30	4		5	T	E	tight	
		6		2A	R	E	tight	
		1	M	2A	F			
		4		2B	T	E	tight	
		13		6	B			
		3		6	T	SE	tight	
		2		5	T	E	tight	
	15:45	20		6	B			
		1		4	T	E		
		4		4	T	E	tight	
		6		2B	R	E	tight	
		1		2B	T	E		
		3		5	T	E	loose	
	16:00	4		2B	T	E	tight	
		6		4	R	E	tight	
		20		6	B			
	16:15	6	A12s	4	R	E	tight	
		6	A30s	5	R	E	tight	
		20		6	B			
		1	A5	6	T	E		
	16:30	6	A30s	5	R	E		
		6	A12s	5	R	E	tight	
		23		6	B			
		1		6	T	E		
	16:45	6		5	R	E	tight	
		6		5	R	E	tight	
		23		6	B			
	17:00	6	A12s	5	R	E	tight	
		6	A30s	6	R	E	tight	
		23		6	B			
	17:15	8	A8sA5A26A31A33	6	T	W	disp	
		27		6	B			
	17:30	6	A8sA5A26	6	T	N	tight	
		29		6	B			
	17:45	1	F	5	T	W		
		2		6	F			
		6		2B	T	NW	tight	
		1		2B	T	N		
		1	M	2B	T	N		
		1		6	T	NW		
		3		2B	T	N	tight	
	18:00	4		5	T	W	tight	

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		6	A9sA8s	2B	R	E	tight	
		6	A12s	2B	T	W	disp	
		6	A30s	2B	R	E	tight	
		1	M	2B	T	W		
		3		2B	T	SW	tight	
	18:30	6		2B	R	W	tight	
		6		2B	R	W	tight	
		10		2B	T	W	loose	
		4		2B	T	W	disp	
	18:45	10		2B	T	W	disp	
		1	M	2B	F			
		4		4	T	W	tight	
		3		4	F			
		1	M	2B	T	W		
		1	M	2B	T	SW	tight	
	19:00	6		2B	R	W	tight	
		10		2A	T	W	disp	
		4		3	T	W	disp	
		7	A32+	4	T	W	loose	
		5	I15s	2B	T	W	loose	
	19:15	6		2A	T	SW	tight	
		1	M	X	F			
		4		3	T	W	loose	
		2	I4	2B	T	E	tight	
		2		2B	T	E	tight	
		6		2B	R	E	tight	
		2		2A	R	E	tight	
	19:30	6		2B	R	E	tight	
		4		3	T	E	loose	
		6	A30s	2B	R	E	tight	
		4		4	T	E	disp	
		4	I15s	2B	T	NW	loose	
	19:45	6		2B	T	W	loose	
		2		2B	T	W	tight	
		3		5	T	W	tight	
		4	I15s	2B	T	S	loose	
		3	A25s	4	T	E	tight	
		6	A8sA9s	2B	R	E	tight	
		4		2B	T	E	tight	
		4	A36s	4	T	E	loose	
	20:00	8	A4s	2B	T	W	loose	
		4		2B	T	E	tight	
		4		2B	T	E	tight	
		6	A30s	2B	T	W	tight	
		6	A8sA9s	2B	T	E	loose	
		3		4	T	E	tight	
27-Jul	9:30	6	A30s	2B	T	W	disp	
	9:45	6	A30s	2B	T	SW	disp	
	10:00	6	A30s	X	T	W	disp	
	10:15	5	A30s - A39	2A	R	NW	tight	
		1	A39	2A	T	NW		
	10:30	all whales out of study area						
	11:00	10	A4s	4	T	W	tight	
		5	C5s	4	T	W	tight	
	11:15	3	A8s-A28	2B	T	W	loose	
		5						
		10	A4s	3	T	W	disp	
	11:30	10	A4s	X	T	W	disp	3(A8s-A28) out of study area
		5	C5s	3	T	W	tight	
	11:45	3	A25A61A28	2B	F		disp	
		1	A27	2B	T	W		
		5	C5s	X	R	W	tight	
		10	A4s	X	T	W	loose	
	12:00	10	A4s	X	T	W	disp	
		5	C5s	2A	T	W	loose	
		1	A27	2B	T	W		
	12:15	3	A43A23A60	2B	T	W	loose	
		1	A27	2B	T	W		
		10	A4s	X	T	W	disp	lead whale at Kaikash Creek
		5	C5s	2A	R	W	tight	
	12:30	1	A27	2B	T	W		A43A23A60 out of study area
		5	C5s	2A	R	W	tight	A4s out of study area
	12:45	1	A27	2A	T	NW		C5s out of study area
	13:00	all whales out of study area						
	14:30	2	A5A26	2B	F		loose	
	14:45	9		2A	R	E	tight	
		3		2A	T	E	tight	
		1		2A	T	S		
		2	A526	2B	T	W	disp	
		2		2A	T	E	loose	
		3	A23s	X	T	E	disp	
		1	A27	2A	T	E		
	15:00	6		2A	T	SE	tight	
		3		2A	T	SE	tight	
		2	A5A26	2B	T	SW	disp	
		2	A25A61	2A	T	SE	tight	
		4		X	T	E	disp	
		3		2A	T	SE	loose	
	15:15	2	A5A26	4	F			
		1	M	2B	T	E		
		1		3	T	E		
		3		X	T	E	tight	

## Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		4		X	T	E	disp	
		2		X	T	E	disp	
		2		X	T	E	tight	
		9		2B	T	E	disp	
15:30	13	13		3	T	E	disp	
		4		2B	T	E	disp	
		3		X	T	E	loose	
15:45	2	A5A26		4	F		disp	
		2	A5A26	4	F		disp	
		19		3	T	E	disp	
16:00	1	M		X	F			
		9	A23s+	4	T	E	disp	
		10		3	T	E	disp	
		2	A5A26	4	F			
		3		X	T	NE	loose	
16:15	3	A12s-A12		X	T	E	loose	
		1	M	3	T	SW	loose	
		4	A23s	2B	T	NE	tight	
		4		4	T	NE	tight	
		3		4	T	NE	tight	
		3		4	R	E	tight	
		1	M	4	T	NW		
		3	A12sA12	X	F			
		1	F	3	T	NW		
		1	M	2A	F			
		1	M	6	T	E		
		3	F	2A	T	W	tight	
16:30	2	A31A12		2A	T	W	loose	
		3	3F	2A	T	W	tight	
		3		4	T	NW	tight	
		4		2B	T	NE	tight	
		1	M	6	T	E		
		4		5	T	NW	tight	
		3		X	T	W	loose	
16:45	5	A12s		2A	T	W	disp	
		3		2B	T	NW	tight	
		4		2B	T	W	tight	
		4		2B	T	NW	tight	
		1	M	2B	T	W		
17:00	12	A25sA9sA11s		2B	T	W	disp	
		1	M	2B	T	W		
		6	A12s	2A	T	NW	disp	
		1	A5	2B	T	W		
17:15	1	A5		2B	T	W		
		3	A31+	2A	T	W		
17:30	all whales out of study area							at least 10 whales out of study area
19:30	6			2A	T	E	disp	
19:45	1			2A	R	E		
		4		2A	T	E	disp	
		5		2A	T	E	disp	
29-Jul	8:00	2	A6A39	5	T	W	disp	
	8:15	6	A30s	4	T	W	disp	
	8:30	5	A6A30A39A50A54	4	T	W	disp	
		1	A38	lost				
	8:45	5	A6A30A39A50A54	3	T	W	disp	
		1	A38	lost				
	9:00	5	A6A30A39A50A54	X	T	W	disp	
		1	A38	lost				
	9:15	4	A30A54A39+M	X	T	W	disp	
	9:30	5	A30s - M	X	T	W	disp	
	9:45	5	A30s - M	X	T	W	disp	A6 + A50 out of study area
	10:00	all whales out of study area						
	15:00	2	A36s	6	B			
	15:15		A36s	lost				
	15:30	3	A34A62A55	3	T	E	loose	
		1	1M from A12	4	T	E		
	15:45	3	A34A62A55	5	T	E	tight	
		1	M	5	T	E		
	16:00	4	A12A34A55A62	5	T	E	loose	
		1	M	6	R	S		
	16:15	6	A12s	6	B			
	16:30	3	small fins	6	T	W	tight	
		3	2MJ	6	T	NW	tight	
	16:45	2	2M	5	T	W	tight	
	17:00	2	2M	5	T	W	loose	
		3	A34A55A62	5	T	W	tight	
	17:15	2	2M	4	T	W	disp	
		3	A34A55A62	4	T	W	loose	
	17:30	2	2M	4	T	W	disp	
	17:45	5	A12s - F	3	T	W	disp	
	18:00	5	A12s - F	3	T	W	disp	
	18:15	6	A12s	X	T	W	disp	
	18:30	6	A12s	X	T	W	disp	
	18:45	6	A12s	X	T	W	disp	
	19:00	4	A12s	X	T	W	loose	
		2		lost in glare				
	19:15	All whales west of study area						
30-Jul	8:00	1	M	3	T	W		
		3	2FJ	3	T	W	loose	
		1	M	3	T	W		
	8:15	1	M	X	T	W		

		2FJ	3	T	W	light
	1	M	3	T	W	
8:30	1	A39	X	T	W	
	5	A6A30A38A50A54	X	T	W	loose
8:45	5	A6A30A39A50A54	X	T	W	disp
9:00	6	A30s	all out of study area			
14:00	3	M F J	2B	T	W	loose
	4	A24A45A64 + J	2B	T	W	loose
14:15	4	A24A45A64 + J	2B	T	W	loose
	3		2B	T	W	loose
	3	A35A52A59	2B	T	W	loose
14:30	3	A11A56A13	2B	T	SW	loose
14:45	2	A24 + J	3	F		light
	3	A11A13A56	3	F		disp
	3	A5s	2B	T	W	loose
	2	2M	X	T	E	light
15:00	3	A11A13A56	X	T	W	loose
	3		2B	T	W	light
	1	M	X	T	E	loose
	2		X	T	E	light
	1		X	T	E	light
15:15	3	A11A13A56	X	T	E	loose
	3	FJC	X	T	E	light
	3		2B	T	SE	light
	4	FJC	X	T	E	loose
15:30	4		3	T	E	light
	2	A25A61	X	T	E	light
	3		X	T	E	light
	1	M	X	T	E	
	1	M	2B	T	E	
	4		2B	T	E	disp
15:45	1	M	3	F		
	2		3	T	E	disp
	3		3	T	E	loose
	5		2B	T	E	loose
	3		3	T	E	loose
	1		2B	T	E	
	3		2B	T	SE	light
16:00	1	M	2B	R	milling	tight
	3	A24s	2B	R	milling	tight
	3		4	R	milling	tight
	3		2B	T	E	light
16:15	3	A25s	3	T	E	loose
	3		4	R	E	light
	2		4	T	E	loose
	3		3	T	E	light
	1	M	3	R	E	light
	4	A27s	4	T	E	loose
16:30	4	A23s	4	R	E	light
	1	A26	4	R	E	
	3	A25s	4	T	E	light
	3	A24s	5	T	E	light
	3		5	T	E	light
	1	M	5	T	E	
	2		5	T	E	light
16:45	1	A5	2B	T	E	
	3		5	T	NE	loose
	1	M	5	T	E	
	3	A25s	5	R	E	light
	4	A23s	5	T	E	light
17:00	6	A30s	2B	R	E	light
	1	A5	2B	T	E	
	4	A23s	5	T	SE	light
	1	A26	5	T	SE	light
	4		6	T	E	light
	3	A25s	5	T	E	light
	3		6	T	E	light
	3		6	B		
17:15	6	A30s	2B	R	E	light
	3		6	T	E	light
	12	A11A56A13A26A23s	6	B		
	1	A5	2B	T	E	
17:30	6	A30s	2B	R	E	light
	1	A33	2B	T	E	
	4	A12s	2B	T	E	light
	1	A31	2B	T	E	
	15	A25s A23s +	6	B		
17:45	6	A30s	2B	R	E	light
	15	A25sA23s+	6	B		could be 7 more (A4s)
	6	A12s	2B	T	E	loose
18:00	6	A30s	5	R	E	light
	6	A12s	2B	T	E	loose
	22	A5sA4s - A5	6	B		could be 7 more(A4s)
	1	A5	lost			
18:15	6	A30s	6	R	E	light
	2		5	T	SE	light
	1		5	T	E	
	3	A12s	5	T	E	light
	4		6	B		at least
18:30	6	A30s	6	R	S	tight
	1		6	F		
	2		6	T	W	loose
	3	A12s	5	T	SE	

## Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		1	M	5	F			
		4		6	B			
		2		6	T	W	loose	at least
		6	A30s	5	T	W	tight	
		1		5	T	W		
		7		5	B			
		4		5	T	W	loose	
		4		5	T	W	loose	
		3		5	T	W	tight	
		2	A12A31	4	T	W	tight	
		2		4	T	W	tight	
		1	M	4	T	W		
		2	2F	5	T	W	tight	
		3		4	T	W	tight	
		3	M2F	5	T	W	loose	
		4		4	T	W	tight	
		2		4	T	W	loose	
		3	3M	5	T	W	loose	
		5		5	T	W	tight	
		1	M	5	T	W		
		1	M	2B	T	W		
		19:15	1	M	3	T	W	
		3		4	T	W	tight	
		4		4	T	SW	tight	
		3		4	R	E	tight	
		7		4	T	W	loose	
		5	A30s - 1	4	R	E	tight	
		1	M	2B	T	W		
		19:30	1	A5	2B	T	W	
		6	A30s	5	R	E	tight	
		6	A12s	2B	T	W	tight	
		4	A23s	3	T	W	tight	
		3	A25s	3	T	W	tight	
		10	A11sA24s	3	T	W	loose	
		4	A8s	3	T	W	tight	
		19:45	1	A5	2B	T	W	
		4	A23s	2B	T	W	tight	
		3	A25s	2B	T	W	tight	
		4	A8s	2B	T	W	tight	
		6	A12s	2B	T	W	tight	
		10	A11sA24s	X	T	W	tight	
		6	A30s	3	T	W	disp	
		20:00	6	A30s	X	T	W	tight
		1	A5	2B	T	W		
		4	A23s	X	T	W	tight	
		3	A25s	X	T	W	tight	
		4	A8s	X	T	W	tight	
		6	A12s	X	T	W	tight	
		10	A11sA24s	X	T	W	tight	
31-Jul	8:00	1	M	5	T	W		
		6	FJ	4	T	W	loose	
		3	FJC	4	T	W	loose	
		1	A32	4	T	W		
		3	FJC	4	T	W	tight	
		3	FJC	4	T	W	tight	
		2	FJ	4	T	W	tight	
		2	FC	4	T	W	tight	
		8:15	4	2FMJ	4	T	W	loose
		3	2MJ	4	T	W	loose	
		1	M	5	T	W		
		2	FJ	4	R	W	tight	
		1	M	4	T	W		
		2	FJ	4	F			
		3	FJC	3	T	W	tight	
		3	FJC	3	T	W	tight	
		1	M	3	T	W		
		8:30	1	J	4	T	W	
		2	FC	4	T	W	tight	
		1	M	4	T	W		
		4	A32FJC	X	T	W	loose	
		3	M+2	5	T	W	loose	
		2	MJ	4	T	W	tight	
		3	FJC	2B	T	W	loose	
		1	F	3	R	W		
		1	M	3	T	W		
		8:45	2	FJ	3	T	W	tight
		1	M	4	F			
		3	M+2small	4	T	W	tight	
		4	FMJC	X	T	W	loose	
		5	2M2F+	3	T	W	loose	
		9:00	3	M2J	3	T	W	loose
		9:15	3	M2J	3	T	W	tight
		9:30 - 11:15 all zones obscured by fog						
		11:15	1	M	5	T	E	
			1	A39	2B	T	E	
		11:30	1		5	T	E	
			5		6	R	E	tight
		11:45	4		6	R	E	tight
			2	MJ	6	T	E	loose
		12:00	2	MJ	6	T	NE	loose
			4		2C	R	E	tight
		12:15	2	FC	2B	T	SE	tight
			2	14141	2R	T	E	tight

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		1	M	2B	T	E		
		2	FJ	2B	T	E	tight	
		4	FJC+A32	2B	T	E	loose	
		5		2C	R	E	tight	
		3		2B	T	E	loose	
		1	A31	2B	T	E		
12:30		3	FJC	2B	T	E	loose	
		6	east of study area					
		2	I4 + C	2B	T	E	tight	
		3	M 2F	2B	T	E	loose	
		3	FJC	2B	T	E	tight	
		5	A30A50A54A37I41	2B	T	E	loose	
12:45		1	M	2B	T	E		
		2	FC	2B	T	W	tight	
		3	FJC	2B	T	E	tight	
		2	FM	2B	T	E	loose	
		1	A32	2B	T	E		
		3	FJM	2B	T	E	loose	
		1	F	2B	T	E		
		1	A31	2B	T	W		
13:00		1	M	2B	T	E		
		3		2B	T	W		
		2	FM	2B	T	W		
		1	M	2B	T	W		
		7	all small fins	2B	T	W		
		2		2B	F			
13:15		2	A12A33	2B	T	W	tight	
		1	A31	2B	T	W		
		2	FC	2B	F			
		2	FM	2B	T	W	tight	
		4	all small fins	X	T	W	tight	
		3	all small fins	2B	S	W	loose	
		5	M + 4small	2B	T	W	loose	
13:30		3		2B	F	W	loose	
		2	FC	2B	T	W	tight	
		4	2M+	2B	T	W	loose	
		5	2M+	2B	T	W	loose	
13:45		1	M	2B	T	W		
		7		2B	T	W	loose	
		6	out of study area					
	15:45	4		6	B			
	16:00	3	2M+	6	T	E	tight	
		12		2A	R	E	tight	
		3		6	B			
16:15		3		2A	R	E	tight	
		11		2A	R	E	tight	
		3		2A	R	E	tight	
		5		6	T	E	disp	
	16:30	10		2A	R	E	tight	
		1	M	6	T	E		
	16:45	5	A36sI15s	2A	R		loose	
		9	A36sI15s	2A	R		loose	
		6	east of study area					
	17:00	16	A36sI15s	X	R		loose	
	17:15	16	A36sI15s	2A	R	W	tight	
	17:30	16	A36sI15s	2A	R	NW	loose	
	17:45	16	A36sI15s	2A	R	NE	loose	
	18:00	16	A36sI15s	2A	R	E	tight	
	18:15	16	A36sI15s	2A	R	E	tight	
	18:30	16	A36sI15s	2B	R	E	tight	
	18:45		no whales visible. Zones X,2A,3 and part of 2B obscured by fog.					
1-Aug	8:00 - 9:00 all zones obscured by fog							
	9:00	2	A36A37	2B	T	E	loose	
		1	M	2B	T	NW		
	9:15	3	FJC	5	R	E	tight	
		2	A36A37	2B	R	E	loose	
		3		6	B			
	9:30	1	M	6	T	E		
		2	A36A37	2B	R	E	loose	
		2	M	4	F		loose	
		4		2B	R		loose	
		2		6	B			
	9:45	1	A32	4	F			
		1	A46	4	T	W		
		2		6	B			
		1	M	6	F			
		3	FJC	5	R	W	tight	
		1	J	5	F			
		1	A37	2B	R	SE		
	10:00	4		6	B			
		1		2B	T	W		
		2	A32A46	4	F		disp	
		4		2B	R	W	tight	
		2	A36A37	2B	F		loose	
	10:15	2	A32A46	2B	F		disp	
		3		2B	T	W	tight	
		4		6	B			
		1		5	T	W		
		3	F A32 A46	2A	T	W	loose	
		3	FJC	2B	T	W	tight	
		3		2B	T	NW	disp	
	10:45	2	A32A46	2A	F			

Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		1	A46	2B	T	W		
		3	FJC	2A	T	W	tight	
		3		2B	T	W	loose	
		1		5	F			
11:00	3	3	FJC	2A	T	W	tight	
		2	A32+F	2A	F			
		3		2B	T	NW	loose	
11:15	3	1	M	2B	T	W		
		3	FJC	2A	T	W	tight	
		3	141 F J	2B	T	W	tight	
11:30	2	2	A32 F	out of study area				
		3		2B	T	W	loose	
		3		3	T	NW	tight	
11:45	2	2		3	F		tight	
		3		3	F		disp	
		3		3	T	W	tight	
12:00	1	1	A6	2B	T	W		
		3		X	T	W	tight	
12:15	1	1	A6	2B	T	W		
		3		X	T	W	tight	
		1						
12:30	1	1	A39	2B	T	W		
		1	A6	2B	T	W		
		1	A39	2B	T	W		
12:45	3	3	A30A50A54	2B	F		loose	
		1	A38	2B	T	S		
		2	A6A39	2B	F			
13:00	2	2	A6A39	2B	T	E	dispersed	
		1	A38	2B	T	S		
		3	A30A50A54	2B	T	S	tight	
13:15	3	3	A30A50A54	3	T	W		
		2	A6A39	2A	T	W	disp.	
		1	A38	3	T	W		
13:30	2	2	A6A39	X	T	W	disp	
		4	A30A50A54A38	X	T	W	disp	
13:45	3	3	A30A50A54	X	T	W		
		2	A39A6	X	T	W	disp	
14:00	2	2	A39A6	X	T	W	disp	
		3	A30A50A54	X	T	W	loose	
		1	A38	X	T	W		
14:15	1	1	A38	X	T	W		
		2	A6	X	F		disp	
		3	A30A50A54	X	T	W	loose	
14:30	5	5	A30s-A39	X	T	W	loose	
		1						
14:45								A39 out of study area
17:15	6	6		X	T	E	disp	
17:30	6			X	T	E	disp	
17:45	8			X	T	E	loose	
		4		X	T	E	loose	
18:00	1			2A	T	E		
		4	M	3	T	E	loose	
		1		X	F			
		9		X	F		tight	
18:15	6	6	A30s	X	T	W	tight	
		8		3	F		disp	
		1		F			disp	
18:30	3	3	M2F	2B	F			
		5	M	3	T	E	loose	
		6	A30s	X	T	E	disp	
		2		3	F		loose	
18:45	6	6	A30s	X	F		disp	
		7	M	4	T	E	loose	
		1	M	2B	R	E		
		2	2M	2B	R	E	tight	
19:00	2	2	A36A37	3	T	W	tight	
		5	A32	5	F		disp	
		2		4	R	E	tight	
		3		2B	T	SE	disp	
		2	A36A37	2B	T	E	tight	
		6	A30s	lost				
19:15	2	2	A36A37	2B	T	E	tight	
		2	A46	2B	R	E	tight	
		8	A3214s	5	T	E	disp	
		3	I41	lost				
19:30	4	4	A32	6	T	E	loose	
		2	A36A37	2B	T	E	tight	
		2	FC	5	T	NE	tight	
		4		5	T	E	tight	
		2		5	T	E	tight	
		2		2B	T	E	tight	
19:45	2	2		6	T	SE	tight	
		4		6	T	SE	tight	
		2	A32	6	T	NE	tight	
		3	FJC	6	T	SE	tight	
		4		6	T	W	tight	
20:00	5	5	A32	6	T	E	disp	
		3		6	T	E	tight	
		4		6	B			
		2	M	6	T	E	loose	
2-Aug	8:00	16	A36s,115s	2A	R	E	tight	
	8:15	16	A36s,115s	2A	R	E	tight	

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
	8:30	16	A36s,I15s	2A	R	E	tight	
		1	A36s,I15s	6	B			
	8:45	1	A36s,I15s	6	T	W		
		16	A36s,I15s	2A	R	E	tight	
	9:00	16	A36s,I15s	2A	R	E	tight	
		1	A36s,I15s	6	T	W		
	9:15	1	A36s,I15s	5	T	W		
		16	A36s,I15s	2A	R	E	tight	
	9:30	1	A36s,I15s	5	T	NW		
		16	A36s,I15s	2B	R	E	tight	
	9:45	16	A36s,I15s	2B	R	SE	tight	
		1	A26	2B	T	W		
		1	A5	4	T	W		
	10:00	1	A5	3	T	W		
		1	A26	2B	T	W		
		16	A36s,I15s	2B	R	E	tight	
	10:15	1	A5	X	T	W		
		1	A26	2B	R	W	(stationary)	
		16	A36s,I15s	2B	S		tight	
	10:30	16	A36s,I15s	2B	R	S		
		1	A5	X	T	W		
		1	A26	2B	R	W	(stationary)	
	10:45	16	A36s,I15s	2A	S		loose	
		1	A5	X	T	W		
		1	A26	out of study area				
	11:00	17	A36s,I15s,A5	X	T	W	disp	
		3		2A	T	N	disp	all others out of study area
	11:15	all whales out of study area						
	14:45	2		X	T	E	disp	
	15:00	3		X	T	E	loose	
		6	A36s	X	B			
		3		2B	T	E	tight	1st beach east of Kaikash
	15:15	3		X	T	E	disp	
		6		X	F		loose	
		3		X	T	E	tight	
		3		X	T	E	loose	
	15:30	3		X	T	E	disp	
		2	A32	X	T	NW	loose	
		3		2B	T	E	tight	
	15:45	3		3	T	E	tight	
		3		3	T	E	loose	
		3		2B	R	E	tight	
		4		X	T	E	loose	
	16:00	3		2B	T	E	loose	
		3	A32	3	T	E	loose	
		3		3	F		loose	
		6	I4	3	F		disp	
	16:15	6		3	T	E	disp	
		3	A36A37A46	2B	T	NW		
		1	A32	4	T	SE	loose	
		2		4	T	E	tight	
		3		4	T	E	tight	
	16:30	3	A36A37A46	2B	T	E	tight	
		1	A32	4	T	E		
		2		4	T	E	tight	
		2		4	T	E	tight	
		3		4	T	E	tight	
		3	I41	4	T	E	loose	
	16:45	3	A36A46A37	2B	T	E	loose	
		3		4	T	E	loose	
		1	A32	5	T	E		
		2		5	T	E	tight	
		2		5	T	E	tight	
		3		5	T	E	tight	
	17:00	2		5	T	E	loose	
		1		5	T	E		
		1	A32	5	T	E		
		3		5	T	E	disp	
		3	A36A46A37	2B	T	E	loose	
	17:15	3		6	T	E	loose	
		4		6	B			
		3	out of study area					
		3		6	B			
	17:30	5		6	B			
		1		6	T	E		
		3	A32	2C	T	E	loose	
	17:45	1		2C	F			
		5		6	F		loose	
		3		2C	T	E	tight	
	18:00	4		2C	R	E	loose	
		0	A36s,I15s					
	18:15	4		2C				obscured by rain
	18:30	0	A36s,I15s	east of study area				
3-Aug	11:30	5		2A	T	E	loose	
		7		2A	T	E	tight	
		2		2A	T	E	tight	
		6		2A	T	E	tight	
		4	A36s	2A	T	E	loose	
	11:45	8		2A	T	E	loose	
		7	A37	2A	T	SE	loose	
		1		2B	T	E		
		7		2A	T	E	tight	
	12:00	6		2A	T	E	tight	

Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		2		2A	T	E	disp	
		1		2B	T	E		
		8	A32	2B	T	SE	loose	
12:15		15		2B	T	E	disp	
		6	A32	4	T	SE	loose	
12:30		4	A32	4	T	E	tight	
		3		3	T	E	disp	
		4		2B	T	SE	tight	
		4		2B	T	SE	tight	
		4		2B	T	SE	disp	
12:45		4		2B	T	SE	disp	
		3		2B	T	W	light	
		1		2B	T	W		
		2		2B	T	W	light	
		5	A32	5	T	NE	loose	
		3		2B	F			
		3		2B	T	E	loose	
13:00		3		2B	F	E	disp	
		5		5	T	E	disp	
		5		2B	F	E	disp	
		5		2B	F	E	disp	
13:15		2		2B	F	E	disp	
		8		2B	T	E	disp	
		7		5	T	SE	disp	
13:30		5	A32	6	T	E	disp	
		2		5	T	E	loose	
		3		2B	T	SE	tight	
		2		2B	T	SE	tight	
		2		2B	T	SE	light	
		3		5	T	E	loose	
14:00		6		2C	T	E	disp	
		5		6	B			
		3		5	T	SE	disp	
		6		2B	T	E	disp	
14:30		6	A32	2C	T	W	disp	
		1		5	T	W	disp	
		3		5	T	E	disp	
		8		6	B			
		3	A23A43A60	X	T	E	tight	
		1	A27	X	T	E		
15:00		3		6	T	W	tight	
		1		6	T	W	tight	
		3		2B	T	W	disp	
		9		3	T	SE	disp	
15:30		9		5	T	E	tight	
		2		2B	T	E	disp	
		4		5	T	E	tight	
		2		2B	T	SE	tight	
		2		4	R	E	tight	
16:00		2		2B	T	E	disp	
		3		2B	T	NW	disp	
		2	A27	5	T	E	tight	
		6		5	T	E	loose	
		2		2B	T	W	disp	
16:30		5	A30s	3	R	E	tight	
		1	A30s	3	T	W		
		2	A5 A26	lost				
		5		2B	T	W	loose	
		4		2B	T	W	disp	
		1		2B	T	W		
17:00		9		X	T	NW	tight	
		1	A5	4	T	E		
		4		2B	T	W	tight	
		1		2B	R	E		
17:30		8	A5 A26 A30s	2B	F		disp	
		2		2B	T	W	disp	
		4		2B	F		loose	
18:00		9		2B	T	SE	loose	
		8		2B	R	E	tight	
		4	A36s	2B	R	E	tight	
		3		3	T	NW	tight	
		2		3	T	E	tight	
18:30		3		3	T	W	tight	
		2		3	T	E	tight	
		35	A11sA23sA24sA8sA12s	4	lost			
19:00		3		5	T	E	tight	
		26	I15sA4s	5	T	E	loose	
19:30		6	A30s	6	R	W	tight	
		3		6	T	E	loose	
		4		6	T	W	tight	
		25		6	B			
20:00		3		5	T	W	loose	
		6		5	B			
		25		6	B			
4-Aug	8:00	1	A6	5	R	W		
		2	A30 A54	5	F		tight	
		1	A50	5	T	SE		
		1	A38	5	R	SE		
		1	A39	2B	F			
	8:15	1	A39	2B	R	NE		
		1	A50	5	T	SE		
		1	A38	6	T	E		
		2	A30 A54	5	F		tight	

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		1	A6	5	R	W		
	6:30	3	A30 A50 A54	6	B			
		1	A6	4	R	W		
		1	A39	2B	R	SW		
		1	A38	5	R	SW		
	8:45	3	A30 A50 A54	6	B			
		1	A6	4	R	SE		
		1	A38	5	T	E		
		1	A39	6	T	SE		
	9:00	1	A39	6	R	E		
		1	A6	5	T	E		
		4	A30 A38 A50 A54	6	B			
	9:15	1	A6	6	R	E		
		2	A38 A39	6	R	W		
		3	A30 A50 A54	6	B			
	9:30	1		5	T	W		
		3	A30 A50 A54	6	B			
		2		6	T	W	disp	
	9:45	6	A30s	6	T	NW	disp	
	10:00	6	A30s	2B	T	W	disp	
	10:15	6	A30s	2B	T	W	disp	
	10:30	3	A6 A38 A39	2B	T	W	disp	
	10:45	6	A30s	2B	T	W	disp	
	11:00	3	A30 A50 A54	2B	T	W	tight	
		3	A6 A38 A39	2B	T	W	disp	
	11:15	2	A6 A38	2B	T	W	disp	
	11:30	3	A50 A54 A30	2B	T	SW	tight	
		1		2B	R	E		
		1		2B	F			
	11:45	3	A30 A50 A54	2B	T	S	loose	
		3	A6 A38 A39	2B	T	SE	disp	
	12:00	3	A30 A50 A54	3	T	SE	loose	
		1	A38	3	T	SE		
		2	A6 A39	X	T	E	disp	
	12:15	2	A6 A39	3	R	E	loose	
		4	A6 A30 A50 A54	3	F		loose	
	12:30	4	A38 A30 A50 A54	4	T	E		
		1	A39	2B	T	NE		
		1	A6	4	T	E		
	12:45	3	A30 A50 A54	5	T	E	tight	
		1	A6	4	T	E		
		1	A38	5	T	E		
		1	A39	2B	T	W		
	13:00	2	A6 A38	4	T	W	disp	
		1	A39	2B	T	W		
		3	A30 A50 A54	4	T	W	loose	
	13:15	1	A6	2B	T	W		
		1	A39	2B	T	W		
		4	A38 A30 A50 A54	4	T	SW	disp	
	13:30	1	A6	2B	T	W		
		4	A38 A30 A50 A54	4	T	NW	disp	
		1	A39	2B	F			
	13:45	1	A39	2B	F			
		3	A30 A50 A54	2B	T	NW	tight	
		1	A38	2B	T	NW		
	14:30	1		2B	T	W		
		1		2B	F			
	14:45	3	A6 A38 A39	2B	F		disp	
		3	A30 A50 A54	2B	R	W	tight	
	14:30	4	A30 A50 A54	X	R	W	loose	
		1		X	R	E		
	14:45	4	A30 A50 A54	X	R	W	loose	
		1		X	R	E		
	15:00	4	A30 A50 A54	X	T	W	disp	
	15:15	4	A30 A50 A54	X	T	W	loose	
	15:30	4	A30 A50 A54	west of study area				
	19:30	6	A30s	2A	R	E	tight	
	19:45	6	A30s	2A	R	E	tight	
	19:47 - 20:00	zone 2A obscured by fog						
5-Aug	10:30	6	A30s	2A	T	SE	disp	
	10:45	3	A6 A38 A39	2A	T	E	disp	
		3	A30 A50 A54	X	T	E	tight	
	11:00	3	A30 A50 A54	X	T	E	tight	
		3	A6 A38 A39	2B	T	E	disp	
	11:15	4	A38 A30 A50 A54	3	T	E	disp	
		2	A6 A38	2B	T	E	disp	
	11:30	2	A6 A38	2B	F		disp	
		1	A39	4	F			
		3	A30 A50 A54	3	F			
	11:45	5	A6 A30 A39 A50 A54	4	T	E	disp	
		1	A38	2B	T	W		
	12:00	5	A6 A30 A39 A50 A54	4	F			
		1	A38	2B	T	W		
	12:15	5	A6 A30 A39 A50 A54	2B	T	W	tight	
		1	A38	2B	T	W		
	12:30	1	A39	3	T	W		
		4	A6 A30 A50 A54	2B	T	W	disp	
	12:45	3	A30 A50 A54	2B	R	E	tight	
		1	A39	2B	T	N		
		1	A6	2B	T	W		
	13:00	2	A6 A50	2A	T	W	tight	
		1	A39	X	T	W		
		2	A30 A54	X	T	W	tight	

## Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
	13:15	1	A39	X	T	W		
		2	A6 A50	2A	T	W	disp	
	13:30	2	A30 A54	2A	T	N	tight	
		1	A6	2A	T	N		
	13:45	2	A38 A39	2A	T	E	disp	
	14:00	4	A6 A30 A50 A54	2A	R	E	tight	others out of study area
		2	A38 A39	2A	F		disp	
	14:45	6	A30s	2B	T	E	disp	
	15:00	3	A30 A50 A54	2B	T	E	tight	
		1	A39	3	T	E		
		1	A6	2B	F			
		1	A38	2B	T	E		
	15:15	1	A6	2B	T	E		others out of sight
		1	A39	2B	T	NE		
		1	A38	2B	T	NE		
	15:30	3	A30 A50 A54	2B	T	SE	tight	
		1	A39	5	T	E		
		1	A6	2B	T	SE		
		1	A38	2B	T	E		
	15:45	5	A30 A50 A54 A39 A6	2B	T	SE	tight	
		1	A38	5	T	E		
	16:00	6	A30s	6	T	E	loose	
	16:15	1	A38	6	T	E		
		1	A39	6	B			
		4	A6 A30 A50 A54	6	T	NE	loose	
	16:30	2	A30s	6	T	E	disp	
		4	A30 A50 A54	6	B			
	16:45	1	A6	6	T	SE		
		1	A38	6	T	W		
		4	A30 A50 A54 A39	6	B			
	17:00	6	A30s	6	T	W	disp	
	17:15	6	A30s	5	T	W	disp	
	17:30	4	A6 A30 A50 A54	5	T	W	tight	
		1	A38	4	T	W		
		1	A39	2B	T	W		
	17:45	5	A6 A30 A38 A50 A54	4	T	SW	disp	
		1	A39	2B	T	W		
	18:00	1	A38	3	T	W		
		1	A39	2B	T	W		
		4	A6 A30 A50 A54	2B	T	W	tight	
	18:15	1	A38	X	T	W		
		4	A6 A30 A50 A54	X	T	W	tight	
		1	A39	2B	T	W		
	18:30	1	A39	2A	T	W		
		5	A6 A30 A38 A50 A54	X	T	W	tight	
	18:45	1	A39	2A	R	W		
		5	A6 A30 A38 A50 A54	X	R	W	tight	
	19:00	5	A6 A30 A38 A50 A54	X	T	E	disp	
		1	A39	2A	F			
	19:15	1	A39	2B	T	E		
		5	A6 A30 A38 A50 A54	X	F			
	19:30	1	A39	2B	T	S		
		5	A6 A30 A38 A50 A54	2B	F			
	19:45	6	A30s	2B	T	W	tight	
	20:00	6	A30s	2B	R	E	tight	
6-Aug	10:15	8	A11s A30s	2B	T	E	tight	
		1	A39	2B	T	E		
	10:30	10	A30s A11s A24s	2B	S	E	tight	
		3	A6 A39 A13	2B	T	E	disp	
	10:45	2	A39 A13	4	T	E	tight	
		8		4	T	E	disp	
	11:00	8		5	T	E	tight	
		3		5	T	E	disp	
		3		5	T	E	disp	
	11:15	15	A11s A24s A30s	5	T	E	disp	A38 out of study area
	11:30	16	A11s A24s A30s	6	B			
	11:45	16	A11s A24s A30s	6	B			
	12:00	2	A11s A24s A30s	6	T	E	disp	
		14	A11s A24s A30s	6	B			
	12:15	16	A11s A24s A30s	6	B			
	12:30	16	A11s A24s A30s	6	B			
	12:45	6	A11s A24s A30s	6	T	W	disp	
		10	A11s A24s A30s	6	B			
	13:00	3	A11s A24s	6	T	W	tight	
		6	A30s	6	R	W	tight	
		2		6	B			
		5		6	B			
	13:15	6	A30s	5	T	W	tight	
		3	A24s	5	T	W	tight	
		7	A11s	5	T	NW	tight	
	13:30	10	A11s A24s	5	I	W	light	
		6	A30s	4	F	W	loose	
	13:45	6	A30s	3	T	W	disp	
		10	A4s	4	T	W	disp	
	14:00	1	A6	X	T	W		
		6	A4s	3	T	W	disp	
		5	A30 A50 A54 A38 A39	3	T	W	disp	
		4	A13	2B	T	W	disp	
	14:15	4	A13	2B	T	W	disp	
		6	A4s	X	T	W	disp	
		6	A30s	2B	T	NW	disp	
	14:30	1	A38	X	T	W		
		1	A6	2A	T	NW		

Appendix A - Whale Scan Data

Date	Time	No. KWS	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		4	A13	2A	T	W	disp	
		3	A4s	X	T	W	tight	
		1	A39	X	T	W		
14:45		4	A13	2A	T	W	disp	
		3	A4s	X	T	W	disp	
15:00		all whales out of study area						
	18:00	16	A30s A4s	2A	R	E	tight	
	18:15	16	A30s A4s	2A	R	E	tight	
	18:30	16	A30s A4s	2A	R	E	tight	
	18:45	16	A30s A4s	2B	R	NE	tight	
	19:00	16	A30s A4s	2B	R	NE	tight	
	19:15	16	A30s A4s	2B	R	NE	tight	
	19:30	16	A30s A4s	2B	R	NE	tight	
	19:45	16	A30s A4s	2B	R	E	tight	
	20:00	16	A30s A4s	2B	T	E	tight	
7-Aug	12:30	4	A8s	3	T	E	loose	
	12:45	4	A8s	3	T	E	disp	
		1	A39	2	T	E		
	13:00	3		2B	T	E	loose	
		2	A6 A38	2B	T	E	disp	
		1	A39	2B	T	E		
	13:15	4	A8s	5	T	E	disp	
		3	A30s	2B	T	E	disp	
	13:30	4	A8s	5	T	E	disp	
		3	A6 A38 A39	2B	T	E	disp	
	13:45	4	A8s	6	B			
		3	A30 A50 A54	2B	T	SE	disp	
		1	A38	2B	T	SW		
		1	A39	6	T	SE		
		1	A6	2B	T	W		
	14:00	3	A30 A50 A54	2B	T	W	disp	
		1	A38	5	F			
		4	A8s	6	B			
		1	A6	4	F			
		1	A39	6	F			
	14:15	1	A30	6	T	E		
		1	A39	6	B			
		4	A8s	6	B			
		1	A38	5	T	E		
		1	A6	5	T	E		
	14:30	1	A6	5	T	E		
		8	A39	6	B			
		1	A38	6	T	SE		
	14:45	2	A6	2B	T	W		
		3		6	B			
	15:00	6		5	T	W	disp	
	15:15	1	A39	4	T	W		
		5	A38	4	T	SW	tight	
		2		4	T	W	tight	
	15:30	7	A38 A39	3	F	W	tight	
		1	A6	3	T	W		
	15:45	6	A38 A39	X	T	W	tight	
		1	A6	2B	T	W		
	16:00	7	A38 A39	X	T	W	tight	
		1	A6	2A	T	W		
	16:15	9	A38 A39	X	T	W	tight	
		1	A6	2A	T	W		
	16:30	1	A6	2A	T	W		
		9	A38 A39	X	T	W	loose	
	16:45	all whales out of study area						
	19:00	3	A6 A38 A39	X	T	E	disp	
	19:15	3	A6 A38 A39	X	R	E		
	19:30	2	A6 A39	X	T	E	loose	
		5	A8s A38	3	T	E	loose	
		3	A30 A50 A54	3	T	E	loose	
	19:45	2	A6 A39	X	T	E	loose	
		5	A8s A38	3	T	E	loose	
		3	A30 A50 A54	3	T	E	loose	
	20:00	2	A6 A39	X	T	E	loose	
		5	A8s A38	3	T	E	loose	
		3	A30 A50 A54	3	T	E	loose	
8-Aug	13:30	6	I15s	2B	T	E	loose	
		8	A30s A12s	2A	T	SE	loose	
	13:45	6		2B	T	SE	tight	
		7	A6	2B	T	SE	tight	
		4		2B	T	SE	disp	
	14:00	10	A38 A33 I41 A31	2B	T	SE	tight	
		6	A30s	2B	T	SE	tight	
		3		2B	T	SE	tight	
	14:15	5	A39	2B	T	SE	tight	
		12	A31 A33	2B	T	SE	tight	
		2	A6	3	T	E	tight	
	14:30	18	I15s	2B	T	E	loose	
		6	A12s	2B	T	E	loose	
	14:45	2	A6	2B	T	E	tight	
		2		5	T	E	tight	
		20	A30s	2B	T	E	tight	
	15:00	3	A6	5	F			
		12	I15s A30s	2B	T	E	loose	
		2		5	T	E	tight	
	15:15	9	A6	5	T	E	loose	
		8		2B	T	E	loose	
		5		6	F		disp	

## Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
	15:30	2		6	B			
		8		6	T	E	tight	
		10		out of study area				
	15:45	10	I15s A30s	6	B			
	16:00	10	I15s A30s	6	B			
	16:15	1		5	F			
		6		6	T	E	loose	
	16:30	1	A31	5	F			
		5		6	B			
		18	A30s A12s	6	B			
	16:45	1	A6	5	F			
		4		6	T	E	tight	
		6		2C	T	E	tight	
	17:00	2		6	T	E	tight	
		5		2B	T	E	tight	
		6		2C	T	E	tight	
		1	A6	2B	T	E	tight	
	17:15	all whales out of study area						
	19:15	6	A30s	2B	R	W	tight	
	19:30	6	A30s	2B	R	W	tight	
		18	A12s I15s	2B	S	W	loose	
	19:45	all whales out of study area						
9-Aug	10:30	6	A30s	2A	T	SE	disp	
	10:45	6	A30s	X	T	E	disp	
	11:00	6	A30s	X	T	E	disp	
	11:15	5	A6 A30 A39 A50 A54	3	T	E	disp	
		1	A38	2B	T	E		
	11:30	1	A38	4	T	E		
		5	A6 A30 A39 A50 A54	4	T	E	disp	
	11:45	5	A6 A30 A39 A50 A54	4	T	E	disp	
		1	A38	4	T	E	disp	
	12:00	2	A38 A6	5	T	EE		
		1	A39	4	T	E	disp	
		3	A30 A50 A54	5	T	E	disp	
	12:15	1	A38	5	T	E		
		4	A6	5	T	E	disp	
		1	A39	5	T	E		
	12:30	3	A30 A50 A54	6	B			
		2		6	T	S		
	12:45	3	A30 A50 A54	6	B			
		1		6	F			
	13:00	3	A30 A50 A54	6	F			
		2		6	F			
	13:30	3		6	B			
		1		6	R	E		
		1		5	T	W		
	14:00	1		2B	T	NW		
		1		6	T	NW		
		20	A12s I15s A11s A24s	X	T	E	disp	
	14:15	1	A38	2B	T	SW		
		20	I15s A12s A4s	X	T	E	disp	
	14:45	1	A38	2B	F			
		1	A39	2B	T	SW		
		15	A12s I15s A4s	3	T	E	disp	
		6		4	T	E	tight	
	15:15	1	A39	2B	T	SE		
		5		3	T	E	disp	
		6	A31 A33	4	T	E	disp	
		4		5	T	E	tight	
		1		4	T	E		
		4	A38 A30 A50 A54	2B	F			
	15:45	5	A6 A30 A38 A39 A54	2B	R	W	tight	
		1		X	T	W		
		1	A50	2B	T	W		
		1		5	T	W		
	16:15	2	A33 A12	2B	T	W		
		2	A31	2B	T	W		
		4		2A	T	NW	tight	
		6	A30s	2A	T	W	tight	
		2	A33 A12	2A	T	NW	tight	
		4		2A	T	NW	tight	
		3		2A	T	NW	tight	
		3		2A	T	NW	tight	
	16:30	all whales out of study area						
	19:00	6	A30s	X	R	E	tight	
		15	A12s A4s I15s	X	R	E	tight	
	19:30	6	A30s	3	T	E	disp	
		15	A12s I15s	X	T	E	disp	
		9	A4s	2A	R	E	tight	
	20:00	7	A12s	X	F			
		1	A39	5	T	E		
		3	A30 A50 A54	4	F			
		9	A4s	2A	R	E	tight	
		2	A6 A38	4	F			
10-Aug	12:30	6		6	T	S	loose	
		2		6	T	W	loose	
	12:45	10	A12s C6s	5	T	W	loose	
		3		6	B			
		5		2B	T	SW	loose	
		6		2C	F		loose	
		6		2C	T	W	tight	

## Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		4	A8s	2B	T	W	tight	
	13:00	4		6	T	W	tight	
		3		6	B			
		12	D7s D11s	2B	R	W	tight	
		4	A8s	2B	T	S	tight	
		3		6	T	W	tight	
		3		5	F		loose	
	13:15	4		2B	T	NW	disp	
		12	D7s D11s	2B	R	W	tight	
		6		4	T	SW	disp	
		6		6	B			
	13:30	6	A12s	2B	T	NW	tight	
		12	D7s D11s	2B	R	W	tight	
		1	I32	2B	T	W		
		6		6	B			
		4		4	F		loose	
		3		4	F		tight	
		1	C9	4				
	13:45	6	A12s	2B	T	W	tight	
		1		2B	T	W		
		1	C9	2B	T	W		
		5		6	B			
		3		3	T	W	tight	
		2		2B	T	W	tight	
		2		2B	T	W	tight	
		2		3	T	W	tight	
		3		3	T	W	loose	
	14:00	6	A30s	2B	T	W	loose	
		1		X	T	W		
		1	C9	2B	T	W		
		3		2B	T	W		
		2		4	T	SW	tight	
		3		6	T	W	loose	
		2		5	B		loose	
	14:15	3		4	T	W	tight	
		2		2B	F		tight	
		1	C9	2A	T	NW		
		3		2B	T	W	tight	
		3		X	T	W	tight	
		2		X	T	W	tight	
	14:30	4		4	T	W	tight	
		3		2B	T	W	loose	
		1		2B	T	W		
		2		4	T	SW	tight	
	14:45	4	A4s	2B	T	SW	tight	
		2		4	T	W	light	
		4		2B	T	W	tight	
		2		2B	T	W	loose	
		1		2B	T	W		
	15:00	4		2B	T	W	tight	
		5		2B	T	W	disp	
		2		3	T	W	loose	
	15:15	2		2B	T	W	tight	
		1		2B	T	W		
		2		X	T	W	loose	
		3		2B	T	W	tight	
		1		2B	T	W		
	15:30	out of study area						
	16:00	9		2B	T	SW	disp	
	16:15	4		2B	T	E	loose	
		4		2B	T	E	loose	
		1		2B	T	E		
		1		2B	T	E		
	16:30	4	A13	2B	T	E	loose	
		3		2B	T	E	tight	
		1		3	T	E		
	16:45	3		2B	R	E	tight	
		1		2B	R	E		
		3		2B	F		loose	
		1	A13	2B	F			
	17:00	4		2B	R	E	disp	
		1	A13	2B	R	E		
	17:15	6		3	R	W	loose	
		18:15	10	A4s	2B	R	E	tight
		6	A12s	2B	T	E	loose	
		15	C5s I15s	2B	T	E	disp	
	18:30	16	A12s A4s	2B	R	E	tight	
		16	C5s I15s	4	T	SE	disp	
	18:45	3	A31 A33	2B	T	E	loose	
		13	A34s A4s	4	T	SE	tight	
		14	C5s I15s	4	F		disp	
	19:00	1	A31	2B	T	E		
		5	A12 A33 A34s	4	T	SE	loose	
		20	C5s I15s A4s	4	F		disp	
	19:15	3	A12 A33 A31	2B	T	NE	disp	
		18	C5s I15s A4s	2B	T	NE	disp	
		8	C5s I15s	4	T	NE	disp	
	19:30	6	A12s	2B	T	NE	disp	
		16	C5s A4s	2B	T	NE	disp	
	19:45	10	A4s	5	T	SE	disp	
		12	C5s I15s	2B	T	E	disp	
		6	A12s	2B	T	E	disp	
	20:00	10	A4s	5	T	E	disp	
		8		2B	T	E	loose	

Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
11-Aug	19:45	2		2B	T	E	loose	
		6	I15s	6	B			
		5	I41	5	T	E	loose	
		3		6	T	SE	loose	
	20:00	3		6	T	E	loose	
		5		6	T	NW	loose	
		3		6	B			
12-Aug	15:45	5	A12s	X	T	E	loose	
		7	I15s	2A	R	E	loose	
	16:00	6	A12s	X	T	E	loose	
		5	I15s	2A	R	E	loose	
		2	I15s	2A	T	SE	tight	
	16:15	2	A12s	X	T	E	tight	
		4	I15s	2A	R	SE	tight	
		3	I15s	2A	R	SE	tight	
		1	I15s	2A	R	SE	tight	
		4	A12s	X	T	E	loose	
	16:30	3	I15s	2B	T	E	loose	
		6	A12s	3	T	E	disp	
	16:45	6	A12s	3	T	E	disp	
		12	I15s	2B	T	E	disp	
	17:00	5	A31 A33	4	T	E	loose	
		4	I15s	4	T	E	tight	
		1	I41	2B	T	SE		
	17:15	1	I41	5	T	E	disp	
		1		4	T	E		
		2		4	F	E	tight	
		3		5	F	E	tight	
		5		5	T	E	loose	
		2		6	T	E	disp	
	17:30	8		6	T	E	tight	
		6		6	T	E	disp	
	17:45	11		5	T	E	loose	
	18:00	6		6	B			
		4		2C	T	E	loose	
	18:15	2		6	B			
		3	I41	2C	T	E	disp	
		6	A12s	2C	T	E	tight	
	18:30	3		2C	T	SW	loose	
		2		6	B			
		3		6	R	E	tight	
	18:45	2		6	B			
		3	I41	2C	T	NE	tight	
		6	A12s	out of study area				
	19:00	2		6	F			
	19:15	all whales out of study area						
13-Aug	8:15	6	A30s	4	T	E	disp	
	8:30	6	A30s	5	T	E	disp	
	8:45	6	A30s	5	T	E	disp	
	9:00	3	A6 A38 A39	5	T	E	disp	
		3	A30 A50 A54	5	F	E	disp	
	9:15	3	A30 A50 A54	6	T	E	loose	
		2	A6 A38	6	T	NE	tight	
	9:30	1	A39	6	F		disp	
		2	A30 A54	6	B			
	9:45	4	A6 A38 A39 A50	5	T	W	disp	
		2	A6 A38	2B	T	NW	disp	
	10:00	4	A30 A39 A59 A54	out of study area				
		2	A6 A38	2B	T	W	disp	
	10:15	6	A30s	2B	T	W	disp	
	10:30	1		X	T	W		
		5		out of study area				
	10:45	1		X	T	W		
		3		2A	T	SE	disp	
	11:00	5		2A	T	SE	disp	
		1		X	T	W		
	11:15	5		out of study area				
		1		I081				
	14:00	1	A38	2A	T	SE		
	14:15	6	A30s	2A	T	SE	disp	
	14:30	6	A30s	X	T	E	disp	
	14:45	6	A30s	3	T	E	disp	
	15:00	6	A30s	3	T	E	disp	
	15:15	6	A30s	4	T	E	disp	
	15:30	6	A30s	4	T	E	disp	
	15:45	4	A6	5	F	E	disp	
		2		4	T	E	tight	
	16:00	4	A6 A38 A39	5	T	E	loose	
	16:15	1	A6	6	T	E	disp	
		5	A30 A38 A39 A50 A54	6	B			
	16:30	5	A30 A38 A39 A50 A54	6	B			
		1	A6	6	T	E		
	16:45	5	A30 A38 A39 A50 A54	6	B			
		1	A6	6	T	W		
	17:00	5	A30 A38 A39 A50 A54	6	B			
		1	A6	5	T	E		
	17:15	4	A30s	6	R	E	tight	
	17:30	6	A30s	6	R	E	disp	
	18:45	2	A38 A6	2B	T	W	disp	
	19:00	6	A30s	2B	T	W	disp	
	19:15	6	A30s	2B	T	W	disp	

Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
	19:30	6	A30s	out of study area				
14-Aug	11:45	3		X	T	E	tight	
		7		X	R	E	tight	
	12:00	2		X	T	E	tight	
		3		2A	T	E	tight	
		4		2A	T	W	tight	
		4		X	T	E	disp	
	12:15 - 16:10 all zones obscured by rain							
	16:15	5	I15s	2A	T	NW	tight	
		6	A30s	2A	T	NW	loose	
		2	C5s	X	T	W	tight	
		2	A31 A33	2A	T	W	loose	
		4	A4s	X	T	W	loose	
	16:30	3	A6 A12s	2A	T	NW	disp	others out of study area
	16:30	6	A30s	X	T		disp	
		1		2A	T	E		
		3		2A	T	E	loose	
	18:45	6	A30s	X	T	E	disp	
		3		X	T	E	loose	
		2		2A	T	E	loose	
		1		2A	T	E		
	19:00	4	A45	X	T	E	loose	
		4	A6 A30 A39 A54	3	T	E	loose	
		1	A38	2B	T	E		
		1	A50	2B	T	E		
		1		2A	T	E		
		3		2A	T	E	loose	
		1		2A	T	E		
		3		2A	T	E	tight	
		1		2A	T	E		
	19:15	6	A30s	2B	T	E	disp	
		5	A12s	2B	T	E	loose	
		3		2B	T	E	loose	
		2		2A	T	E	loose	
		4		2A	T	E	disp	
		3		2B	T	E	disp	
	19:30	3		2B	T	E	tight	
		3		2B	T	E	loose	
		4		2B	T	E	loose	
		1		3	T	E		
		2	A6 A38	2B	T	E	loose	
		3		2A	T	E	tight	
		4	A30 A39 A50 A54	lost				
	19:45	4		2B	T	E	tight	
		3		2B	T	E	disp	
		2		2B	T	E	tight	
		5		4	T	E	disp	
		4	C5s	2A	T	E	loose	
		1		2B	T	W		
		3	A30s	2B	T	E	tight	
	20:00	4		2B	T	E	disp	
		3		2A	T	E	tight	
		2		2A	T	E	loose	
		4		2B	T	E	loose	
		1		4	T	E		
15-Aug	6:00	6	A30s	2B	T	E	loose	
	8:15	6	A30s	3	T	E	loose	
	8:30	6	A30s	3	T	E	disp	
	8:45	6	A30s	4	F		disp	
	9:00	1	A6	5	F			
		1	A38	4	F			
		4	A30 A39 A50 A54	4	F		loose	
	9:15	6	A30s	5	T	E	disp	
	9:30	5		5	T	E	disp	
		1		6	B			
	9:45	6	A30s	6	T	E	disp	
	10:00	1	A6	5	F			
		4	A30 A39 A50 A54	6	B			
		1	A38	6	T	SW		
	10:15	5	A6 A30 A38 A50 A54	2B	T	NW	disp	
	10:30	3	A6	2B	T	NW	disp	
	10:45	2	A6	2B	T	NW	disp	
	11:00	6	A30s	2B	T	W	disp	
	11:15	6	A30s	2B	T	W	disp	
	11:30	6	A30s	2A	T	W	disp	
	11:45	5	A30s	X	F		disp	
	12:00	1	A6	out of study area				
		4	A30 A39 A50 A54	X	T	W	disp	
	12:15		C5s	2A	T	SE	disp	
	15:00	5		X	T	E	loose	
	15:15	3		X	T	E	disp	
	15:30	4		C13	3	F	loose	
	15:45	4						
	16:00	all zones obscured by rain						
	16:15	5		4	T	E	disp	
	16:30	3		4	T	NE	disp	
	16:45	4	C10s	5	T	E	loose	
	17:00	4	A38	2B	T	E	loose	
		1	A39	2B	T	E		
		5	C5s	lost				
	17:15	5	A30 A38 A39 A50 A54	X	T	E	loose	zones 6 and 2C obscured by rain
		5		2B	T	E	disp	

## Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
	17:30		all zones obscured by rain					
	17:45	3		X	T	E	disp	
		3		6	B			
		5	A30s	4	T	E	disp	
18:00		3	C5s	6	B			
		3		2B	T	E	disp	
		3		3	T	E	loose	
		2		4	T	E	loose	
		3		4	F		tight	
	18:15	3	C5s	6	B			
		3	A13	2B	T	E	tight	
		3		3	T	E	loose	
	18:30	5		4	T	NW		
		3		2B	R	E	loose	
		1		6	B			
		1		2B	T	E		
	18:45	3		6	B			
		3		5	T	E	loose	
		3		2B	T	E	tight	
	19:00	2		2B	T	E	disp	
		4		6	T	E	loose	
		1		2B	T	E		
		4		6	B			
	19:15	8		6	B			
	19:30	8		6	B			
	19:45	8		6	T	E	loose	
	20:00		all whales out of study area					
16-Aug	8:00	3		2B	R	W	tight	
	8:15		all zones obscured by fog					
	8:30	7		2B	T	W	loose	
	8:30 - 13:30		all zones obscured by fog					reserve, 2A,X,2C obscured by fog
	13:30	7		2B	T	E	loose	
		8	A24s	2B	T	E		
	14:00	1	A11s C5s	X	T	E	disp	
		5		4	T	E		
		3	C5s	4	T	E	tight	
	14:15	1	A13	3	T	E	tight	
	14:30	5	C10s	4	R	E	tight	
		1	A13	4	T	W		
		1	C5	5	T	E		
	15:00	4	C10s	4	T	E	tight	
		3	A13	5	T	E	tight	
	15:15	4	A11s	6	B			
		1	C5	4	R	E		
		4	C10s	4	R	E	tight	
	15:30	4	A13 A11 A56 A48	6	B			
		4	C10s	4	R	E	tight	
		1	C5	4	R	E		
	15:45	5	C5s C10s	5	R	E	tight	
		4	A13 A11 A56 A48	6	B			
		11		2A	T	E	disp	
		2		X	T	E	tight	
	16:00	6	A30s	2B	T	E	tight	
		10	A12s I15s	2B	T	E	loose	
		6	A30s	3	T	E	tight	
		5	C5 C10s	5	R	E	tight	
		1		2B	T	E		
	16:15	12	A30s	3	T	E	disp	
		6		4	T	E	loose	
		1		2B	T	W		
		1	A31	2B	R	E		
		2		2B	T	W		
	16:30	5		2B	T	W	tight	
		1	A13	2B	T	W		
		6	A30s	4	F			
		9		4	T	E	disp	
		3		3	T	E	tight	
		1	A31	2B	R	E		
		6		2B	T	W		
	16:45	3		2B	F	W	loose	
		6	A30s	5	T	E	loose	
		6	C5 C10 A31	2B	T	W	tight	
		1	A13	2B	T	W		
		4	A33 I41	5	T	E	tight	
		1		4	R	E		
	17:00	3	A24s	2B	T	E	loose	
		3	A35s	2B	T	E	loose	
		6	A30s	6	T	E	loose	
		1	A31	2B	T	W		
		3	C5 C10 A13	lost in glare				
		4		4	R	W	tight	
	17:30	6	A30s	6	B			
		7	I15s	4	F			
		1	I41	4	T	E		
		1		5	T	E		
		6	A31 C5 C10s	2A	T	W		
		4	A33	5	R	W		
		3		5	R	W		
	17:45	6	A30s	5	T	W	tight	
		1		2B	T	W		
		7	I41	2B	T	W	tight	
		6	A33	5	T	W	tight	
	18:00	6	A30s	5	F			

Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		6	A33	5	T	W	tight	
		2	I41	2B	T	W	loose	
18:15		4	A33	4	T	SW	tight	
		6	A30s	5	T	W	disp	
		4	I41	2B	T	W	loose	
18:30		4	I41	2B	T	W	loose	
		4	A33	4	T	W	tight	
		1	A38	4	T	SW		
		4		5	T	W	tight	
19:00		1	A6	5	F			
		5	A33	X	T	W	loose	
		1		4	T	W		
19:15		1	I41	X	T	W		
		7		X	R	W	loose	
		1	A6	4	T	N		
		1	A39	4	T	W		
		1	A38	3	T	W		
19:30		3	A30 A50 A54	3	T	W	tight	
		1	A6	2B	F			
		4		X	T	W	loose	
19:45		2		X	T	W	tight	
		3	A39 A6	2B	T	W	loose	
20:00		2	A39 A6	2B	F		loose	
		3	A38	X	T	W	loose	
		1		2B	T	W		
17-Aug	8:00	0	A12s A30s A4s D5s G2s G3s I15s R2s R7s R9s W3s					
		3		X	T	W	tight	
		1		2B	R	W		
8:15		2		X	T	E	tight	
		1		2B	T	SE		
		2		X	T	E	tight	
8:30		7		X	T	E	tight	
		2		2B	T	E	tight	
8:45		4		2A	T	E	tight	
		12	I15 I4 I41	2B	S	E	tight	
		2	R3 R12	2B	T	E	loose	
		4		2B	T	E	tight	
		1		2B	T	NE		
		3		2B	T	E	loose	
9:00		10		2B	T	E	tight	
		1		2B	T	E		
		1		2B	T	E		
		1		2B	T	E		
		2		5	F	E	loose	
9:15		14		2B	T	E	loose	
		1		2B	R	E		
		1		2B	T	E		
		4		6		E	loose	
		1		5	T	E		
9:30		11	R15	6	T	SE	loose	
		2		2B	T	E	disp	
		1		2B	T	E		
		7	G17 G3	2B	T	E	disp	
		1		3	T	SE		
9:45		4		2B	T	E	loose	
		9		2B	T	E	loose	
		15		2B	R	E	tight	
		1		6	T	E		
10:00		11		6	R	SE	tight	
		7		2B	T	E	tight	
		1		2B	F			
		4	R15	2B	T	E	loose	
10:15		13		6	B			
		20		2B	R	E	loose	
		2		2B	R	E	loose	
		2		6	R	E	loose	
		5	A4s	2B	T	SE	tight	
10:30		26		6	B			
		7		2B	T	E	loose	
		3		2C	T	E	tight	
		5		6	T	E	loose	
		1		6	T	E		
		3		6	T	E	tight	
10:45		12	I15s I31s	6	B			
		3		6	T	E	tight	
		7		2C	lost			
		3		2B	T	E	loose	
		4		2C	T	E	loose	
11:00		1	G19	2C	T	SW		
		6		2C	R	SW	tight	
		10	I15s I31s	6	B			
11:30		4		2C	T	W	tight	
		16	I15s I31s As	6	B			
		6		6	S		tight	
		3		2C	T	W	tight	
12:00		16	I15s I31s	6	B			
		1		6	F			
		9		6	T	W	tight	
12:30		3		5	T	W	tight	
		8		6	F		tight	
		7		5	T	W	loose	
		1		5	F			
		6		5	T	W	loose	

## Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		5		2B	T	E	loose	
	13:00	5		2B	T	W	tight	
		3		2B	T	W	tight	
		3		2B	T	W	tight	
		2		2B	T	W	disp	
	13:30	7		2B	T	W	tight	
		7		2B	T	W	disp	
		5		2B	T	W	tight	
		3		2B	T	W	tight	
		3		2B	T	W	tight	
		2		2B	T	W	tight	
		2		2B	T	W	tight	
		2		2B	T	W	tight	
		4		2B	T	W	tight	
		2		2B	T	W	tight	
		4		2B	T	W	disp	
	14:15	3	A11 A13 A56	2B	T	W	loose	
	14:30	3	A11 A13 A56	2B	T	W	loose	
	14:45	1	A13	2B	T	W	tight	
	15:00	3		2B	T	W	loose	
	15:15	1		2B	T	W	tight	
	15:30	2	A45 A52	2B	T	W	tight	
	15:45	all whales out of study area						
	17:45	4	A46	2B	T	E	disp	
		2	C5s	3	T	E	tight	
	18:00	2	C5s	3	T	E	disp	
	18:30	1	C5	2B	T	E		
		1	A13	4	T	E		
		2	A11 A56	4	T	E	tight	
		1	C10	3	T	E	tight	
	18:45	2	A11 A56	2B	T	E	tight	
		1	A13	2B	T	E		
		5	C5s	2B	T	W	tight	
	19:00	4	C10 C13 C17 C20	2B	R	E	tight	
		1	A13	2B	T	W		
		2		2B	T	E	tight	
	19:15	3	A11 A13 A56	5	T	E	tight	
		2	C20	2B	T	E	tight	
		1		2B	T	E		
	19:30	3	A11 A13 A56	6	B			
		1		2B	T	SE		
		2		2B	T	S	tight	
		1	C5	2B	T	E		
	19:45	3	A11 A13 A56	6	B			
		1		5	T	E		
		3		2B	T	NE	loose	
	20:00	2		6	B			
		1		6	T	SW		
		4		2B	T	W	tight	
18-Aug	8:00	2	I15s	4	T	E	tight	
		1	I15s	4	T	E		
		4	I15s	4	T	E	tight	
		1	I15s	4	T	E	tight	
		5	I15s	4	T	E	loose	
	8:15	6	I15s	4	T	E	loose	
		1	I15s	5	T	NE		
		4		6	B			
	8:30	4	I15s	5	T	NE	loose	
		4	A4 C5s	6	B		loose	
		4	I15s	5	T	NE	tight	
		4	I15s	5	T	NE	loose	
	8:45	3	I15s	4	T	E	loose	
		6	I15s	2B	T	E	loose	
		4		6	B			
		2		5	T	SW	tight	
	9:00	6	I41	2B	T	W	loose	
		2	A4s	6	T	W	loose	
	9:15	4	I41	2B	T	E	tight	
		6	I15	6	B			
	9:30	6	A4s	6	B			
	9:45	5		6	B			
	10:00	3	A4s	2B	T	W	loose	
		4	A24s	2B	T	W	tight	
		1	I15s	lost!				
	10:15	1	I41	5	T	W		
	10:30	6		4	T	W	disp	
		4		5	T	W	disp	
		2	A33	4	T	W	tight	
	10:45	4	A31	2B	T	W	disp	
		6	I41 A33	3	T	W	tight	
	11:00	4	A31	2B	T	W	loose	
		5	I41 A33	X	T	W	loose	
	11:15	all whales lost in waves						
	11:30	all whales out of study area						
19-Aug	10:45	2	T4 S8	2B	T	E	tight	definitely transients, but i.d. uncertain
	11:00	2	T4 S8	2B	T	E	tight	
20-Aug	15:15	2	A12 A31	X	T	E	loose	
	15:30	2	A12 A31	X	T	E	loose	
	15:45	2	A12 A31	X	F	E	loose	
	16:00	3	A34 A55 A62	2B	T	SE	loose	
		1	A33	2B	T	SE		
	16:15	2	A12 A31	X	T	E	tight	
		1	A33	2B	T	E		

Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
		3	A34 A55 A62	2B	T	E	tight	
	16:30	2	A12 A31	3	T	E	loose	
		3	A34 A55 A62	2B	T	E	tight	
		1	A33	2B	T	E		
	16:45	2	A12 A31	3	T	E	loose	
		1	A33	3	T	E		
	17:00	1	A33	4	T	E		
		2	A12 A31	4	T	E	loose	
	17:15	1	A33	2B	T	E		
		3	A34 A55 A62	5	T	E	tight	
		2	A12 A31	5	T	E	loose	
	17:30	3	A34 A55 A62	5	T	E	tight	
		2	A12 A31	5	T	E	loose	
	17:45	3	A34 A55 A62	6	T	E	tight	
		2	A12 A31	6	T	SE	tight	
	18:00	2	A12 A31	6	T	E	loose	
		3	A34 A55 A62	6	B			
	18:15	2	A12 A31	2C	T	E	loose	
	18:30	all whales out of study area						
21-Aug	11:00	3		6	B			
	11:15	1	A13	5	T	W		
		4	A24s	2B	T	W	tight	
		2		5	T	W	tight	
		1		5	F			
	11:30	3	A11s	2B	T	W	tight	
		1	A13	4	T	W		
		2	A11s	4	T	W	tight	
	11:45	1	A13	4	T	S		
		2	C5s	4	T	S	tight	
		1		4	T	S		
		2	A11 A56	4	T	S	tight	
	12:00	3		3	T	W	tight	
		1		3	T	W		
		2		4	T	W	tight	
	12:15	2		3	T	W	tight	
		1	A13	3	T	W		
		1	C5	3	T	W		
		2		3	T	W	tight	
	12:30	1	A13	2B	T	W		
		2		X	T	W	tight	
		3	C5s	X	F	W		
	12:45	1	A13	X	T	W		
		2	C5 C13	X	T	W	loose	
		2	C10 C20	X	T	W	tight	
		1		X	T	W		
	13:00	1		X	T	W		
	14:15	3	A24s	X	T	E	tight	
		3	A35s	X	T	E	tight	
	14:30	4	A11 A13 A48 A56	X	T	E	tight	
		3	A24s	X	T	E	tight	
		3	A35s	X	T	E	loose	
	14:45	3	A24s	X	T	E	tight	
		3	A35s	X	T	E	tight	
		4	A11 A13 A48 A56	X	T	E	tight	
	15:00	3	A24 A45 A64	3	T	E	tight	
		3	A35 A52 A59	X	F	E		
		4	A11 A13 A48 A56	X	T	E	tight	
	15:15	1	A13	3	T	E		
		3	A11 A48 A56	3	T	E	tight	
		3	A35 A52 A59	4	T	E	tight	
	15:30	1	A13	3	R	E		
		3	A11 A48 A56	3	R	E	tight	
		3	A35 A52 A59	4	T	NE	tight	
		2	A24s	5	T	E	tight	
	15:45	3	A11 A48 A56	2B	T	W	tight	
		1	A13	2B	T	W		
		3	A35 A52 A59	5	T	E		
	16:00	1		4	F			
		3		2B	T	NW	tight	
		4		2B	T	NE		
		1	A13	2B	R	W		
		3	A11 A48 A56	2B	R	W	tight	
	16:15	1	A13	2B	T	SE		
		2	A11 A56	3	T	SE	tight	
		4	C5s	3	R	E	tight	
	16:30	1	A13	4	T	S		
		5	C5s	3	R	NE	tight	
	16:45	1	A13	2B	T	W		
		5	C5s	2B	T	W	tight	
		2	A11 A56	2B	T	W	tight	
	17:00	3	A12 A31 A33	2B	T	W	loose	
		3	A24 A45	2B	T	W	loose	
	17:15	2	A31 A12	4	T	W	loose	
		1	A33	4	T	SW		
		3	A35 A52 A59	2B	T	W	loose	
	17:30 - 20:00 all zones obscured by rain							
23-Aug	13:00	1	A31	X	F			
	13:15	2	A31 A12	X	T	SE	loose	
	13:30	2	A31 A12	X	T	E	loose	
	13:45	2	A31 A12	X	T	E	disp	
	14:00	2	A31 A12	3	T	SE	disp	
		3	A34 A55 A62	2B	T	SE	tight	
		1	A33	2B	T	E		

Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
	14:15	2	A12 A31	3	F		disp	
		3	A34s	2B	T	SE	tight	
		1	A33	2B	T	E		
	14:30	3	A34s	4	T	SE	tight	
		2	A12 A31	4	F		disp	
		1	A33	2B	T	SE		
	14:45	1	A33	2B	F			
		3	A34s	5	T	E	tight	
		1	A12	5	T	E		
		1	A31	4	T	E		
	15:00	5	A12 A31 A34s	5	T	E	disp	
	15:15	1	A31	6	B			
		4	A12 A34s	6	F		loose	
	15:30	5	A12 A31 A34s	2C	T	E	loose	
	15:45	out of study area						
24-Aug	8:30	5		2C	T	W	loose	
	8:45	4	A24s	2B	F			
		6		2B	T	W	loose	
		4		6	B			
		3		2C	T	W	loose	
	9:00	2	A24s	2B	T	W	tight	
		1		4	F			
		2	A12s	5	F			
		6		5	T	W	loose	
		5		2B	T	SW	loose	
	9:15	2	A12 A31	4	F			
		2		4	T	W	tight	
		5	A33	4	T	W	tight	
		4		5	T	W	loose	
	9:30	3	A31	4	F			
		4		4	F			
		3		3	T	W	loose	
	9:45	5	C5s	3	T	W	tight	
		6	A31 A33 A12 A13	3	T	W	loose	
		2		3	T	W	loose	
		2		3	T	W	tight	
	10:00	5	C5s	X	T	W	tight	
		3	A12 A13 A31 A33	X	T	W	loose	
		2		X	T	W	tight	
	10:15	15	A31 A33 A13 A12	X	T	W	loose	
	13:45	6	A4s	2A	R	E	tight	
		1		2A	T	SE		
	14:00	10	A11s A24s	2A	R	E	tight	
	14:15	10	A4s	2A	R	SE	tight	
		1	A31	2A	T	NW		
	14:30	1	A31	2A	R	NW		
		10	A4s	2A	R	E	tight	
	14:45	10	A4s	2B	R	E	tight	
	15:00	10	A4s	2B	R	E	tight	
	15:15	10	A4s	3	R	E	tight	
	15:30	10	A4s	3	R	E	tight	
	15:45	10	A4s	3	R	E	tight	
	16:00	7	A11s	4	R	SE	tight	
		3	A24s	4	R	E	tight	
	16:15	7	A11s	4	R	E	tight	
		3	A24s	2B	R	NE	tight	
	16:30	3	A24s	2B	T	E	loose	
		7	A11s	lost				
		1	A33	2C	T	E		
		3	A34s	2C	T	E	tight	
	16:45	7	A11s	5	T	E	tight	
		1	A33	2B	T	E		
		3	A34s	2B	F			
	17:00	3	A34s	2B	T	E	tight	
		1	A33	2B	T	E	tight	
		2	A31 A12	4	T	E	tight	
		7	A11s	6	T	E	tight	
	17:15	2	A31 A12	4	T	E	tight	
		7	A11s	6	B			
		5	C5s	2B	T	E	tight	
	17:30	7	A11s	6	B			
		5	C5s	2B	R	E	tight	
		2	A31 A12	5	T	E	loose	
	17:45	7	A11s	6	B			
		5	C5s	2B	R	E	tight	
		2	A31 A12	5	F		loose	
	18:00	9	A11s A31 A12	6	B			
		5	C5s	2B	T	E	tight	
	18:15	2	A31 A12	6	T	NE	tight	
		7	A11s	6	B			
		5	C5s	2B	R	E	tight	
	18:30	7	A11s	6	T	W	loose	
		5	C5s	2B	T	W	tight	
	18:45	5	C5s	2B	T	E	tight	
		1	A31	5	T	W		
		2	A11	2B	T	W	tight	
		1	A13	5	F			
		1		5	T	W		
	19:00	5	C5s	2B	R	E	tight	
		3	A13 A31	5	T	W	disp	
		2		2B	T	W	tight	
	19:15	3	A11 A4B A56	2B	T	W	loose	
		5	C5s	2B	R	E	tight	

Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments	
		1	A31	4	T	NW			
		1	A13	2B	T	NW			
		1	A33	2B	T	W			
19:30	5	1	C5s	2B	R	W	tight		
		1	A31	2B	T	W			
		3	A11 A48 A56	2B	T	W	disp		
		1	A33	2B	T	W			
19:45	3	1	A34 A55 A62	2B	T	W	tight		
		1	A33	2B	T	W			
		5	C5s	2B	T	W	tight		
		2	A12 A31	2B	T	SW	loose		
		2	A11 A56	2B	T	W	tight		
		1	A13	2B	T	W			
20:00	3	1	A24 A45 A64	2B	T	W	tight		
		1	A35	2B	T	W			
		1	A33	2B	T	W			
		5	C5s	2B	T	W	tight		
25-Aug	8:30	2	A12s	X	T	SE	tight		
		1		X	T	SE			
	8:45	3		X	T	E	tight		
9:00	3		A31 A33 A12	X	T	E	disp		
9:15	2		A12 A31	3	T	S	loose		
		3	A34s	2B	T	E	tight		
		1	A33	2B	T	E			
9:30	2		A12 A33	4	F		disp		
		1	A31	3	F				
9:45	2		A12 A31	4	T	E	loose		
		1	A33	4	F				
10:00	1		A33	2B	T	E			
		2	A31 A12	5	T	E	loose		
10:15	1		A33	2B	T	E			
		2	A31 A12	5	T	E	tight		
10:30	1		A12	6	B			A33 out of study area	
		1	A31	6	F				
10:45	2		A12 A31	2C	T	E	loose		
11:00			all whales out of study area						
26-Aug	8:00	2	A12 A31	X	T	E	loose		
		4	A34s A33	2A	T	SE	loose		
8:15	6		A12s	X	T	E	disp		
8:30	3		A34s	3	F		loose		
	1		A12	X	T	E			
8:45	5		A34s A12 A31	3	F		disp		
	1		A33	2B	T	E			
9:00	3		A34s	4	T	E	tight		
	2		A12 A31	4	T	E	loose		
	1		A33	2B	T	E			
9:15	1		A33	2B	T	E			
	4		A34s A12	4	F		loose		
	1		A31	4	T	E			
9:30	5		A33 A31 A34s	5	T	E	disp		
	9:45	5		A31 A33 A34s	5	T	E	disp	
10:00	3		A34s	6	B				
	2		A12 A31	6	F		loose	A33 out of study area	
10:15	5		A34s A12 A31	6	T	E	loose		
		4		A34s A12	2B	T	W	tight	
12:30	2		A31 A33	2B	T	W	loose		
12:45	6		A12s	2B	T	W	disp		
13:00	2		A33 A12	2A	T	W	disp		
13:15			all whales out of study area						
	17:00	2	A31 A12	2A	T	SE			
	17:15	3	A31 A33 A12	X	T	E	disp		
17:30	3		A34s	X	T	E	tight		
	3		A33 A31 A12	X	T	E	disp		
17:45	1		A33	3	T	E			
	4		A31 A34s	X	T	E	tight		
	1		A12	3	T	E			
18:00	1		A33	3	T	E			
	5		A34s A12 A31	3	F		disp		
18:15	4		A33 A34s	4	T	E	loose		
	2		A31 A12	4	T	E	tight		
18:30	6		A12s	4	T	E	loose		
18:45	3		A34s	5	T	NW	tight		
	1		A33	2B	T	NW			
	2		A12 A31	4	T	N	tight		
19:00	1		A33	2B	T	W			
	2		A31 A12	2B	T	NW	tight		
	3		A34s	2B	T	NW	tight		
19:15	3		A33 A12 A31	2B	T	W	disp		
	3		A34s	2B	T	NW	tight		
19:30	3		A33 A12 A31	2B	T	W	loose		
	3		A34s	2B	S	W	tight		
19:45			all whales out of study area						
27-Aug	8:30	1		2C	T	NE			
	9:45	1		2B	T	N			
	10:00	1		A33	2B	T	W		
	10:15	2		A12 A31	2B	T	W	tight	
	1		A33	2B	R	W			
	3		A34s	5	T	W	tight		
	10:30	2		A12 A31	2B	T	W	tight	
	1		A33	2B	T	W			
	3		A34s	4	T	W	tight		

Appendix A - Whale Scan Data

Date	Time	No. KWs	Individual/ Pod IDs	Zone	Activity	Direction	Degree of disp.	Comments
	10:45	3	A34s	4	T	W	tight	
		1	A33	2B	T	SE		
	11:00	1	A33	2C	F			
		3	A34s	3	T	W	tight	
	11:15	3	A34s	3	T	S	tight	
	11:30	3	A34s	X	T	W	tight	
	11:45	3	A34s	X	T	W	tight	
	12:00	3	A34s	X	T	W	tight	
	12:15	3	A34s	X	T	W	tight	
	12:30	6	A12s	out of study area				
	16:00	1		2A	T	E		
	16:15	2		2A	T	E	tight	
	16:30	6	A12s	out of study area				
29-Aug	8:00	6	A12s	5	T	SE	disp	
	8:15	6	A12s	5	R	E	tight	
	8:30	6	A12s	2B	R	E	tight	
	8:45	6	A12s	5	R	E	tight	
	9:00	6	A12s	5	R	SE	tight	
	9:15	6	A12s	5	R	E	tight	
	9:30	6	A12s	5	R	E	tight	
	9:45	6	A12s	5	R	E	tight	
	10:00	6	A12s	5	R	NE	tight	
	10:15	6	A12s	5	R	E	tight	
	10:30	6	A12s	5	R	SE	tight	
	10:45	6	A12s	2B	R	E	tight	
	11:00	6	A12s	2B	R	NW	tight	
	11:15	6	A12s	2B	R	NW	tight	
	11:30	6	A12s	2B	T	NW	tight	
	11:45	6	A12s	2B	T	W	tight	
	12:00	6	A12s	2B	T	W	tight	
	12:15	6	A12s	out of study area				
	19:00	2	A33 A55	2A	S		tight	
	19:15	3	A33 A55 A34	2B	T	E	tight	
		2	A12 A31	3	T	E	tight	
		1	A64	2B	T	E		
	19:30	4	A33 A34 A55 A64	2B	T	E	loose	
		2	A12 A31	3	T	E	tight	
	19:45	4	A33 A34 A55 A64	2B	T	E	tight	
		2	A12 A31	3	T	E	disp	
	20:00	2	A12 A31	3	T	E	disp	
		4	A33 A34 A55 A64	2B	T	E	tight	
30-Aug	17:00	4	I11s	4	T	W	disp	
		3		2B	T	SW	disp	
		10		5	T	W	disp	
	17:30	4	I31s	4	T	W	disp	
		3	W3s	5	T	W	tight	
		14	I11s A12s	5	T	SW	tight	
		3		5	T	W	disp	
		1		2B	T	W		
		2		2B	T	W	tight	
	17:45	14	I11s I31s	4	R	NE	tight	
		3	W3s	4	R	N		
		4	A12s	2B	T	SW	tight	
	18:00	14	I11s I31s	5	S		tight	frequent spyhopping
		4	A12s	2B	T	NW	disp	
		3	W3s	4	T	W	loose	
	18:15	14	I11s I31s	5	T	W	tight	
		3	W3s	3	T	W	loose	
		5	A12s	2B	T	W	disp	A33 lost in glare
	18:30	1	A12	2A	F			other A12s out of study area
		8		4	F			
		3	W3s	2B	T	NW	loose	
		4		4	T	W	tight	
	19:00	16	I31s I11s	2B	S		tight	frequent spyhops
	19:15	all out of study area						
31-Aug	9:30	6	A12s	2B	R	NW	tight	
		24	I11s I31s W3s	5	R	W	tight	
	10:00	6	A12s	2B	T	W	disp	
		24	I11s I31s W3s	3	R	W	tight	
	10:30	2	A31 A33	2B	T	W	disp	
		24	I11s I31s W3s	X	T	W	loose	
	11:00	30	A12s I11s I31s W3s	X	T	W	loose	
	11:30	all whales out of study area						

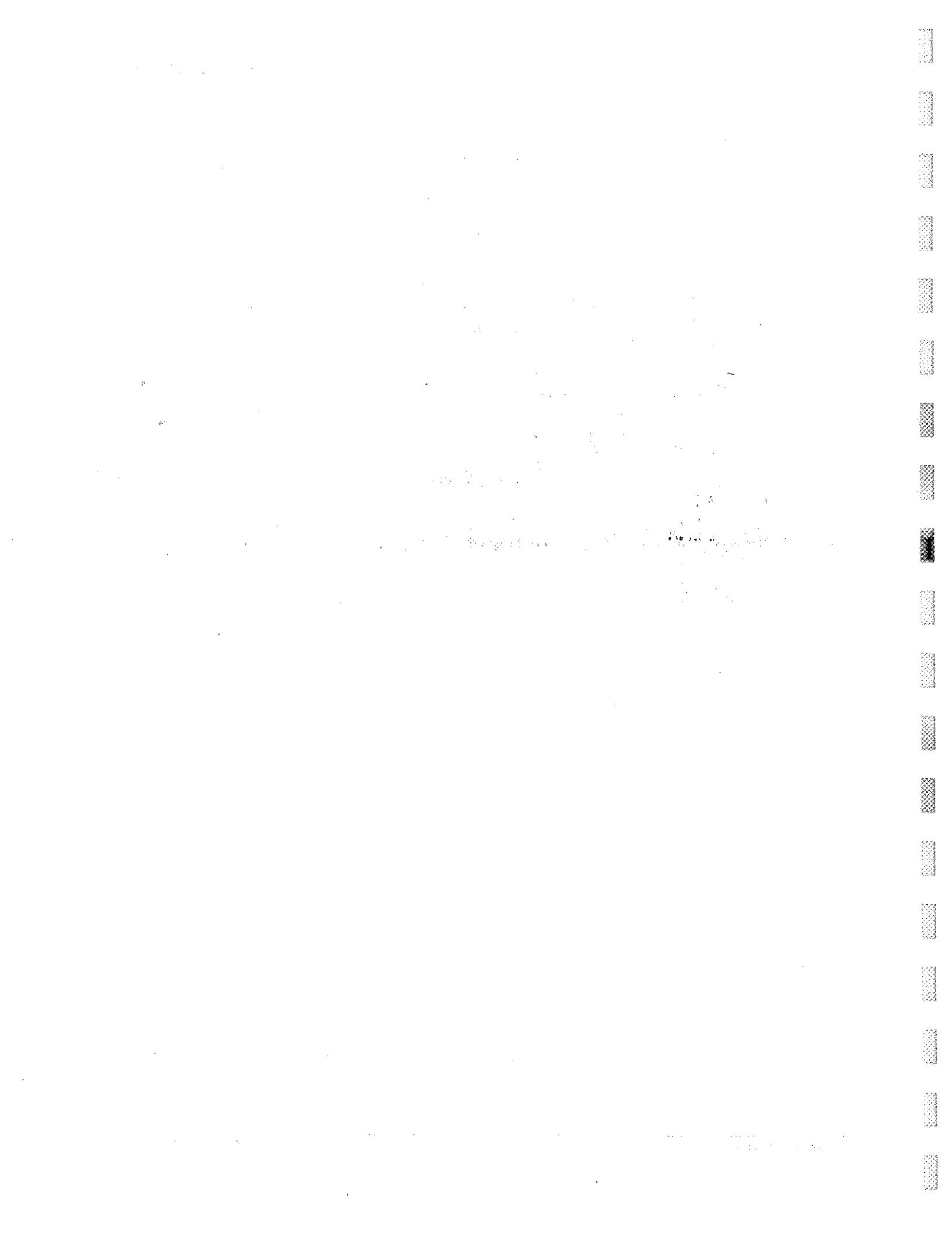


**APPENDIX B1                    Boat Count Data****Interpretive Notes:****A) Vessel Category Codes**

RKG = Recreational Kayak Group  
RPVs = Recreational Power Vessel, under 5 m.  
RPVb = Recreational Power Vessel, over 5 m.  
RSV = Recreational Sailing Vessel  
CFV = Commercial Fishing Vessel  
CCV = Commercial Charter Vessel  
COL = Commercial Ocean Liner  
TUG = Tug boat with or without barge  
CAR = Self propelled cargo vessel  
PRV = Professional Research/photography Vessel  
GPV = Government Patrol Vessel

**B) CFV Activity Codes (While engaged in fishing activities only)**

S = Seining  
T = Trolling  
G = Gillnetting



Appendix B1 - Boat Count Data

1995 Boat Count Data										
Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
1-Jul	8:00	RPVs			1		1			
	8:15	CFV			2					
	8:30	RPVs					1			
		COL		1						
		RPVs						1		
		CFV			3					
	8:45	CFV			2					
	9:00	RPVs			1					
		RSV		2		1				
		CFV		2						
		RPVs		2						
	9:15	CFV			6					
		RPVs			1					
		RSV			1					
	9:30	RPVs			1			1		
		CFV			3					
		RPVs			1					
	9:45	CFV			6					
		RSV		1	1					
	10:00	CFV			10					
		RPVs			2					
		TUG			1					
		RSV				2				
	10:15	CFV		1	8					
		RSV								2
		RPV					1			
		TUG			1					
	10:30	TUG			1					
		RSV						2		
		CFV			1	1				
	10:45	TUG				1				
		RSV				2				
		CFV				4				
	11:00	CFV				2				
		RSV			2					
		TUG			1					
	11:15	no boats								
	11:30	no boats								
	11:45	no boats								
	12:00	CFV				5				
	12:15	CFV		2	1					
		RPVs			1					
	12:30	CFV				3				
	12:45	CFV		1	4					
		TUG			1					
	13:00	CFV				6		1		
		TUG				1				
		RPVs			1					
	13:15	TUG				1				
		CFV		1	1					1
		RPVs		1						
	13:30	CFV				1				1
		RPV			1					
		TUG				1				
	13:45	TUG				1				
		CFV				3	1			
		RPV			1					
	14:00	TUG				1				
		CFV				9				
		RPV			1					
		RSV					1			
		CAR			1					
	14:15	CFV		1	6					
		RSV								1
		CAR				1				
	14:30	CFV		3	7					
		RSV								1
	14:45	CFV				7				
		RSV			1					
	15:00	CFV		3	3	2				
		RSV		1						
		RPV				1				
	15:15	CFV		2	4					2
		RPVs		1						1
	15:30	CFV		3	1			2	1	1
		RPV			1					
	15:45	CFV		3	1					1
		RPVs			1					
		CCV			1					
	16:00	CFV		1	1					
		CCV			1					
		TUG			1					
	16:15	TUG				1				
		CFV				2				
		RPVs			1					
	16:30	CFV				4				
		TUG			1					
		RPV			1					
	16:45	CFV				1				
		COL				1				
		RPV			1					
	17:00	COL				1				

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	17:15	RPV		1	2					
		CFV								
	17:30	RPV	1		1					
	17:45	COL								
		CFV		1						
	18:00	RPV	1		2					
	18:15	CFV		2						
	18:30	TUG		1						
	18:45	TUG		1						
	19:00	CAR		1						
		CFV		2	1					
	19:15	CAR	1							
	19:30	TUG			1					
	19:45	CFV				1				
	20:00	CFV			1					
2-Jul	8:00	CFV		2						
		RPVb		1						
	8:15	no boats								
	8:30	RKG		1(8)						
	8:45	CFV			1					
		RKG		1(8)						
	9:00	CFV	1							
		RPVb			1					
	9:15	CFV		5						
		RPVb			1					
	9:30	CFV		6						
	9:45	CFV		4						
	10:00	CFV		2						
	10:15	CFV		4						
	10:30	CFV		2	2					
		RPVb		1						
		RSV		1						
	10:45	CFV		2						
		RPVb			1					
		RSV		1						
	11:00	CFV		5						
		RSV		1						
	11:15	CFV		7						
	11:30	CFV	2	7			1			
	11:45	CFV	1	8						
		RSV	1							
		RPVs		1						
	12:00	CFV	1	3				2		
		RSV		1						
	12:15	RSV			1					
		CFV		3				2		
	12:30	CFV	2						1	
		RSV								
	12:45	CFV	2	1						
		TUG		2						
		RSV								1
	13:00	TUG		2						
		CFV		2						
		RSV		1						
	13:15	TUG		2						
		CFV		1						
		RPVs		1						
	13:30	TUG		2						
		CAR		1						
		CFV		5	1					1
		RPVs		1						
	13:45	CFV	2	2				1	2	
		CAR		1						
		TUG		2						
		RPVs						1		
	14:00	CFV	2	4			1			2
		RPVb					1			
	14:15	CFV	3	5	1				2	
		RPVs					1			
	14:30	CFV	3	3	1					
		RPVs		1						
	14:45	CFV	2	7				1		
		RSV	1							
	15:00	CFV	2	4			1			
		RSV	1							
	15:15	CFV		3			1			
		RSV					1			
	15:30	CCV		1						
		RSV							1	
		CFV	2				1			
	15:45	CFV					1			
		RSV								
		CCV		1						
	16:00	CFV	1	2						
		RPVs			1					
	16:15	COL	1							
		CFV			4					
		RPVs			1					
	16:30	COL	1					1		

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFV			2				2	
		CCV		1						
16:45		COL					1			
		CFV		1	2				2	
		CCV		1						
		CAR								
		RPV		1			1			
17:00		COL				1				
		CAR			1					
		CFV		1	2		1			
		RPVs						1		
17:15		CFV		2	1					
		RPVs		1						
		RSV			1					
17:30		COL		1						
		RSV			1					
17:45		COL			1					
		RSV						1		
18:00		RSV							1	
		CFV			2					
18:15		CFV			2					
		RSV			1					
18:30		CFV		2						
		RSV			1					
18:45		COL			1					
		CFV			2					
		RSV			1					
19:00		RSV			1					
		CFV			2					
19:15		CFV			2					
19:30		CFV			1					
19:45		TUG			1					
20:00		TUG			1					
3-Jul	8:00	RPVs			1					
		TUG			1					
		CFV								1
	8:15	TUG		1						
	8:30	CFV			2					
	8:45	RSV		1						
	9:00	RPVs			1					
		CFV			1					
		RSV								1
		CAR			1					
	9:15	CAR			1					
	9:30	CFV			2					
	9:45	CFV								
	10:00	no boats		2						
	10:15	CFV		1						
		RPVs			1					
	10:30	RPV								1
	10:45	RPVb		1						
	11:00	RPV		1						
		#RPVb			1					
	11:15	RKG		1(5)		1(2)				
	11:30	RKG				1(2)				
		RKG		2(2.5)						
	11:45	RPV		1	3					
		RKG		2(2.5)						1(2)
	12:00	CFV		1						
		RPV		1						
		RKG		1(5)						1(2)
	12:15	RSV		1						
		CFV		1						
		RKG		2(2.5)	1(2)					
	12:30	RPV			1(2)					1(2)
		RKG			1(2)					
		CFV			1					
		RPV			1					
		RSV			1					
	12:45	RKG		1(4)	2(2.2)					
		CFV		1	1					
	13:00	CFV		2						
		RKG		2(2.4)	1					
	13:15	TUG		1						
		RKG		2(2.4)	1(2)					
		CCV			1					
		CFV			1					
	13:30	TUG		1						
		CFV								
		RKG		2(2.4)						
	13:45	TUG			1					
		CFV								
		RKG		1(4)						
	14:00	TUG			1					
		RPV			1					
		RKG		1(4)						
		CFV		1						
	14:15	CFV		1	2					
		PRV			1					
		RKG		1(4)						
	14:30	CFV		1						
		RPV			1	1				
		RKG		1(4)						
	14:45	TUG		1						
		CFV				1				
		RKG		1(2)						

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	15:00	CFV			2					
		RKG		2(6,2)						
		TUG		1						
	15:15	CCV			1					
		CAR		1						
		RKG		2(6,2)						
		TUG			1		1			
	15:30	CAR						1		
		RKG		2(6,2)						
		TUG								
	15:45	RKG		1(6)						
		TUG			1				1	
		CFV								
		RSV		1						
	16:00	CFV			1					
		RSV			1					
		TUG			1	no barge				
		RKG		3(1,6,2)						
	16:15	CFV			1					
		TUG		1	no barge					
		RKG		2(1,6)						
		RPVb			1					
	16:30	RPVs			1					
		CFV		2	1					
		RPVb		1						
		RKG		1(1)						
	16:45	RPVb		1						
		CFV			3					
	17:00	CFV		3	2					
		RPV		1						
	17:15	CFV			3					
		RPV			1					
	17:30	CFV		1	1					
	17:45	CFV		1						
	18:00	RPV			1					
	18:15	COL			1					
		CFV			1					
		RSV			1					
	18:30	TUG		1						
		CFV		1						
	18:45	CFV		1						
		TUG		1						
	19:00-20:00 rain									
4-Jul	8:00	CFV							1	
		TUG		1						
	8:15	CFV		1						
		TUG			1					
	8:30	TUG			1					
		CFV		1						
	8:45	fog all								
	9:00	fog all								
	9:15	fog all								
	9:30	fog all								
	9:45	TUG		fog	1	fog	fog			fog
	10:00	RSV							1	
		RPVs							1	
	10:15	TUG			1					
		RSV			1					
		RPVs		1						
	10:30	RPVs		1						
		RSV		1						
	10:45	RPVs			1					
		RPVb			1					
	11:00	RPVb			1					
		RPVs			1					
	11:15	RPVs					1			
		RPVb			1					
	11:30	RPVb			1					
		RSV			1					
		RKG		1(8)						
	11:45	RSV		1						
		RKG		1(8)						
	12:00	RSV			1					
		RKG		1(8)						
	12:15	RSV			2					
		RPVb			1					
		RKG		1(8)						
	12:30	RSV			1					
		GPV		1						
	12:45	RSV		1						
		RPV			1					
	13:00	RPV			1					
		GPV				1				
	13:15	RPV		1	1					
		CCV		1						
	13:30	GPV			1					
	13:45	GPV			1					
	14:00	RKG		1(8)						
		GPV			1					
	14:15	RPVb			1	1				
		RKG		2(5,3)						
	14:30	RKG		1(5)						
		RPV		1	2					
		RSV			1					
	14:45	RKG		2(3,5)						
		RPV		1	2					
		CCV			1					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	15:00	RPV		1						
		RKG		1(3)						
	15:15	RPV			1					
		RKG		1(3)						
	15:30	CFV			1					
		RPV				1				
	15:45	RPV		2						
		RSV			1					
	16:00	RPVb			1					
		RSV				1				
		CFV			1					
	16:15	CFV			2					
		RPVb			1					
		RSV			1					
	16:30	RPVb			1					
		RSV			1					
		CFV		2						
	16:45	RSV		1						
		RPVb			1					
		RPVs		1						
		CFV		2						
	17:00	CFV			2					
		COL		1						
		RPVs			1					
	17:15	COL			1					
		CFV			1					
		RSV		1						
	17:30	COL		1						
		CFV		1						
		RSV		1						
	17:45	COL			1					
		CFV		1						
		RSV		1						
	18:00	no boats								
	18:15	CFV			1					
	18:30	CFV		1	1					
	18:45	RPVs			1					
		TUG		1						
	19:00	TUG		1						
	19:15	TUG		1						
	19:30	TUG		1						
	19:45	CFV			1					
		RKG			1(2)					
		TUG		1						
	20:00	CFV		1	1					
		TUG			1					
5-Jul	8:00-8:15	fog all								
	8:30	CAR			1					
		CFV		1						
	8:45	CFV		1						
	9:00	CFV					1			
		RSV			1					
		TUG		1						
	9:15	*CFV							1	
		RSV			1					
	9:30	CFV								1
		RPVb			1					
		CFV			1					
	9:45	RPVb			1					
		CFV			1					
	10:00	CFV			1					
	10:15	CFV			1					
		RKG			1(7)					
	10:30	CFV				1				
		RKG			2(1,6)					
	10:45	RKG			1(6)					
		RSV				1				
		CFV		1						
	11:00	RSV			2					
		RPVs								1
		RKG			1(6)					
	11:15	RSV				1				
	11:30	RSV				1				
	11:45	RSV				1				
	12:00	RKG			1(6)					
	12:15	RKG			1(6)					
	12:30	RKG			1(6)					
	12:45	RKG			1(6)					
	13:00	RPV			2					
		CAR		1						
	13:15	CCV				1				
		RPV		1	1					
		CAR			1					
	13:30	RPV		1					1	
		CAR			1					
		CFV			1					
	13:45	RPV			1		1			
		CFV			1					
	14:00	RPV		2						
		CFV		1						
	14:15	RPV		3						
		CFV						1		
	14:30	CFV			1					
	14:45	CFV			2	1				
	15:00	RKG			1(6)					
		RKG					1(5)			

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	15:15	CCV			1					
	15:30	RKG		2(5,1)						
	15:45	RKG		3(5,1,1)						
	16:00	RSV			3					
	16:00	RKG		2(5,1)						
	16:00	RSV			2					
	16:00	RPVs			1					
	16:15	RKG		1(6)						
	16:15	RKG		1(6)						
	16:30	RSV			1					
	16:30	RPV			1					
	16:45	RSV			1					
	16:45	RPVs			1					
	17:00	RSV			1					
	17:15	CFV			2					
	17:15	GPV			1					
	17:30	TUG			1					
	17:30	CFV			1					
	17:30	RSV			1					
	17:30	COL			1					
	17:30	GPV			1					
	17:30	TUG			1					
	17:30	RKG			1(4)					
	17:45	CFV			1					
	17:45	RSV			1					
	17:45	COL						1		
	17:45	TUG			1					
	17:45	RSV			1					
	17:45	CFV			2					
	17:45	RKG			1(4)					
	18:00	RPVb			1					
	18:00	CFV			1					
	18:00	TUG			1					
	18:00	RPV			1					
	18:00	RSV			1					
	18:00	RKG			1(4)					
	18:15	RSV								
	18:15	CFV			2					
	18:15	TUG			1					
	18:15	RPV			1					
	18:15	RKG			1(6)					
	18:30	RSV			2					
	18:30	TUG			1					
	18:30	CFV			1					
	18:30	RSV			2					
	18:30	TUG			1					
	18:30	RPV			1					
	18:30	RKG			1(6)					
6-Jul	8:00	no boats								
6-Jul	8:15	no boats								
6-Jul	8:30	no boats								
6-Jul	8:45	CFV			1					
6-Jul	9:00	CFV			1					
6-Jul	9:00	COL				1				
6-Jul	9:15	RSV				1				
6-Jul	9:15	CFV			1					
6-Jul	9:15	RPV			1					
6-Jul	9:30	CFV			2					
6-Jul	9:45	RSV			1					
6-Jul	9:45	CFV			3					
6-Jul	9:45	RPVb			1					
6-Jul	9:45	TUG			1 no barge					
6-Jul	10:00	CFV			3					
6-Jul	10:00	TUG			1 no barge					
6-Jul	10:00	RSV			1					
6-Jul	10:15	no boats								
6-Jul	10:30	RKG			1(8)					
6-Jul	10:45	RPVb			1					
6-Jul	10:45	RKG			1(8)					
6-Jul	11:00	RPVb			2					
6-Jul	11:00	RSV			2					
6-Jul	11:00	RKG			2(8,4)					
6-Jul	11:15	RSV				2				
6-Jul	11:15	RKG			2(4,8)					
6-Jul	11:30	RPVb			2					
6-Jul	11:30	RPVb			1					
6-Jul	11:30	RKG			2(8,4)					
6-Jul	11:30	RSV			2					
6-Jul	11:30	CFV			1					
6-Jul	11:45	RSV			1					
6-Jul	11:45	RKG			2(8,4)					
6-Jul	11:45	CFV			1					
6-Jul	12:00	RPVb			1					
6-Jul	12:00	RPVb			1					
6-Jul	12:00	CFV						1		
6-Jul	12:15	RKG			3(4,4,5)					
6-Jul	12:15	RKG			2(5,4)					
6-Jul	12:15	RPVs			1					
6-Jul	12:15	RPVb			1					
6-Jul	12:15	CFV							1	
6-Jul	12:15	CCV			1					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	12:30	RKG		4(6,4,1,8)	1					
		RSV			1					
	12:45	RKG		3(6,1,4)						
		RSV			1					
		RKG		1(6)						
	13:00	CFV			1	1				
		RSV			1					
		TUG				1				
	13:15	RSV		1						
		CFV			2					
		TUG			1					
		RKG		1(3)						
	13:30	CFV		1	1					
	13:45	RKG		1(8)						1
		RPVb			1	1				
		CFV			1					
		CAR			1					
	14:00	CAR			1					
		CFV		1						
		RPVs						2		
	14:15	CAR			1					1
		CFV		1			1			
		RPVs		1						
		TUG		1						
		GPV		1						
	14:30	CAR			1					
		RSV			1					
		CFV		2	2					
		TUG			1					
		RPVs			1					
		GPV		1						
	14:45	TUG			2					
		CAR			1					
		GPV		1						
		RSV			1					
		CFV			3					
	15:00	RPVs			1					
		CAR			1					
		TUG			1					
		RSV			1					
	15:15	RSV			1					
		TUG			1					
		CAR			1					
	15:30	RPVs						1		
		TUG			1					
		CAR		1						
		RKG		1(6)						
	15:45	RPVs						1		
		CAR		1						
		RKG		2(8,6)						
	16:00	RSV		1						
		RPVs						1		
		CFV			1					
		*RKG		1(8)						
	16:15	RSV			1					
		CFV		1						
		RPVs						1		
		RKG		2(2,8)						
	16:30	RSV			1					
		RPVs						1		
		RKG		2(2,8)						
		CFV		1						
		RPVb		1						
		RKG		1(2)						
	17:00	CFV			1					
		RKG		1(2)						
	17:15	RKG		1(2)						
		RSV		1						
		RPV		1						
	17:30	RPVb			1	2				
		RKG		2(2,4)						
		RSV		1						
	17:45	RPVs		1		1(4)				
		RKG								
		RSV		1						
		PRV						1		
	18:00	CFV			1					
		PRV		1						
		RSV		1						
		RKG				1(4)				
	18:15	no boats								
	18:30	RPV			1					
		GPV			1					
	18:45	COL		1						
		CFV			1					
		GPV		1						
	19:00	COL			1					
	19:15	no boats								
	19:30	CFV			2					
	19:45	CFV			2					
		COL		1						
	20:00	COL			1					
7-Jul	8:00	CFV		2						
	8:15	no boats								
	8:30	CFV			1					
	8:45	no boats								

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	9:00	CFV			1					
	9:15	CFV		1						
	9:30	CFV		1						
	9:45	no boats								
	10:00	RKG			1(4)					
	10:15	CFV			1					
	10:30	RSV			1					
	10:45	RSV			1					
	11:00	TUG			1					
	11:15	TUG			1					
	11:30	CFV			1					
	11:45	RSV			1					
	12:00	CFV			1					
	12:15	RPVb		1						1
	12:30	CFV			2					
	12:45	RSV			1					
	13:00	RPVb			2					
	13:15	CFV			1					
	13:30	CFV			1					
	13:45	RPVb			1					
	14:00	CCV			1					
	14:15	TUG		1	1					
	14:30	CFV			1					
	14:45	RPVb			1					
	15:00	CFV			2					
	15:15	CFV		1	2	1				
	15:30	CFV			2					
	15:45	CFV		2	3					
	16:00	RPV		1						
	16:15	RKG			1(2)					
	16:30	COL		1						
	16:45	COL		1						
	17:00	CFV			1					
	17:15	RKG			1(2)					
	17:30	RSV			1					
		CAR		1						
		CFV			1					
		CFV			1					

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CAR			1					
		RSV		1						
		RPVs			1					
		RKG		1(2)	1(1)					
	17:45	CAR			1					
		RPV		1						
		CFV		1						
	18:00-18:15	rain								
	18:30	CFV		1	7					
		CAR			1					
	18:45	CAR		1						
		CFV		1	4					
	19:00	CFV		3						
		RKG		1(2)						
	19:15	CFV			1					
	19:30	CFV			4					
	19:45	CFV			4					
	20:00	CFV			1					
		CCV								
6-Jul	8:00-9:45	fog all			1					
	9:45	RSV			1					
		CFV			1					
	10:00	RPVs								1
		RSV			1					
		RPVb		1						
		CFV		1						
	10:15	RPVs			2					
		RPVb			1					
		CCV		1						
		RSV		1						
		RKG		1(7)						
	10:30	CCV			2					
		CFV			2					
		RKG		1(6)						
	10:45	CFV			2					
		RSV			2					
		CCV			1					
		RPVs				1				
		RPVb			1					
	11:00	CFV			2	1				
		CCV				1				
		RSV			2					
		RKG		1(7)						
	11:15	RSV		1	1					
		CCV			1					
		CFV			1					
		TUG			1					
		RKG		2(1,2)	1(7)					
	11:30	CFV		1						
		TUG		1						
		RSV		1	2					
		RKG		1(7)						
	11:45	CCV				1				
		RKG		1(7)						
		RSV		1	3					
		CFV		1						
		CCV			1					
	12:00	RSV		1	3					
		RPV			2					
		RKG		1(7)						
		CCV			2					
	12:15	RPV		1						
		CCV			2					
		RKG		1(2)	1(7)					
		RSV			1					
	12:30	RSV		2	3					
		CFV			3					
		RPV			1					
		RKG		2(2,7)						
	12:45	RSV		1	1					
		RKG		1(2)	1(7)					
		CFV			6					
		RPV			1					
		CCV			1					
	13:00	TUG		1						
		CFV		1	6					
		RKG		1(2)	1(7)					
		CCV		1						
		RPVb			1					
		RPVs			5					
		RSV			1					
	13:15	TUG			1					
		CFV		3	1					
		RPVs		1						
		RSV		1						
		RKG		1(7)						
		CCV		2	1					
		RPVb		1						
	13:30	CCV		1	1					
		CFV			1					
		RKG		3(7,1,2)						
		PRV		1						
		RPV		1						
		RSV		1	1					
	13:45	CCV		2						

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFV		1						
		RKG		3(7,1,2)						
		PR		1						
		RPV		1						
		RSV		1	1					
	14:00	CCV		2						
		CFV		1						
		RKG		2(3,2)						
		RPV		1						
		RSV		1	1					
		PRV		1						
	14:15	CFV			1					
		RSV			1					
	14:30	CFV			1	1				
		RSV			1					
	14:45	CCV		1						
		CFV			3					
		RSV			1	2				
	15:00	RSV				2				
		CFV		2		2				
		CCV				1				
	15:15	RSV		1	2					
		RPVs			1					
		CFV			1	1				
	15:30	CFV		2		2				
		RSV		3						
	15:45	CFV				1				
		RSV				1				
	16:00	CFV		1	2					
		RSV			1					
		PRV			1					
	16:15	CFV				1				
		RSV		1						
		PRV				1				
	16:30	COL		1						
		CFV		2						
		RPVs		1						
		RSV		1						
	16:45	PRV		1						
		CFV		2						
		COL			1					
		RSV		1						
	17:00	no boats								
	17:15	CFV				1				
		COL		1						
	17:30	RPVs			3					
		COL		1						
		RPVb			1					
		RSV		1						
	17:45	CFV			2					
		RSV		1						
	18:00	RSV			1					
		CFV				1				
	18:15	CFV			1		2	1		
		RSV			1					
	18:30	CFV			1					
	18:45	no boats								
	19:00	RKG		1(2)						
	19:15	CFV			1					
		RKG		1(2)						
	19:30	CFV		1	3					
		RKG		1(2)						
		GPV		1						
	19:45	CFV		1	1					
		GPV			1					
	20:00	CFV			5					
9-Jul	8:00	CFV		2	6	1				
		TUG		1						
		RPV			1					
	8:15	CFV		2	12					
		TUG			1					
	8:45	CFV		3	4					
	9:00	CFV		2	5					
		TUG			1					
	9:15	RSV		1						
		TUG		1	1					
		CFV		6						
		RPVs							1	
	9:30	RPVs								1
		TUG			1					1
		CFV		2	3					
		RSV		1						
	9:45	CFV		2	2		1			
		TUG			1					
		RPVs		1						
		RSV			1					
		CCV		1						
	10:00	CCV		1						
		TUG		1						
		CFV		1	4					
		RSV			1					
		RPVs			2					
		RPVb		1						
	10:15	CFV		2	8				1	
		RSV			3					
		RPVb		2						

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	10:30	RSV			3		1			
		CFV		2	2					
		RPVb				1				
	10:45	CFV		3	3					
		RSV		1						
		RPVs			1					
	11:00	CFV		2	2					
	11:15	CFV			1					
		CAR		1						
	11:30	RSV			1					
		CAR			1					
		RPV		1						
	11:45	RPVs			3					
		RSV		1						
		CFV			2					
		RKG			1(8)					
	12:00	CFV		2	2					
		RPVs		1						
	12:15	CFV		1		1				
		RPVs				1				
	12:30	CFV		1	1					
		RPVs		1						
	12:45	CFV		1	2	1				
		RSV			1					
	13:00	CFV		1	2					1
		RSV			1					
		TUG		1						
	13:15	CFV			1		1			
		TUG		1						
		RSV		1						
	13:30	CFV		1	1					
		RSV			1					
		TUG			2					
	13:45	TUG			1					
		RPVs			1					
		RSV			1					
		CFV		1	1					
	14:00	RPVs			2					
		CFV		1	2					
	14:15	RKG			1(1)					
		CFV		2	2					1
		RPVs		1						
	14:30	CFV		1	4					
		RPVs			2					
		CCV			1					
		RPVb			1					
	14:45	CFV		1	6					
		RPVs			1					
		CCV			1					
		RPVb		1						
		RSV		1						
		RKG			1(7)					
	15:00	CFV		4	1					
		RPV			1					
		RKG			1(7)					
		RSV			1			1		
	15:15	RSV			1					
		TUG		1						
		RKG		1						
	15:30	TUG			1					
		CFV			2					
		RSV			2					
		RKG			1(7)					
	15:45	RKG			1(7)			1		
		TUG								1
		RPVs			1					
		RSV		1						
		RPVs			2					
	16:15	RPV			1					
		CFV				1	1			
		RSV			1					
		RKG			1(2)	1(1)				
	16:30	CFV			3					
		RSV		1						
		RKG			1(2)	1(1)				
	16:45	CFV		3	1					
		RSV			1					
	17:00	CFV		1	2					
		RSV			1					
	17:15	CFV				2				
		RSV		1						
	17:30	CFV				1				
	17:45	CFV		1						
		RPVs			1					
	18:00	no boats								
	18:15	no boats								
	18:30	RPVs		1						
	18:45	CFV		1						
	19:00	COL				1				
	19:15	CFV				1				
		COL		1						
	19:30	no boats								
	19:45	RPVb			1					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	20:00	RPVb			1					
		TUG		1						
10-Jul	8:00	CFV			1					
		RPV			1					
	8:15	CFV			3					
	8:30	CFV		1	1					
	8:45	CFV		1	1					
		RSV		1						
	9:00	RSV		1	3					
	9:15	RSV			1					
		RPV			2					
	9:30	CFV		2						
		RSV			1					
		RPVs					1			
	9:45	RSV			1					
		RPVs						1		
	10:00	CFV			1					
		RPV				1				
	10:15	CFV			2					
		RPVs			1					
		RSV			1					
	10:30	RPVs			1					
		RSV			1					
		CFV			1					
	10:45	RPVs			1					
		RSV			1					
	11:00	no boats								
	11:15	no boats								
	11:30	RSV			1					
		RPVb			1					
	11:45	RSV			2					
	12:00	RSV			1		1			
	12:15	RSV		1	1					
		RPVb			1					
	12:30	RSV		1	1					
	12:45	RSV		1	1	1				
		CFV		1						
		RKG		1(6)						
	13:00	RSV			3					
		CFV			2					
		RPVs			1					
	13:15	RSV			3					
		CFV			1		1			
		RPV		1						
		RKG		1(6)						
	13:30	RSV			1					
		CFV			2					
		RPV		1						
		RKG		1(7)						
	13:45	RSV			1					
		CFV			1					
		RPV		1						
	14:00	CFV		1						
	14:15	RSV			1					
	14:30	RSV						1		
		TUG		1						
	14:45	RSV						1		
		TUG		1						
	15:00	RSV		1						
		TUG		1						
	15:15	RSV			1					
		TUG		1						
	15:30	TUG		1						
	15:45	TUG		1						
		RPVb			1					
	16:00	TUG		1						
		RPVb			1					
	16:15	RPV			1					
		TUG		1						
		CAR			1					
	16:30	CAR			1					
		TUG		1						
	16:45	RKG		1(7)						
		RSV			2					
		TUG		1						
		CFV			1					
		CAR		1						
		RPV		1						
	17:00	CFV		1						
		RSV		2						
		TUG		1						
		RPVb			1					
	17:15	TUG			1		1			
		RPVb			1					
		RKG		2(7,2)						
	17:30	TUG			1		1			
		CCV		2						
		RKG		2(7,2)						
		RPVb						1		
	17:45	CCV		2						
		RKG		2(7,1)						
		TUG					1			
		RPVb			1	1				
	18:00	RPVb					1			
		TUG					1			
		CCV		2						

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		cannot see VI shore in 2A-rain								
	18:15	CCV		2						
		TUG					1			
		cannot see VI shore in 2A-rain								
	18:30	TUG					1			
		CCV		1						
		cannot see VI shore in 2A-rain								
	18:45	TUG					1			
		cannot see VI shore in 2A-rain								
	19:00	TUG						1		
	19:15	TUG						1		
		RSV			1					
		COL		1						
		CFV								
	19:30	RSV			1					
		CFV			1					
		COL			1					
		TUG			1					
	19:45	TUG					1			
		CFV						1		
	20:00	TUG						1		
		CFV							1	
11-Jul	8:00-8:45 fog all									
	9:00	no boats								
	9:15	no boats								
	9:30	RSV			1					
		CFV			1					
		RKG		1(1)						
	9:45	CFV			2					
		RPV			3					
		RKG		1(1)						
	10:00	CFV			1					
		RKG		1(1)						
	10:15	CCV		1						
		CFV		1	2					
		RKG		1(1)						
		RPV		1						
		TUG			1					
	10:30	TUG		1	1					
		RPV		1						
		CCV		2						
		RKG		2(1,1)						
		CFV			2					
		RPV			1					
	10:45	RKG		2(1,1)						
		CCV		2						
		RPV		1B,1S	1B					
		CFV		1				1		
	11:00	CFV			1					
		CCV		2						
	11:15	CFV			1					
	11:30	CFV			1					
		PRV			1					
		RPV		1B	1B					
		RSV		1						
	11:45	CFV					1			
		RPV		1B	1B					
		RSV		1						
		RKG		1(2)						
	12:00	CFV						1		
		RSV			1					
		RPVb			1					
		RKG		4(2,6,7,9)						
	12:15	CFV					1			
		RPV			1B	1B				
		RSV			1B	1B				
		RKG		2(2,9)						
	12:30	RKG		2(2,9)						
		RPV			1B					
		RSV							1	
	12:45	RPV			1S					
	13:00	RSV						1		
		CFV		1						
	13:15	TUG			1					
		CFV		1	1					
		RPV		2B	1S					
		RSV							1	
	13:30	TUG		1	1					
		RPV		2B	2S					
		RSV						4		
		CFV			1					
	13:45	CFV			1					
		RPV			2B					
		RSV						1	1	
		TUG			1					
		RKG		1(5)						
	14:00	TUG			1					
		RSV						1	1	
		RKG		1(5)						
		RPV			1B					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	14:15	RPV			1B					
		CFV			1					
		RSV		1						
		RKG		1(5)			1(2)			
	14:30	RSV			1					
		RPV			1S					
		RKG		1(4)				1(2)		
	14:45	RKG		1(5)		1			1(2)	
		RSV								
		RPV		1B 1S	1B					
		CCV		2						
	15:00	CCV		1	1					
		RKG		1(6)	1(2)					
		RPV		1B					1B	
		RSV		1						
	15:15	CCV		1						
		RKG		3(9,2,6)						1(2)
		RPV		1B 1S	1B				1B	
	15:30	RKG		2(6,9)						1(2)
		RPV			2B				1B	
	15:45	RPV			1B					
		CCV			1					
		RKG		2(6,9)						1(2)
	16:00	no boats								
	16:15	RPV			1B					
	16:30	no boats								
	16:45	RKG				1(2)				
	17:00	RKG		1(5)						
		CFV			1					
	17:15	RKG		1(3)		1				
		CFV								
	17:30	no boats								
	17:45	RKG		1(2)						
	18:00	no boats								
	18:15	CFV			1					
	18:30	CFV			2					
	18:45	RPV			1B					
		CFV			1					
		RKG					1(1)			
	19:00	no boats								
	19:15	no boats								
	19:30	no boats								
	19:30 - 20:00	glare								
12-Jul	8:00	PRV			1					
		TUG			1					
	8:15	TUG			1					
		RPVs		1						
	8:30	TUG		1	1					
		RSV			1					
	8:45	RSV			3					
		CFV			1					
		TUG			1					
	9:00	CFV			2					
		TUG			1					
		RSV			1					
	9:15	TUG			1					
		CFV			1					
	9:30	RSV			1					
		TUG			1	1				
		CFV			1					
	9:45	CFV			1					
		RSV			2					
		TUG			1	1				
	10:00	CFV			2					
		RSV			1					1
		TUG			1					
	10:15	RSV			1					1
		TUG			1					
		RPVb			1					
		CFV			2					
	10:30	CFV			1	3				
		RPVb			1					
		RSV			1					1
		TUG			2					
	10:45	RPVb			5					
		RSV			1					
		CFV			1					
		TUG			1					
		RKG		1(9)						
	11:00	RSV			1					
		CFV			2					
		TUG			1					
		RKG		4(2,9,6,2)						
	11:15	CFV			2					
		RSV			1					
		RKG		1(2)						
		TUG			1					
	11:30	RPVs			2					
		CFV			1	1				
		RKG		3(9,7,2)						
		TUG			1					
	11:45	RPVs			1					
		CFV			2					
		TUG			1					
		RKG		3(7,9,2)						
	12:00	RPVs			2					

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		TUG					1			
		CFV			1					
		RKG		2(2,8)						
	12:15	RKG		2(10,6)						
		TUG			1					
		RPVs								
		RSV			1				1	
	12:30	RSV					1			
		RPVs						1		
		TUG			1					
		RKG		2(1,6)			1(8)			
	12:45	RKG		1(9)			1(8)			
		RSV			1			1		
		RPVs						1		
		TUG			1					
	13:00	RKG		2(8,9)						
		RPVs		1					1	
		TUG			1					
		RSV							1	
	13:15	TUG		1	1					
		RSV			1	1				
		RKG		1(8)						
	13:30	TUG			2					
		RKG		1(8)						
		RSV			1	1				
	13:45	RSV			2					
		CFV			1					
		RPVb			1					
		TUG			2					
		RKG		1(8)						
	14:00	RSV		1	1					
		CFV			1					
		RKG		1(8)						
	14:15	TUG			1					
		RSV			2					
	14:30	TUG			1					
		RSV			2					
	14:45	TUG				1				
		RSV			2					
		CFV			2					
		RPVb			1					
		TUG				1				
		RKG		2(1,6)						
	15:00	CFV			2					
		RSV		1				1		
		TUG			1					
	15:15	RKG		1(6)					1	
		RSV								
		TUG			1					
		RKG		1(6)						
		CCV			1					
	15:30	CFV			1					
		CCV								
		*TUG			1					
		CFV			1					
		RSV							1	
		RKG		1(6)						
		RPVb			1					
	15:45	RSV			1					
		CFV			1					
		RPVb			1					
	16:00	RSV			1					
	16:15	RKG		2(2,14)						
		RSV			1					
	16:30	RKG		2(11,4)						
	16:45	RKG		2(1,1)						
	17:00	RPVs			1					
		RKG		2(2,1)						
	17:15	CFV			1					
		RKG		1(2)						
	17:30	CFV			2					
		RPVb			1					
	17:45	CFV			1					
		RSV			1					
	18:00	CFV			1					
	18:15	no boats								
	18:30	no boats								
	18:45	no boats								
	19:00	no boats								
	19:15	no boats								
	19:30	CFV			1					
	19:45 - 20:00	glare								
13-Jul	8:00	CFV			1					
	8:15	no boats								
	8:30	RSV			1					
		CFV			1					
	8:45	CFV			1					
	9:00	CFV			1					
	9:15	CFV			1					
		RSV			1					
		CCV			1					
	9:30	CCV			1	1				
		CFV			1	1				
		RSV				1				
	9:45	CFV			2		1			
		CCV								

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	10:00	CCV		1	1					
		CFV		2	1					
	10:15	RPVb								1
		CFV		2				1		
		RSV			1					
		CCV			1					
	10:30	RSV			3					
		TUG		1						
		RPVb						1		
		CCV			1					
	10:45	RSV			4					
		CFV		1	1	1				
		CCV			2					
		TUG					1			
		RPVb		1	1					
		RKG		1(6)						
	11:00	RPVs		3	1	1				
		RPVb					1			
		CFV		1	2					
		RKG		1(6)						
		TUG						1		
		CCV			2					
	11:15	RPVs		3						
		RPVb					1			
		RKG		1(6)						
		CFV		1	2					
		TUG				1				
		CCV			2					
	11:30	TUG								
		CFV		2	2					
		CCV			2					
		RPVs			3					
		RKG		1(6)						
	11:45	CFV		1	2					
		RPV			2					
		RSV								1
		TUG			1					
		CCV			2					
		RKG			2(1,6)					
	12:00	RPV		2	2					
		TUG			1					
		CCV			2					
		RSV				1				
		RKG			2(1,6)					
	12:15	RPV			1	1				
		RSV				1				
		CCV				2				
		RKG			2(1,6)					
	12:30	CFV		1						
		CCV			2					
		RSV			2					
		RKG			2(1,6)					
	12:45	CCV		2	1					
		CFV		1	2					
		RSV			1					
		RKG		1(6)	1(1)					
	13:00	CFV		2	2					
		RSV			1	1				
		CCV			2					
		TUG				1				
	13:15	CCV		2						
		RSV		1						
		TUG		1						
		CFV		1	2					
	13:30	CFV		1	1					
		RSV		1						5
		CCV		1						
		RPV			2					
	13:45	CCV		2						
		CFV		2						
		RPV		1	2					
		RSV				2				
	14:00	CCV		3						
		RSV		1						
		RPV		1	2					
		TUG			1					
		RKG			1(1)					
	14:15	CCV		1	2					
		RPV			1					
		TUG			1					
		CFV			1					
	14:30	CCV		2	2					
		RSV		1						
		TUG		1						
		RKG			1(6)					
		RPV		1						
		CFV				1				
	14:45	RSV				1				
		CFV			1					
		RPV			1					
		CCV			1					
	15:00	RSV			1					
		RPV					1			
	15:15	RKG				1(2)				
	15:30	RKG				2(8,2)				
	15:45	RKG				1(8)				

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RPVs		5						
	16:00	RKG		1(8)						
		CFV		1						
	16:15	RKG		1(8)						
		RPVs		2						
		CFV			1					
	16:30	CFV			1					
		RPVs		2						
	16:45	RKG		1(1)						
		CFV			2					
		RPVs		2						
	17:00	RPVs		2	1					
		CFV			1					
	17:15	CV			1					
	17:30	RSV			1					
	17:45	RSV			1					
		RPV								1
	18:00	CFV			1					
		RPV			2					
	18:15	RSV			1					
	18:30	no boats								
	18:45	CFV			1					
	19:00	no boats								
	19:15	CFV			1					
	19:30	CFV		1	1					
	19:45	CFV			1					
	20:00	COL			2					
		CFV			1					
		CAR			1					
14-Jul	8:00-8:15 log all									
	8:30	no boats								
	8:45	RPVs			1					
	9:00	RPVs			1					
	9:15	CFV			1					
	9:30	CFV			1					
	9:45	CFV		1						
		RPV								
		RSV								2
	10:00	CAR			1					1
		RPV								2
		RSV								1
		TUG			1					
	10:15	TUG			1					
		RPV		3						
		RSV								1
		CFV			1					
		GPV			3					
	10:30	CFV			1					
		GPV		1	1					
		RPV		2						
		RSV		1						
		TUG		1						
	10:45	CFV		1						
		GPV		2	1					
		RSV		1	1					
		TUG		1						
	11:00	CFV			1					
		GPV		1						
		RKG		1(1)						
		RSV								1
	11:15	RKG		1(1)						
		RSV								1
		TUG								1
	11:30	CFV			1					
		RSV								1
		RPV			1					
		RKG		1(1)						
		TUG								1
	11:45	RKG		1(1)						
		RSV			3					
	12:00	CFV			1(1)					
		RKG		1(1)						
		RPV		1						
		RSV			2					
	12:15	CFV			4					
		RKG		1(1)						
		RPVs		1	2					
		RSV			3					
	12:30	CFV		2	2					1
		RKG		1(1)						
		RPVs		2	1					
		RSV			2					
	12:45	CFV		3	3					
		RKG		1(1)						
		RPVs		2	1					1
		RSV			2					
	13:00	CFV			4					
		RKG			1(1)					
		RPV			1					
		PRV			1					
	13:15	CFV			2					1
		PRV			1					
		RPVs			1					
		RSV			1					
		RKG			1(1)					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	13:30	RPVs		1						
		CFV		1	3		1			
		RSV			1					
		PRV			1					
	13:45	CFV		2	2			1		
		RPVs			2	2				
		RSV		1						
	14:00	CFV			1			1		
		RPVs		1						
		TUG		1						
	14:15	RSV		1						
		RPVs		1						
		CFV		1			1			
		TUG		1						
	14:30	RPVs	3							
		TUG	1							
		RSV	1							
		CFV					1			
	14:45	RSV			2					
		CCV			1					
		RPVs	3							
		TUG	1							
		PRV			1					
		CFV								
	15:00	RSV			2				1	
		RPV	3							
		PRV			1					
		TUG	2							
	15:15	RSV			2					
		RPV	3							
		PRV			1					
		TUG	2							
	15:30	RSV			2					
		TUG	1	2						
		PRV			1					
	15:45	TUG	1	1						
		PRV			1					
		RSV			1					
		CFV			1					
		RPVs			1					
	16:00	RPVs	1							
		COL	1							
		CCV			1					
		RSV			1					
		TUG	1							
		PRV			1					
	16:15	COL	2	1						
		CCV			1					
		RSV			1					
		TUG	1							
		PRV			1					
		RKG					1(2)		1(1)	
	16:30	COL		1	1					1
		CCV		1						
		RKG					1(2)		1(1)	
		CFV	1	1						
		TUG	1							
	16:45	CCV	1							
		CFV	1							
		TUG	1							
		RKG	1(1)	1(1)						
	17:00	RPV	1							
		CCV	1							
		TUG			1					
		RKG	1(1)	1(1)						
	17:15	RPV			2					
		TUG			1					
		RKG	191							
	17:30	RPV			1					
		TUG			1					
	17:45	CFV			1					
		RPV			1					
		TUG			1					
	18:00	CFV			1					
		RPV			1					
		TUG			1					
	18:15	RPV			1					
		TUG			1					
		CFV	1							
	18:30	CFV			1					
		RPV			1					
		TUG			1					
	18:45	CFV			1					
		RPV			1					
		TUG			1					
	19:00	CFV								
		RPV			1					
		TUG		1						
	19:15	RPV			1					
		TUG		1						
	19:30	TUG	1							
	19:45	RSV			1					
		TUG	1							
	20:00	TUG	1							
15-Jul	8:00	TUG			1					
		RPVb			1					

## APPENDIX D 1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	8:15	TUG			1				1	
	8:30	TUG			1				1	
		RSV			1					
	8:45	TUG			1	1			1	
		CFV			1					
		RPVb		1						
	9:00	RPV		1						
		TUG						1		1
		RSV		1						
	9:15	TUG					1			
		RPVb			1					
		RSV			1					
		RPVs		1						
	9:30	TUG			1					1
		RSV			1					
		CCV			1					
		RPVs						1		
	9:45	RSV			4					
		TUG							1	
		RPVs		1						
	10:00	TUG							1	
		RSV			1					
		RPVs		1						
		CCV		2						
	10:15	CCV		3						
		TUG							1	
		RSV			1					
	10:30	TUG							1	
		RSV			1					
		CCV		4						
		RPVs		1						
	10:45	TUG							1	
		RSV			1					
		CCV		1						
	11:00	TUG							1	
		CCV		1						
	11:15	TUG							1	
		RKG			1(1)					
	11:30	RKG			2(1,2)					
		TUG							1	
	11:45	RKG			2(1,2)					
		TUG			1					
		CFV			1					
		RSV			1					
		CCV		1						
	12:00	CCV		2						
		RSV			1					
		CFV			1					
		TUG				1				
	12:15	CCV		2						
		RSV			1					
		CFV			1					
		TUG				1				
	12:30	CFV		1	3					
		RPVs			2					
		CCV		2						
		TUG				1				
	12:45	CCV		2						
		CFV			3					
		TUG				1				
		RPVs		2						
		RKG			1(3)					
	13:00	CCV			2	1				
		RPVs		2						
		TUG				1				
		CFV			2					
		CCV		1	2					
		RSV			1					
	13:15	RSV			2					
		CCV		1	2					
		CFV			1					
		RPVs			1					
	13:30	CCV		1	2					
		CFV			1					
		RPVs			1					
	13:45	CCV			3					
		CFV			2					
		RSV			1					
		RPVs			1	1				
	14:00	CFV		1	2					
		CCV			2					
		RPVs			1	1				
		RKG			1(1)					
	14:15	RSV			1					
		RPV			1					
		CFV			2					
		CCV			2					
	14:30	TUG			1					
		CCV			1					
		CFV		1	2	1				
		RPVs			3					
		RKG			1(2)					
	14:45	TUG				1				
		CFV				3				
		RPVb				3				
		RPVs				2				
		GPV				1				
		CCV				1				
		RKG			1(2)					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	15:00	CFV		1	2					
		CCV			1					
		RPVb								
		RPVs		1						
	15:15	RPV			1				1	
		CCV			1					
	15:30	COL		1						
		CCV			2					
		RPVb			1					
	15:45	COL		1						
		CFV			1					
		RPVb		1	1					
		TUG			1					
		CCV		1	1					
	16:00	TUG			2					
		COL								
		CFV		1	1					
		CCV		1	1					
	16:15	TUG			2					
		CFV			1					
		CCV		1						
	16:30	RSV			1					
		CCV		2						
		COL				1				
	16:45	RPV		1						
		RSV		1						
		CCV		1						
		COL								
	17:00	RSV			1					
		TUG			1					
	17:15	RPV		2						
		RKG		1(1)						
		RSV			1					
		TUG			1					
	17:30	CFV			1					
		RSV					1			
		RPV		3						
	17:45	RSV				1				
		CFV		1						
		CCV		1						
		RPV		2						
	18:00	RPV		1						
		CCV		1						
	18:15	CCV		1						
	18:30	CCV		1						
		CFV		3						
		RSV			2					
	18:45	CFV		3						
		RSV		2						
	19:00	CFV		4						
		RSV		2						
		RPVb		1						
	19:15	CFV		1	1					
	19:30	CFV		1						
	19:45	no boats								
	20:00	no boats								
16-Jul	8:00	CFV		1						
		RPVs		1						
	8:15	RPVs		1	1					
		RPVb			1					
		TUG			1					
		RKG		1(4)						
	8:30	CFV			4	2				
		RSV			1					
		RKG		1(4)						
	8:45	TUG		1						
		CFV			7					
		RSV			1	1				
		RKG		1(5)						
	9:00	TUG			3					1
		RSV							1	1
		RKG		1(5)						
	9:15	RSV					1			
		CFV			1					
		RKG		1(5)	1(1)					
	9:30	RPVs			1					
		RKG			1(1)					
		RSV								
		CFV								
	9:45	CFV			1				1	
		RSV			1					
		RKG			2(2,1)					
	10:00	CFV		1	1					
		RSV		1						
		RKG			1(1)					
	10:15	RKG			1(1)					
	10:30	no boats								
	10:45	RPVb				1				
		CFV				1				
	11:00	CFV				1				
		RKG			1(1)					
	11:15	TUG				1				
		CFV				1				
	11:30	no boats								
	11:45	RKG			1(1)					

## APPENDIX D 1 ~ Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	12:00	no boats								
	12:15	RPVb			2					
		RKG					1(1)			
	12:30	RKG					1(1)			
		RPVb			2					
	12:45	RKG					1(1)			
		RPVs		1						
	13:00	CFV			1					
		RKG						1(4)		
		RPVs		1						
	13:15	CFV		1						
		RKG						1(1)		
		CAR			1					
	13:30	CFV			1					
		CAR			1					
		RKG							1(1)	
	13:45	RKG							1(1)	
		CFV		1						
		RPVs		1	1					
	14:00	RPVb			1					
		CFV			1					
	14:15	CFV			3					
		GPV			1					
	14:30	RPVb			1					
		CFV			4					
	14:45	CFV		1	5					
	15:00	CFV			2					
	15:15	CFV			1					
	15:30	RPVb			1					
		RSV		1						
	15:45	CFV			2					
		RPVb			2					
		RSV		1						
	16:00	RPVs			1					
		RSV			1					
		CFV			2					
	16:15	CFV			1					
		RPVb		1						
	16:30	RPVb			1					
		COL		1						
		CFV			1					
	16:45	COL			1					
		RPVs		1						
	17:00	CFV			1					
	17:15	COL			1					
	17:30	COL			1					
	17:45	COL			1					
		CFV			1					
	18:00	CFV		1						
	18:15	CFV			1					
	18:30	CFV			1					
	18:45	CFV			1					
		COL			1					
		TUG			1					
	19:00	COL						1		
		CFV			1					
		TUG			1					
	19:15	CFV			1					
		COL		1						
		TUG			1					
	19:30	TUG		1						
		CFV			1					
	19:45	CFV		1		1				
	20:00	CFV			1					
17-Jul	8:00	CAR			1					
		CFV			2					
		RSV							1	
	8:15	RSV								1
		CFV			2					
	8:30	RSV			1					
		CFV		1						
	8:45	CFV			2					
		RPVb			1					
	9:00	no boats								
	9:15	fog								
		RPVb			1					
		RSV			1					
	9:30	fog							1	
		RSV								1
	9:45	fog								
		RSV			1			1		
	10:00 - 10:30 all zones fogged in									
	10:45	CFV			2					
	11:00	RPVb			2					
		RSV			2					
		RPVs				1				
	11:15	RSV		1						
		TUG		1						
	11:30	TUG			1					
	11:45	CCV			1					
		TUG			1	1				
	12:00	CCV			1					
		TUG			1					
	12:15	TUG			1		1			
		GPV								
	12:30	GPV			1					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	12:45	RPVs			1					
	13:00	RPVs			1					
	13:15	RSV			1					
	13:15	CCV			1					
	13:30	CCV			1					
	13:30	RPVs			1					
	13:45	RPVs			1					
	14:00	RPVb		1						
	14:15	RPVs			1					
	14:30	RSV		1						
	14:45	RSV			1					
	15:00	CFV		1						
	15:00	CFV			2					
	15:15	RPVb			1					
	15:15	RSV		1						
	15:15	RPVs			1					
	15:30	GPV						1		
	15:30	RPVs			1					
	15:30	RPVb			1					
	15:30	RSV		1						
	15:45	RPVs			1					
	15:45	CAR		1						
	16:00	RSV			1					
	16:15	CAR			1					
	16:30	CAR			1					
	16:45	no boats								
	17:00	no boats								
	17:15	no boats								
	17:30	no boats								
	17:45	TUG		1						
	18:00	TUG			1					
	18:00	COL		1						
	18:00	RSV			1					
	18:15	TUG			1					
	18:15	COL			1					
	18:30	RSV			1					
	18:45	RSV						1		
	19:00	RSV							1	
	19:00	TUG			1					
	19:15	RSV					1			
	19:30	CCV			1					
	19:45	CCV			1					
	20:00	CCV			1					
18-Jul	8:00	TUG			1					
	8:15	CCV			1					
	8:15	TUG			1					
	8:15	CCV			1					
	8:30	no boats								
	8:45	TUG		1						
	9:00	CAR				1				
	9:15	CCV				1				
	9:15	RKG			2(1,3)					
	9:30	RKG			2(1,3)					
	9:45	RKG			2(1,3)					
	10:00	CCV				1				
	10:00	RKG				1(3)				
	10:15	RKG				1(3)				
	10:30	RKG				1(3)				
	10:45	RPVs				1				
	10:45	RKG				1(3)				
	11:00	CCV				1				
	11:00	no boats								
	11:15	no boats								
	11:30	CCV				1				
	11:30	RKG				1(1)				
	11:45	RKG				1(1)	1(5)			
	11:45	TUG					1			
	12:00	TUG					1			
	12:00	CFV					1			
	12:15	RKG				1(1)	1(5)			
	12:15	CFV				1				
	12:30	TUG				1				
	12:30	RPVs				1				
	12:30	RKG				2(6,8)				
	12:45	CCV					1			
	12:45	CCV					2			
	12:45	RKG				2(6,8)				
	13:00	RKG				2(6,8)				
	13:00	CCV					1			
	13:00	CFV					1			
	13:15	RPVs					1			
	13:15	CCV					2			
	13:30	CFV					1			
	13:30	CCV					2			

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RKG		1(2)						
		RPVs			1		1			
		RSV			1					
	13:45	CCV		1	1					
		RSV		1	1					
		RPVs		1	4					
		RKG		1(2)						
	14:00	RKG					1(2)			
		CCV		2	1					
		RPVs			1					
	14:15	CCV			2					
		RKG					1(2)			
	14:30	no boats								
	14:45	CCV				2				
		RSV				1				
	15:00	RPVs				1				
		RKG		2(1,2)						
		CCV					1			
	15:15	CCV				3				
		RKG				1(2)				
	15:30	RKG		3(6,8,2)						
		RPVs				1				
		CCV				2				
	15:45	RPVs				1				
		RKG		2(6,8)						
		CCV			1					
	16:00	CCV			2					
		RSV				1				
		RKG		2(6,8)						
	16:15	RSV				1				
		RKG		1(6)						
	16:30	RSV				1				
		RKG		1(6)						
	16:45	RKG		1(6)						
		RSV				1				
	17:00	RKG		1(6)						
		CFV				1				
	17:15	COL			1					
		RKG		1(6)						
		CCV			2					
	17:30	CCV				2				
	17:45	CCV				2				
	18:00	CCV				2				
		RPVb								1
		RPVs				1				
	18:15	CCV								
		RPVs				2				
	18:30	RPVs				1				
		CCV			1					
	18:45	CCV				2				
	19:00	CCV				2				
	19:15	CCV				2				
	19:30	RPVb		2	1					
	19:45	RPVb								1
	20:00	no boats								
19-Jul	8:00	RPVb		1						
		CCV				1				
	8:15	RPVb				1				
		CCV				1				
	8:30	CCV				1				
	8:45	CCV				1				
	9:00	CCV				1				
	9:15	CCV				1				
	9:30	CCV				1				
		RPVb				1				
	9:45	RPVb				1				
		CCV				1				
	10:00	RPVb				1				
		CCV				1				
	10:15	CCV				1				
		RKG		2(1,3)						
	10:30	RSV				1				
		RKG		2(1,3)						
	10:45	RSV				1				
		RKG		2(1,3)						
	11:00	RSV				1				
		RPVb				1				
		CFV				1				
		RKG		1(3)						
	11:15	RSV				1				
		RPVs		1						
	11:30	RPVb			1					
	11:45	CFV				1				
		RPVb				1				
		RPVs				1				
	12:00	CFV				1				
		RSV				1				
		CFV				1				
	12:15	RKG		1(3)						
		RSV				1				
		CFV				1				
	12:30	RKG		2(3,7)						
		RSV				1				
	12:45	TUG					1			
		CFV					1			
		RKG		2(2,3)						

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	13:00	RPVs	1							
		TUG			1					
		CFV		1	1					
		RKG	1(3)							
		RPVs		1						
		RPVb		1						
	13:15	RKG	1(3)							
		RPVb						1		
		CFV		2						
	13:30	RKG	1(3)							
		CFV			2					
	13:45	RPVs			1					
		CFV			2					
		RSV			1					
		RKG	1(3)						1	
	14:00	TUG			1					
		RPVs			1					
		RSV			1					
		CFV	1							
	14:15	RSV			1					
		RPVs			1					
		CFV	1							
	14:30	RSV	1							
		RKG	1(4)							
	14:45	RSV			1					
		RPVs			2					
	15:00	RPVs			2					
		RSV		1		1				
	15:15	RPVs	1		1					
		RPVb	2							
		RSV	1							
	15:30	RSV			2					
		RPVb			1					
		RKG		1(2)						
		RPVs			1					
		CFV			1					
	15:45	RSV			3					
		RKG	1(1)							
		RPVs			1					
		CFV			1					
		RPVb			1					
	16:00	RSV			3					
		CFV	1	2						
		CCV	2							
		RPVs	1							
		PRV			1					
	16:15	CCV			2					
		RSV			2					
		CFV			5					
		PRV			1					
		RKG	1(4)							
	16:30	CCV		1	2					
		RSV			2					
		CFV	1	2						
		RKG					1(4)			
		PRV					1			
	16:45	CFV			2	1				
		CCV			2					
		RKG	1(4)							
		CFV			1	1				
	17:00	CCV			3					
		RSV			1					
		RPVs			1					
	17:15	CFV				1				
		CCV			4					
		RPVs			1					
		RSV			2					
	17:30	CFV				1				
		CAR				1				
		CCV			1					
		RSV			1					
		RKG	1(6)							
		CFV				1				
		CAR				1				
	17:45	CFV				1				
		18:00	CFV			1				
		RKG	1(6)							
	18:15	RPVb	1							
		RKG	1(6)							
		COL	1							
		RSV			1					
	18:30	COL				1				
		RKG	1(6)							
		RPVs	1							
		RSV	1							
	18:45	RSV	1							
		RPVs	1							
		RKG	1(6)							
		COL								
	19:00	RSV	1							
		RKG	1(6)		1					
	19:15	RSV	1							
	19:30	CFV				1				
		RSV	1							
	19:45	CFV				1				
		RSV	1							
	20:00	RPVs			1	1				

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
20-Jul	08:00 - 14:00	All zones obscured by fog								
	14:00	CCV			3					
		CFV							1	
		TUG		1						
		RPVb								2
		RPVs			1					
	14:15	PRV			1					
		CCV			3					
		CFV								1
		RPVb			1					
		RPVs		1						
		RSV			1					
		PRV			1					
		TUG		1	1					
	14:30	TUG			2					
		RPVb			1					
		RSV			2					
		CCV			1					
		CFV			2					
	15:00	PRV			1					
		TUG			1					
		CFV			1					
		RPVs		2						
		RSV		1		1				
		RKG		1(10)						
	15:15	TUG			1					
		RPVs		2						
		RKG		1(10)						
		RSV		3						
	15:30	RPVs		1		2				
		RSV		1		1				
		RKG		1(10)						
	15:45	RPVs		1						
		CFV			1					
	16:00	RPVs		1						
		RSV		1						
	16:15	RKG			1(4)					
		RSV			1					
		CFV			1					
	16:30	RSV		1	1					
		RKG		1						
	16:45	RSV				1				
		RKG		2(8,4)						
	17:00	RSV				1				
		CAR				1				
		CCV		2						
		RPVb		1						
	17:15	CCV		3						
		RPVb		1						
	17:30	CCV		2		1				
		RPVb		1						
	17:45	CCV				1				
	18:00	CCV				1				
		CAR				2				
	18:15	CCV		1						
	18:30	CCV		3						
	18:45	CCV		1	1					
		RPVs		1						
		CFV				1				
	19:00	CFV				1				
		PRV				1				
		RPVs		1						
		CCV		1						
	19:15	PRV				1				
		RPVs		1						
		TUG		1						
	19:30	RPVs				1				
		PRV				1				
		TUG		1						
	19:45	CFV				1				
		COL				1				
		RPVs		1						
	20:00	PRV				1				1
		COL				1				
		CFV		1						
21-Jul	8:00	TUG								1
		RKG					1(1)			
	8:15	TUG								1
		RKG						1(1)		
	8:30	RPVs			1					
		COL			1					
		TUG								1
		RKG		1(1)						
	8:45	RKG		2(1,1)						
		TUG				1				
		RSV		1						
	9:00	CFV				1				
		RKG		1(1)	1(1)					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	9:15	RPVb	1		1					
		RKG	1(1)		1(1)					
		RSV			1					
		CFV	1							
	9:30	CFV			1					
		RPVb							1	
		RPVs	1							
		RSV	1							
	9:45	CFV			1					
		RPVs			2					1
		RSV			1					
	10:00	RSV			1					
	10:15	RPVb			3					
		RSV			1					
	10:30	RPVb			2					
		RSV			1					
		RPVs	1							
	10:45	RPVs	1			1				
		RSV			1					
		RPVb			1					
	11:00	COL			1					
		RPVs	1							
	11:15	GPV			1					
		RPVs	1							
		RSV	1							
	11:30	RPVs	1		1					
		RSV							1	
	11:45	RPVs	1		1					
		RKG	2(9.2)							
		RSV							1	
	12:00	RPVs	1		2					
		TUG			1					
		RSV			1					
		RKG	2(2.2)							
		RPVb			1					
	12:15	RPVb	1	2	2					
		RPVs	2							
		TUG			1					
		RKG	1(2)							
	12:30	RPVb			2					
		RPVs	1		1					
		RKG	1(2)							
	12:45	RPVs	3		1					
		CCV	3							
		TUG			1					
		RKG	1(2)							
	13:00	RPVs	2							
		CCV	1		1					
		TUG			1					
		CFV			1					
		RKG	1(3)							
	13:15	RPVb	1							
		RPVs	3							
		CCV	2							
	13:30	CCV	2							
		RPVs	1		1					
		RPVb						1		
	13:45	RPVb	2							
		RPVs	1		2					
		PRV			1					
		CCV	1							
	14:00	RPVs			1					1
		CFV			1					
		PRV			1					
		CCV	2		1					
	14:15	CCV	1							
		RPVb			1					
	14:30	PRV					1			
		RSV			1	1				
		RPVs			1					
		RPVb	1							
	14:45	RSV	1		1					
		RPVb			1					
		CFV			1					
		RPVs	1							
	15:00	CFV			1					
		RSV			1	1				
	15:15	RSV								1
	15:30	RSV			1					
		CFV			1					
		PRV			1					
	15:45	RSV			1					
		PRV			1					
	16:00	RPVb	1	1						
		PRV			1					
	16:15	PRV			1					
		CCV			1					
		CFV			1					
	16:30	PRV			1					
		CCV			1					
	16:45	GPV			1					
		CCV			1					
	17:00	CCV			1	1				
		GPV			1					
	17:15	CCV			2					
		GPV			1					

## **Appendix B1 - Boat Count Data**

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CAR		1						
	17:30	RSV		2						
		RPVs		1						
		CAR			1					
		CCV		1	2					
	17:45	CCV			2					
	18:00	CCV		1	2					
		TUG		1						
		RSV	1							
		RPVs			1					
	18:15	TUG			1					
		RSV	1							
	18:30	CFV		1	1					
		RSV			1					
	18:45	COL			1					
		CFV			2					
		CCV			2					
		RKG			1(2)					
	19:00	CFV			1					
		TUG			1					
		CCV			1					
		RKG			1(1)					
	19:15	CCV			1					
		TUG			1					
		CFV			1					
		RKG	1							
	19:30	CFV		1	1					
		CCV		1						
		COL		1						
	19:45	CFV			1					
		COL		1	1					
		RPVs		1						
	20:00	CFV								1
		COL			1					
		RPVs						1		
22-Jul	8:00 - 12:18	All zones obscured by fog								
	12:30	CCV				1				
		RSV								
		CFV		1	2					
		RPVs			1					
	12:45	TUG			2					
		TUG								
		RPVs			1	1				
		RSV			2					
		CFV			1					
	13:00	CCV				1				
		RPVs	2			1				
		RSV			2					
		CFV			1					
		CAR			1					
		RKG	1(4)							
	13:15	CCV				3				
		PRV				1				
		RSV				1				
		RPVs				2				
		RKG	1(4)							
	13:30	RPVs	1	1		2				
		CCV				3				
		RSV				1				
		CAR								
		RKG	1(10)							
	13:45	CCV	1			3				
		CAR		1	1					
		RPVs	1			2				
		RSV	1							
		CFV				2				
		RKG	1(10)							
	14:00	CAR					1			1(1)
		RPVb				2				
		CFV				1				
		RPVs	1							
		RSV	1							
		RKG	1(10)							
		CCV				1				1(1)
	14:15	CFV					1			
		RPVs	2			1				
		RSV	2							
		RKG	1(10)							
	14:30	RSV	2	1						
		RPVs	5							
		CCV	3							
		CFV		1						
		RKG	3(1,5,4)							
	14:45	CCV	3		1					
		RSV	2		1					
		RKG	1(6)							
		RPVs	4							
		RPVb	1							
		CFV			1					

		CFV		1				
16:00		TUG		1				
		RPVs		1				
		PRV		1				
		RKG	1(2)					
		CFV			1			
16:15		RSV		1				
		TUG		1				
16:30		RSV		2				
		PRV		1				
16:45		RSV		2				
		PRV		1				
17:00		RSV		1				
		PRV		1				
17:15		COL		1				
		RSV		1				
17:30		RSV						
		RKG	1(1)		1			
17:45		CFV	1					
		COL		1				
18:00		CFV	1					
18:15		COL		1				
		CFV			1			
18:30		CFV		2				1
		CCV	1					
		RKG	1(1)					
18:45		CFV			2			1
		CCV	1					
		RKG	1(1)					
19:00		PRV			1			
		CFV			3			
		CCV	1					
19:15		PRV			1			
		CFV			3			
19:30		RPVb			1			
		PRV			1			
		CAR			1			
19:45		CAR			1			
		RPVb			1			
20:00		CFV			1			
		CAR			1			
23-Jul	8:00	RKG	1(3)					
	8:15	RKG		1(3)				
		CFV			2			
	8:30	RKG	1(3)	1(3)				
		CFV	1	1				
	8:45	no boats						
	9:00	RPVb		2	1			
		RKG	1(1)		1(2)			
		CFV			1			
	9:15	RPVb			2			
		RSV			1			
		CFV		1	1			
	9:30	RKG	2(1,1)		1(2)			
		RSV			2			
		RKG	1(1)	191				
		RPVb				1		
	~ 9:45	RPVb			1			1
		RKG	1(1)		1(1)			
	10:00	RPVb		1	2			
		RKG	1(1)					
	10:15	CFV			1			1
		RPVb			1			
	10:30	CFV		2				
		RPVb		3				
	10:45	RPVb		2				
		RPVs		1				
		TUG						
		CFV		1				
		RKG			1(2)			
	11:00	RPVb			3			
		RPVs		1				
		TUG		1				
		CFV			1			
		RKG			1(2)			
	11:15	TUG			1			
		RPVs			1			
		RKG				1(2)		
	11:30	RSV						1
		RPVs			1			
		RPVb			1			
		CFV		1				
		RKG				1(2)		
	11:45	RSV			2			
		CFV			1			

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RPVs		1						
		RKG	1(3)		1(2)					
	12:00	RPVs			1		1			
		RPVb								
		RKG	1(3)		1(2)					
		RSV			2					
		CFV			1					
	12:15	RSV			1					
		RKG	1(1)							
	12:30	CFV			1					
		RSV			1					
		RKG	1(1)							
	12:45	RKG								
		CFV								
	13:00	PRV			1					
		RKG	3(3,3,1)							
		RPVs	1							
	13:15	RPVs	1		1					
		RKG	3(3,3,1)							
	13:30	RKG	4(3,3,5,2)				1(3)			
		CFV		1						
		RPVs	1							
	13:45	RPVs	1							
		RKG	3(3,5,2)							
	14:00	RKG	2(3,2)							
	14:15	CFV			1					
		RKG	2(3,2)							
	14:30	RKG			2(3,2)					
		RPVs			1					
	14:45	RKG			1(5)					
		RSV	1							
	15:00	RSV			1					
		CFV			1					
	15:15	RPVs			1					
		RSV			1					
	15:30	RKG	1(2)							
		RPVs		1						
	15:45	RKG	1(3)		1(2)					
		CFV			1					
	16:00	CFV			2					
		RKG		1(3)						
	16:15	RPVs	1		1					
		CFV			2					
	16:30	RPVb		1	1					
		CFV		3						
		RKG			1(5)					
	16:45	RKG			2(3,2)					
		CFV			2					
		RPVb			1					
	17:00	RPVb			1					
		CFV			1	2				
		RKG			1(5)					
	17:15	CFV			1					
	17:30	CFV				1				
	17:45	RPVs	1							
		RPVb			1					
	18:00	RPVb		1						
		COL		1						
	18:15	TUG		1						
		COL			1					
	18:30	TUG			1					
	18:45	TUG								
		CFV								
	19:00	no boats								
	19:15	no boats								
	19:30	CFV			1					
	19:45	CFV		1						
	20:00	CFV		1						
		COL						1		
24-Jul	8:00	RSV			1					
		TUG			1					
		RPV	1							
	8:15	TUG			1					
		RSV			1					
		CFV	1		1					
	8:30	RPVs						1	1	
		CAR		1						
		CFV			1					
		RKG	1(5)							
	8:45	RPVs	1	2	1		1	1		
		RPVb		1	1					
		CAR			1					
		RKG	2(2,7)							
	9:00	RPVs	1				1			
		RPVb		1	1					
		RSV			1					
		RKG	2(2,2)	2(5,1)						
	9:15	RPVb		1						
		RPVs	1							
		RSV			1					
		RKG	2(2,2)	2(5,1)						
		CFV			2					
	9:30	RKG			1					

	10:00	CFV		2				
		RSV		3				
		RKG	1(3)					
		RPVs	1	1				
		CCV	1					
		RPVb		1				
	10:15	RPVb		1	1			
		RSV		3				
		CCV	1					
		RPVs	1	1				
		RSV		2				
		RKG	2(1,1)					
	10:30	CFV		1				
		RPVb		2				
		CCV		1	1			
		RPVs	1					
		RSV		2				
		RKG	1(2)					
	10:45	RSV		1	1			
		RPVb		1				
		RPVs	1	2				
		RKG	2(1,2)					
	11:00	CCV		1	1			
		RPVb		2				
		GPV					1	
		RPVs		2				1
		RSV						
		RKG	3(18,1,1)					
	11:15	RKG	3(1,1,15)					
		CCV		2				
		RPVb		1				
		RPVs	1	1				
		GPV					1	
		RSV		1				
	11:30	GPV		1				
		CCV		2				
		RSV		1				
		RKG	2(1,17)					
		RPVb						
		RPVs	1	1				
		CC	1	1				
		RSV		2				
		RKG	5(17T)		1(5)			
		RPVs	3					
	12:00	CCV	1	1				
		RPVs	3					
		RKG	8(17T)		1(5)			
		CFV		2	1			
		RSV		2				
	12:15	CFV			4			
		RSV		2				
		CCV	1	1				
		RKG	5(16T)		1(5)			
	12:30	RSV	1					
		RKG	3(5,6,2)		2(2,7)			
		CCV	1					
		RSV		1				
	12:45	RPVs	3(2,2,1)					
		CCV						
	13:00	RPVs	1					
		RSV		1				
		RKG	3(2,2,1)		1(7)			
		RPVs	2					
		CCV						
	13:15	CCV		1	1			
		RPVb		1				
		RKG	1(4)		4(7,1,1,1)			
		RPVs	1	1	1			
		RSV		1	1			
	13:30	CCV			1			
		RSV		2				
		RPVs						
		RKG		4(22T)				
	13:45	CCV	2					
		RKG	5(31T)					
		RPVb			1			
		RSV			1			
		CFV		1				
	14:00	RSV			1			
		CFV	1					
	14:15	RKG	2(6,16)		1(4)			
		RSV						
		TUG		1	1			
	14:30	RPVb			1			
		RPVs			1			
		CFV	1					
		RKG	1(6)					
	14:45	CFV			2			
		RPVb		1	1			
		TUG		1				
		RKG	1(6)					
	15:00	no boats						
	15:15	no boats						

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	15:30	CAR		1						
	15:45	CAR		1						
	16:00	RSV	1		1	RAIN		1		
	16:15	RSV			RAIN	1				
	16:30	RSV			RAIN					
	16:45	RPVb			2					
	16:45	RPVs			2					
	16:45	RPVs		2						
	16:45	RPVb		1						
	17:00	CFV	1		1					
	17:00	CCV	1		1					
	17:00	RPVb		1						
	17:00	RPVs		2						
	17:15	CCV	2							
	17:15	CFV	1							
	17:15	RKG	1(1)							
	17:30	CCV	2							
	17:30	RPVs		1						
	17:30	CFV			2					
	17:45	RKG	1(5)							
	17:45	CFV		1	1					
	17:45	CCV	1	1						
	17:45	RKG	1(5)							
	17:45	RPVs		2						
	18:00	RKG	1(1)							
	18:00	CCV		1	1					
	18:00	RPVs			1					
	18:15	CCV		1						
	18:30	CCV		1						
	18:45	RKG	1(2)							
	18:45	CCV		1		rain				
	18:45	RKG	1(3)							
	18:45	CFV			1					
	19:00 - 20:00 All zones obscured by rain									
25-Jul	8:00	no boats								
	8:15	RPVs			1					
	8:30	RPVs								1
	8:45	no boats								
	9:00	CFV		1						
	9:15	no boats								
	9:30	CAR		1						
	9:30	CFV			1					
	9:45	CAR			1					
	9:45	CFV			2					
	10:00	CFV			3					
	10:15	RSV			1					
	10:30	no boats								
	10:45	no boats								
	11:00	RPVs	1							
	11:15	CFV		1						
	11:15	RKG	3(8,4,1)							
	11:30	CFV			2					
	11:30	RKG	2(8,1)	1(4)						
	11:45	RPVb			1					
	11:45	CFV	1							
	11:45	RKG	1(1)	1(2)						
	11:45	RPVs	1							
	11:45	RPVb			1					
	12:00	RKG	4(20T)	1(2)						
	12:00	RSV			1					
	12:00	RPVb			1					
	12:00	RPVs	1							
	12:15	CFV		1						
	12:15	RSV			1					
	12:15	RKG	4(20T)							
	12:15	RPVs	1							
	12:30	RPVb			1					
	12:30	RPVs	1							
	12:30	RKG	4(22T)							
	12:45	RSV			1					
	12:45	RPVs	2							
	12:45	RKG	2(1,2)							
	13:00	RPVs	3							
	13:15	CFV			1					
	13:15	CFV		rain	rain	1				
	13:30 - 14:15 All zones obscured by fog									
	14:15	RSV	fog	fog	1					
	14:15	CCV			1					
	14:15	RPVb			1					
	14:30	CCV			1					
	14:30	CFV			1					
	14:30	RSV			1					
	14:30	RPVs			1					
	14:45	CCV	fog		1	fog				
	14:45	RPVs			1	fog				
	15:00	RPVs	fog			fog				
	15:15 - 16:30 All zones obscured by fog									
	16:30	RSV	1		2					
	16:45	TUG			2					
	16:45	RSV			2					
	16:45	TUG		1	2					

	19:00	no boats						
	19:15	CCV						
		COL	1					
		RSV		1				
	19:30	COL			1			
		RSV			1			
	19:45	no boats						
	20:00	no boats						
26-Jul	8:00	CFV			1			
	8:15	no boats						
	8:30	CFV	1					
	8:45	CFV			1			
	9:00	RPVb			1			
		CFV			1			
	9:15	CFV	2					
	9:30	CFV	1		2			
	9:45	CFV					1	
		RPVs						
	10:00	CFV		1			1	
	10:15	RSV			1			
		CFV			1	1		
	10:30	TUG						
		RSV			1			
		CRY			1			
		TUG			1			
		RPVs			1			
	10:45	RSV			2			
	11:00	RKG	1(1)					
		RSV	1	1	1			
		PRV						1
	11:15	RKG	1(4)					
		RSV			2			
		PRV						
	11:30	PRV					1	
		RSV			3			
		RPVs	2		1			
		RPVb			1			
	11:45	RSV			3			
		PRV			1			
		RKG			1			
		RPV	1					
	12:00	RKG	2(6,4)		1			
		RPVs	1					
		RSV			1	2		
	12:15	RSV			1			
		RPVb			1			
		RKG	1(6)		1(1)			
		RPVs	1					
	12:30	RSV			1			
		RPVb			1			
		RPVs			1			
		RKG			1(2)	1(1)		
		CFV			1			
	12:45	CFV			1	1		
		RPVb			1			
		RPVs	1					
		RKG	1(1)		1(2)			1(4)
	13:00	CFV	1					
		RPVb						
		RPVs	1	1				
		CCV		1				
	13:15	CFV			2			
		RPVb			1			
		RPVs	1					
		RKG	1(6)					
		CCV			3			
	13:30	CFV						
		CCV		1	1			
		RPVs	2					
		RPVb	1					
		RKG	1(6)					
	13:45	RPVs	1				1	
		RSV						
		RPVb	1					
		CCV	1					
		CFV			1			
	14:00	CFV			2			
		RSV						
		CCV			1			
		RKG	1(6)					
	14:15	RSV			1			
		CFV		1	1			
		CCV			1			
		RKG	2(6,1)					
	14:30	RSV			1			
		CCV			1			
		RKG	2(6,5)					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	14:45	RSV			2					
		CCV			1					
		RKG			1(2)					
		RPVs	1							
	15:00	GPV			1					
		RSV		1	1					
		RPVs	1							
		RKG			1(1)					
	15:15	GPV		1						
		RSV		1	1					
		RPVs	1		1					
		CFV			1					
		RPVb						1		
	15:30	RPVb	1							
		RKG		2						
		RSV		2						
		CCV		1						
		GPV		1						
		TUG		1						
	15:45	RKG	1(1)		2(1,2)					
		TUG			1					
		RSV		2	1					
		RPV			2					
	16:00	RSV			3					
		RPVs			3					
		TUG			1					
		CCV			1					
	16:15	CFV		2						
		RPVs	1		1					
		RSV			3					
		CCV			1					
	16:30	CCV		1	1					
		RPVs	1		1					
		CFV			3					
		RSV			2					1
		RKG	1(1)							
	16:45	CCV			1					
		RSV	1		2					
		CAR			1					
		RKG	1(1)							
	17:00	CFV			1					
		RSV	1							
	17:15	RSV			1					
		CFV			1					
		RPVs		1						
	17:30	CFV							1	
		CCV			1					
		RSV	2							
	17:45	CCV			2					
		RSV	2							1
		CFV								
	18:00	CFV			1					
		COL		1						
		CCV			2					
	18:15	COL			1					
		CCV			2					
	18:30	CCV			2					
		COL			1					
		RKG			1(8)					
	18:45	COL			2					
		CCV			2					
		RKG			1(8)					
		RSV		1						
	19:00	COL			2					
		RSV		1						
		CCV			1					
		RPVs		1						
	19:15	COL			2					
		CCV		2						
		RSV		1						
	19:30	COL			1					
		CFV			1					
		CCV			1					
		RSV		1						
		RKG			1(8)					
	19:45	COL			1					
		CCV			2					
		RSV			1					
		CFV		1	2					
	20:00	CCV			1					
		CFV			2					
		RSV			1					
27-Jul	8:00	TUG								1
	8:15	TUG				1				1
	8:30	TUG		1	1					1
	8:45	CFV			1					
		TUG			1					1
	9:00	CFV			2	1				
		RKG	1(5)							
		RSV			1					
		TUG					1			

10:00	CFV							
	CCV	2						
	RPVs	1						
	RPVb	1						
10:15	RPVb	1						
	RSV	1						
	CCV	2						
	RPVs	4						
	CFV						1	
10:30	RKG							
	RPVs	2	1					
	RPVb		2					
	CFV	1				1		
	CCV	1						
	TUG	1						
10:45	RKG	1(8)						
	CFV	1	1					
	TUG			1				
	RPVb			1				
	RPVs			1				
11:00	RKG	2(8,7)	1(1)					
	CFV	1		2				
	RPVs	1		2				1
	TUG							
11:15	CFV			2				
	RPVs			1				
	RKG	2(8,7)						
11:30	RPVs	1	1	2		2		
	RKG	2(7,1)						
	RSV	1						
	CFV							
11:45	CFV				1			
	RSV	1		2				
	RKG	3(1,8,5)						
	CCV				1			
	RPVs	2	1					
	CFV	1						
12:00	RSV	1						
	CFV	1	1					
	CCV			1				
	RPVs			1				
	RKG	2(2,7)						
12:15	CCV			1				
	RSV	1	1					
	RPVs	1					3	
	CFV							
	RKG	1(3)	1(7)	1(3)				
12:30	RPVs	3		1				
	CCV			1				
	RSV	2						
	RKG	1(5)	2(7,3)	1				
	CFV	1						
12:45	RSV			2				
	RPVs	2		1				
	RKG	1(1)	1(3)	1(1)				
	CCV			1				
13:00	RPVs		2					
	RKG	1(1)						
	RSV			2				
	CFV			1				
	CCV			1				
13:15	CCV			1				
	RPVs	3		2				
	RSV			1				
	RKG	1(1)			1(1)			
~13:30	TUG	1						
	RPVs	1						
	RPVb			1				
	RSV	1						
	CCV			1				
	RKG	1(7)		1(2)	1(1)			
13:45	TUG			1				
	RKG	1(6)	1(8)					
	CCV			1				
	RSV	1						
	RPVs	1	1					
14:00	RSV		1					
	RKG	1(8)	1(8)					
	CCV			1				
	RPVs	2						
14:15	RSV	1	2					
	CCV			1				
	RPVs	2						
	RKG	1(8)	1(5)					
	CFV						1	
14:30	CFV							1
	CCV			1				
	RPVb	1						
	RSV	1						
	RKG	2(8,5)	1(5)					
	TUG	1						
14:45	TUG			1				
	RKG	4(16T)		1(2)				

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CCV		1						
		RPVs		2	1					
		RSV		2	1					
	15:00	RPVs		2						
		CFV	1		1					
		CCV		1						
		RPVb		1						
		RSV		1	1					
		RKG	3(2,2,7)	1(2)						
	15:15	TUG				1				
		TUG		1						
		CFV	1	1						
		RSV		3						
		RPVs		1						
		RPVb		1	1					
		RKG	4(14T)							
		CCV	1		1					
	15:30	TUG	1							
		RSV		1	1					
		RKG	2(1,2)							
		CFV				1				
		RPVs	2							
	15:45	CCV	1	1	1					
		TUG			1					
		RPVs	1	2	1					
		CFV				1				
		RKG	2(2,1)							
	16:00	CCV	3		1					
		RPVs	2							
		RSV	1							
		RKG	3(1,1,3)							
	16:15	RPVs	2	1						
		RKG	1(2)	1(2)						
		RSV	1	1						
		CFV	1	1						
		CCV	4							
		CFV	1							
	16:30	CCV	3	1						
		CFV		4						
		RKG	2(1,2)	1(2)						
		RPVs			1					
		RSV	1			1				
	16:45	CFV				4				
		CCV	2	2	1					
	17:00	CCV	3	1	1					
		RSV	1							
		CFV				5				
	17:15	CCV		4						
		RSV		2	1					
		RKG	1(1)							
		CFV				2				
	17:30	CFV		4	1					
		CCV		1						
		RKG	1(1)							
	17:45	CFV				1				
		CAR				1				
		CCV				1				
		RSV			1					
		RKG	1(1)							
	18:00	CFV				1				
		CAR			1					
	18:15	RPVs				1				
	18:30	RKG	2(7,3)							
		CFV				1				
	18:45	CFV				1				
		TUG				1				
	19:00	TUG			1					
	19:15	no boats								
	19:30	no boats								
	19:45	CFV			1					
	20:00	COL				1				
		CFV				1				
28-Jul	8:00	CFV	2	2	1					
	8:15	CFV		1	2		1			
	8:30	RPVs								
		CFV	1		3					
	8:45	CFV	1		2					2
	9:00	RSV								
		CFV		1			1	1		
	9:15	CFV		1			1			
		RSV			1					
	9:30	CFVs								
		CFV				1				
		RSV	1							
		RPVb				1				
	9:45	CFV			1			1		
		RSV	1							
	10:00	CFV								1
	10:15	RPV				2				
		CFV								1
	10:30	CFV			4					
		CFVs								
		RPVb				5				
	10:45	CFV				3				
		RPVb		2	4					
		RPVs	2							

	HPVs	2									
	RPVb		1	1							
11:15	RPVb			2							
	RPVs	2									
11:30	CFV			1							
	RPVs	2									
11:45	CFV		2	1							
12:00	CFV	1	2	1							
	RKG	1(1)									
12:15	CFV	1		2							
	RSV		1	1							
12:30	TUG		1								
	CFV			1							
12:45	TUG			1							
	CFV		2	1							
13:00	CFV			3							
13:15	CFV	2		1							
	CCV			1							
	RSV			1							
13:30	CFV		2				1	1			1
	CCV										
	GPV	1									
13:45	CFV		3	3						1	1
14:00	CFV	1								1	
	RSV			1							
	CCV			1							
	TUG		1								
14:15	TUG			1							
	RPVb			2							
	CFV										1
14:30	RPVs			1							
	CFV										
	TUG			1							
	CCV			1							
14:45	CFV	1	1								
	RKG	1(1)									
15:00	CFV		1	1							
	RKG	1(1)									
15:15	CFV	1		1							
	RKG	2(1,1)									
15:30	COL		1								
	CFV		2	1							
	RKG	2(1,1)									
	COL		1								
	CFV		1								
15:45	CFV			1							
16:00	RKG	1(1)									
16:15	TUG			1							
	RKG	1(1)									
16:30	CFV	1									
	TUG		1								
16:45	TUG		1								
	CFV	1									
17:00	CFV		1								1
	TUG			1							
17:15	CFV			1							1
17:30	CFV		2								
	RKG	1(1)									
	GPV			1							
	RPV			1							
17:45	CFV			3							
	TUG			1							
18:00	CFV			1							
	TUG			1							
18:15	no boats										
18:30	no boats										
~18:45	CFV		5	1							
19:00	CFV			6							
19:15	CFV			5							
	COL	1									
19:30	COL			1							
19:45	no boats										
20:00	CFV			1							
29-Jul	8:00	TUG		1							
	CFV	1									
	TUG			1							
8:30	CFVs										1
	TUG		1								
8:45	CFV			1							
	CFVs										1
9:00	CFVs										1
9:15	CFV	1									
9:30	CFV	1		1							
	COL			1							
	RPVs			1							
9:45	RPVb			1							
	CFV	1									
10:00	CFV	1	1								
	RPVb	1									
10:15	CFV										
	RPVb	1									
10:30	CFV	1									
	RPVb			1							
10:45	RPVb			1							

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RSV			1					
		CFV	3							
		CFVs	1							
	11:00	RSV			1					
		CFVs	1							
		CFV		1	1		1	1		
	11:15	CFV	1		3					
		RSV			1					
		CFV			2					1
	11:30	CFV			2					1
	11:45	CFV		2	2					
		RSV	3	1						
		RPVb			1					
	12:00	RPVb		1						
		RSV	2	2						
		CFV	2	3						
	12:15	CFV	2	3						
		RSV	1	1						
		RPVb								1
	12:30	RPVs			1					
		CFV	1		4					1
		RSV			3					
	12:45	CFV		1	2			1		1
		RSV			2					
	13:00	RPVb			2					
		CFV	2	1	3		1			
	13:15	CPV	1	6	8		4			
		RSV			1					
	13:30	CFV		5	2					4~
		RSV			1					
	13:45	CFV		2	6					
		RSV			1					
	14:00	CFV	2		6					
		RSV		1	1					
	14:15	CFV	2		5					
		RSV			1					
	14:30	CFV					2			1
		RSV			3					
	14:45	CFV		1						2
		RSV			1					1
		TUG								
	15:00	CFV								
		TUG			4					
	15:15	CFV			1					
		TUG								
		RSV			6					
	15:30	CFV								1
		RSV	1		1					
		COL								
	15:45	CPV		9	6					1
		RSV	1							
		COL			1					
	16:00	CFV			19					1
		COL			1					
		CCV			1					
	16:15	RSV		1						
		CFV			8		1			
	16:30	CFV	1		4		1			
		CCV			1					
	16:45	CFV	1		14					
		CCV			1					
	17:00	CFV	1		13					
		CCV	1		1					
	17:15	CFV	1		9					
		CCV			2					
	17:30	CFV		3	1					
		CCV			2					
	17:45	CFV	1		1					
		CCV	1		1					
		TUG			2					
	18:00	TUG			2					
		CFV	1							
		CCV	2							
	18:15	CFV	1							
		TUG			1					
		CCV	2							
	18:30	CFV	1		1					2
		TUG			1					
		CCV	2							
	18:45	CCV	2							
		CFV								2
	19:00	CCV			1					2
		CFV								
	19:15	CFV	4		1		1	1		
		CCV			1					
	19:30	CFV			5		1			
		CCV			1					
	19:45	CFV	1		4					
		CCV			1					
	20:00	CFV	1							
		CCV			1					
30-Jul	8:00	CAR								
		CFV			4					
		TUG	1							
		RPVs			1					
		CFV		1						2

		RPVs						
8:30		CFV	1				1	
		RPVb		1			1	
		TUG	1					
	8:45	RKG	1(1)					
		TUG	2					
		CFV					2	
	9:00	RPVs			1			
		COL		1				
		TUG	1		1		1	
		CFV					2	
		RKG	1(1)					
		RPVs	1					
		RPVb		1				
	9:15	TUG	1		1		1	
		CAR			1			
		RPVs		1				
		RPVb		1				
		CFV					2	
		RSV		1				
	9:30	TUG	1			1		
		CFV		2			2	
		RPVb		1				
		RSV		1				
		CAR		1				
	9:45	COL		1				
		CFV		4			2	
		TUG	1			1		
		RSV		1				
		RPVb		1				
	10:00	CFV		3		1	2	
		TUG	1	2			1	
		RSV			1			
	10:15	CFV		4		2	1	
		RPVs		1				
		RSV					1	
	10:30	TUG		2		1	1	
		CFV				1	1	
		RSV				1	1	
		TUG				1	1	
		RPVb		1				
		RPVs		1				
	10:45	CFV	1		2			
		TUG				1	1	
		RSV				1	1	
		RPVs		1				
	11:00	CFV	1	1	2			
		TUG				1	1	
		RSV				2	1	
		RPVb		1				
		RPVs		1				
	11:15	CFV	1		3			
		TUG				1	1	
		RSV		1			1	
	11:30	CFV	1		2			
		TUG				1		
		RSV				1		1
		CCV		1				
	11:45	RSV		1				
		TUG				1	1	1
		CFV	1		1		1	
		RPVb		4				
		CCV		1				
		RKG		1				
		RPVs		1				
	12:00	RSV		2				
		RPVs	1					
		CFV	1		2		1	
		RPVb		1				
		RKG		1				
		TUG			1			
	12:15	RPVs		1				
		CFV	3	2			1	
		RSV			3			
		RKG			2(1,1)			
		TUG						
		CAR		1				
	12:30	CAR		1				
		CFV	3	2	1		1	
		RKG			1(1)			
		RPVb		1				
		TUG						
		RSV		1				
		RPVs		1				
	12:45	CFV	2	1	3		1	
		RSV			1			
		TUG					1	
		RPVb			1			
		RPVs	1					
	13:00	RPVb			1			
		CFV	1		4		1	
		TUG						
		RPVs	1		1			
		RSV			1			
		CFV	1		2		1	
		TUG			1			
	13:15	RPVb						

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RKG			1(4)					
		RSV								
		RPVs	1			1				
	13:30	CFV			1			1		
		TUG		1	1					
		RPVs	2			1				
	13:45	RKG			1(4)					
		CFV						1		
		TUG								
		RPVb	1			2				
		RPVs	2							
	14:00	RKG	2(2,4)							
		RPVb	1		1					
		RPVs	1							
		CFV						1		
		RKG	2(2,4)		1(2)					
		TUG				1				
	14:15	RPVb	1		1					
		CFV			2					
		TUG				1				
		RKG	1(4)		1(2)					
		RPVs	1							
	14:30	CFV			2			1		
		RPVb			1					
		RSV	1							
		RPVs	3							
		TUG				1				
		RKG	1(4)		1(1)					
	14:45	CFV			1					
		RPVb			4					
		RKG	1(4)							
		TUG								
	15:00	CFV						1		
		RPVb			1					
		RPVs	3							
		RSV	1							
	15:15	RPVb			1					
		CFV						1		
		RPVs	4							
		RSV	1	1						
		RKG								
	15:30	CFV						1		
		RSV	1	1						
		CAR			1					
		RPVs	4							
		RKG	1(1)		1(1)					
	15:45	CAR			1					
		CFV			1					
		RSV	1		1					
		RKG								
		RPVs	3							
	16:00	RKG	2(1,3)		1(2)					
		CFV		1	2					
		RSV	1		1					
		RPVs	3							
	16:15	CFV			3					
		RSV	1		1					
		RKG	1(3)		1(2)					
		RPVs	3							
		GPV								1
	16:30	COL		1						
		GPV								1
		RSV	1		1					
		CFV								1
		RPVs	2							
		RKG			1(2)					
	16:45	CFV		1						1
		RSV			2					
		COL				1				
		RKG	1(2)							
	17:00	COL		1						
		RSV	1	1						
		CFV								1
		CCV			1					
		RKG	1(2)							
	17:15	COL			2					
		CCV			1					
		CFV			1					1
		RSV			4					
	17:30	COL		1						
		CCV								
		CFV								
		RSV			3					
		TUG		1						
		RPVb			1					
	17:45	CCV				1				
		CFV			1					1
		RSV			1					
		TUG			1					
		RPVb				1				
		COL								
		RKG	1(2)							
	18:00	RSV								
		CCV			1					
		COL			1					

		CFV				1	
		CCV		1			
18:30		CCV	1	1			
		COL				1	
		CFV					
		TUG			1		
18:45		COL		1			
		CFV				1	
19:00		CFV	1	4			
		TUG		1			
19:15		CFV	1	2	1		
		TUG		1			
19:30		CFV		1			
		TUG		1			
19:45		RKG	1(2)				
		TUG		1			
20:00		RKG	1(2)				
		CFV	1	1		1	
		CFV		1		1	
31-Jul	8:00	TUG		1			
		CFV				1	
8:15		TUG		1			
		RPVb		1			
		RKG		1(1)			
		CFV				1	
8:30		CAR		1			
		CFV	1			1	
		RPVb		1			
8:45		CFV		1		1	
9:00		CFV		1		1	
		RPVs		1			
		RKG		1(1)			
9:15		RPVs		3			
		CFV				1	
9:30 - 11:15 all zones obscured by fog							
11:15		RPVb		1	1		
		CFV		3		2	
11:30		CFV		3	1	2	1
		RPVb	1				
11:45		CFV		3		1	
		RSV		1			
		RPVs	11				
		RKG	1(2)		1(2)		
12:00		CCV		1			
		RKG	2(4,2)				
		RPVs	1				
		CFV		1		1	
12:15		CFV				1	
		CCV		1			
		RSV		1			
		RKG	1(4)		1(1)		
		RPVs	1				
12:30		CCV		2			
		CFV		2		1	
		RPVb	1				
		RPVs	1			1	
		RSV		1			
		RKG	1(4)		1(2)	1(2)	
12:45		RPVs	1	1	3		
		RSV			1		
		CCV		2			
		RKG	2(2,3)	1(1)	1(1)		
13:00		RPVs	2		2		
		CCV		1	1		
		RKG	1(5)	1(1)	1(2)		
		CFV		2			
13:15		RPV	2		2		1
		RSV		1			
		RKG	1(6)		1(2)		
13:30		RSV		1			
		CFV	2	1	2		
		CCV		1			
		RPVs	2		3		
		CAR			1		
		RKG	1(1)		1(2)		
		RPVb		1			
13:45		CFV			2		
		RPVs	2	5		3	2
		RSV	2		1		
		RPVs			2		
		RKG			1(2)		
		CCV		1			
14:00		RPVs	2	8	1		
		RSV		6			
		RPVb		1			
		CFV	1		5		
		RKG	1(2)				1
14:15		RPVs			3		
		CFV		4	3	3	
		RSV		5			
		RKG	2(1,2)				

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	14:30	CFV	1	1	8			1		
		RSV	1		4					
		RKG	2(2,2)							
	14:45	CFV	1		4			1		
		RSV	2(1,2)	2	2					
	15:00	CFV	1		2			1		
		RPVb		1						
		RSV		1	1					
		RKG	3(2,2,3)							
		RPVs		1						
	15:15	TUG		1						
		RSV			1					
		RPVb			1					
		RKG	2(2,5)							
		RPVs	1							
		CFV						1		
	15:30	CFV	1(S)					1		
		TUG			1					
		RPVs	2							
		RKG	2(2,5)							
		RPVb			1					
	15:45	RPVb		2						
		CFV			1	2		1		
		CFV	1							
		TUG			1					
		RKG	2(7,2)							
		RPVs	2							
		CAR								
	16:00	RKG	2(5,7)							
		RPVs	2		1					
		CFV	1		11			1		
		CAR			1					
	16:15	CFV	2		10			1		
		CAR			1					
		TUG			1					
		RKG	5(14T)							
		RPVs	2							
	16:30	CFV	2		2				1	
		RSV	1							
		RKG	4(8T)							
		RPVs	2							
	16:45	CFV	1		3				1	
		RKG	5(11T)							
		RSV	1							
		RPVs	1							
	17:00	CFV	1					1		
		RKG	5(14T)		1					
		RPVs	1							
		RSV	2							
	17:15	CFV	1		1				1	
		RKG	2(2,6)		2					
		RSV	1		1					
		TUG		1						
		RPVs	1							
	17:30	RSV			2					
		TUG			1					
		RPVs		1						
		RKG	4(5T)							
		CFV	1		1			1		
	17:45	CFV	1		2			1		
		RSV			2					
		RKG	3(2,1,1)							
		TUG			2					
	18:00	CFV	1		3			1		
		RPVb			1					
		TUG			1					
		RKG	2(2,1)							
	18:15	CFV	2		3			1		
		TUG			1					
	18:30	CFV	1	2	6		1	1		
		RKG	2(2,1)							
		CCV	1							
	18:45	CFV			8			1	1	
	19:00 - 20:00	All zones obscured by fog.								
1-Aug	8:00 - 9:00	All zones obscured by fog.								
	9:00	TUG			1					
		CFV	4		7	FOG	2	2	FOG	FOG
	9:15	CFV	6	2	9		1	2	3	1
		RKG		1(1)						
	9:30	CFV	4	1	11		1	2		2
		RKG			1(1)					
		RSV			1					
	9:45	CFV	6	6	3		2	2		3
		RSV		3						
		RKG	1(1)							
	10:00	CFV	6	4	4		4	4		1
		RSV	2		1					
		TUG			1					
		CCV	1							
		CAR		1						
		RKG	1(5)							
	10:15	CFV	7	2	3		3	2	2	1
		RSV			2					
		RKG	1(5)							

		CAR		1					
		TUG		1					
		RKG	1(5)						
10:45		CFV	4	6		2	2	2	1
		RSV		1					
		TUG		1					
		RKG	1(4)						
		CCV		4					
		RPVs	1						
11:00		CFV	6	10	2	2	3	3	2
		RSV							1
		RPVs		2					
		CCV		1	3				
		RKG	1(1)		1(4)				
11:15		CFV	5	3	8	1	3	2	2
		CCV			2				
		RKG	1(1)		1(4)				
		RPVs							
11:30		CFV	4	4	3		3	3	1
		RKG	1(1)		1(4)				2
		CCV			2				
11:45		CFV	4		4	1	3	2	1
		RKG	1(1)		1(4)				2
		CCV			1				
		RPVb		1					
12:00		CFV	7	1	5	1	2	3	
		RPVb			1				
		CCV			1				
		RPVs	1		1				
		RKG	1(6)		1(4)				
12:15		CFV	5		9		1	3	
		RPVb			1				1
		RKG	1(6)						
		RPVs			1				
		CCV			1				
12:30		CFV	5		7	1		4	
		RPVb			1				
		CCV			1				
		RKG	1(8)						
12:45		CFV	5		2	2		3	
		RPVb			1				
		RKG	1(8)						
		CCV			1				
13:00		CFV	4		2	2		3	
		RPVb				1			
		CCV			1				
		RPVs							
13:15		CFV	5		4	1		4	
		RPVb			1		1		
		RKG			1(4)				
13:30		CFV	5	4	3	1	1	3	
		CCV			1				
		RPVb			1				
		RKG	1(8)		1(4)				
		RSV			1				
13:45		CFV	7		5	2	1	2	
		RKG	2(2,8)						
		CCV			1				
		RSV		1	1				
		RPVb		1	1				
14:00		CFV	7		1	1		2	
		RSV			2				
		RPVb			3				
		RKG	3(2,1,4)						
14:15		CFV	6		3		1	3	
		RSV			3				
		RKG	5(10T)		1(2)				
14:30		CFV	6		3	1		3	
		RSV			2				
		RKG	3(1,2,3)						
		RPVb			1				
		CCV			1				
14:45		CFV	4	7	9	1		3	
		RPVs	1						
		RKG	2(1,4)						
15:00		CFV	4	4	9			2	
		CCV			1				
		TUG			1				
		RPVs		1					
		RKG	2(1,4)						
15:15		CFV	5	1	3			2	
		TUG		1					
		RKG	3(1,1,4)						
		RPVs	1						
15:30		TUG			1			2	
		CFV	5	1	5	2			
		RKG	2(2,4)						
		RPVs	1						
15:45		TUG			2				
		CFV	5		1	1		3	
		RKG	2(2,4)						
16:00		CFV	5	6	1			3	

## SPPC-1A DT Dual Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		TUG			1					
		RKG	1(4)							
		RPVs	1							
	16:15	CFV	8	2	4			3		1
		TUG			1					
		RPVs	1							
	16:30	CFV	5	2	6			3		1
		RSV		1						
		TUG			1					
		RPVs	1							
	16:45	RKG	1(1)							
		RSV		1	1					
		CFV	6	4	1			3		1
		CCV			1					
		RPVs	3							
	17:00	CFV	5		3	1		3		1
		RSV			2					
		RPVs	4							
		RKG	2(1,1)							
	17:15	CFV	5	5	2	1		3		1
		CCV			2					
		RSV			1					
		COL			1					
		RPVs	5							
		RKG	2(1,1)							
	17:30	RSV		2						
		CFV	6		4	1		3		3
		CCV	2							
		RKG	1(1)							
	17:45	CFV	6	1	1					2
		CCV	3							
		RPVs	1							
		RKG	1(2)							
	18:00	CFV	8	2	1			2		1
		CCV	3							
		RPVs	1							
		RKG	1(1)							
	18:15	TUG		1						
		RPVs	1	1						
		CFV	7					2		1
		CCV	3							
		RKG	1(1)							
	18:30	TUG			1					
		CFV	5		1			1		
		RPVs			2			1		
		CCV	1							
	18:45	CFV	5	1	1					
		CCV	2							
		TUG			1					
		RPVs			1					
		RKG	1(2)							
	19:00	CFV	5		2				1	1
		TUG						2		
		RPVs	1							
		CCV								
	19:15	CFV	6			1		2		
	19:30	CFV	5	1	1	1		3		1
	19:45	CFV	5		2				2	2
	20:00	CFV	6	2					2	
		TUG			1					
		CAR		1						
2-Aug	8:00	CFV	8		2	1	1	2	1	
		RSV			1					
		TUG	1							
	8:15	CFV	7		1	1	1	3	1	
		RSV						1		
		TUG	1							
		RKG	1(2)							
	8:30	CFV	7		2	1			3	
		RSV			1					
		TUG	1							
		RPVb			1					
		RKG	1(2)							
	8:45	CFV	7	1			1		2	3
		TUG								
		RSV								1
		RKG	1(2)							
	9:00	CCV			1					
		TUG						1		
		RSV			1					1
		RKG	1(2)							
		CFV	7	1	1				3	
	9:15	CCV			1					
		TUG						1		
		RSV		1	1					
		CFV	9	1	1				3	
	9:30	TUG						1		
		RSV			1					
		CAR		1	1					
		CFV	8		2	2			3	1
		CCV			1					
		RKG	1(5)							
	9:45	CFV	9	1	2	1			3	
		TUG							1	
		CAR			2					
		RSV			1					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	10:00	TUG						1		
		CAR			1					
		RSV			1					
		CCV			3					
		CFV	9	2		2		3		3
		RKG	1(4)			1(3)				
	10:15	TUG			1					
		RSV		1		4				
		CCV				1(3)				
		RKG	1(4)							
		CFV	6			1		5		2
	10:30	TUG			1			1		
		CCV			4					
		RSV		3						
		RKG	1(5)							
		CFV	6		7	1		3		2
	10:45	TUG		1	1				1	
		CCV		3						
		RSV			1	2				
		CFV	7		5	1	1	2		2
		RKG			1(4)					
	11:00	TUG		1					1	
		RSV		1	2					
		CCV		4						
		RPVs		1						
		RKG	1							
		CFV	8		2	1	1	2		2
	11:15	CFV	9	1	2	2		2		3
		RPVb		1	1					
		RSV			1					
		TUG			1				1	
		CCV		3						
		RPVs		1						
	11:30	CRV	7	1			1	2	1	2
		CFVs	1							
		RPVb			1					
		RPVs		1						
		TUG							1	
		RKG	1(2)							
	11:45	RPVb			1					
		TUG							1	
		CFV	9	1	1			2		2
		RKG	1(2)							
	12:00	RPVb			1				1	
		TUG								
		CFV	9	1	2	2	2	2		
		RKG	1(2)							
	12:15	RSV			1					
		RKG	2(1,2)							
		CFV	12			1	1	3		2
	12:30	TUG					2	2		1
		CFV	9				1			4
		RPVb		1			1			
		RPVb			1					
		RSV		2						
		CFV	9				1	2	2	2
		TUG			2					1
	13:00	RSV					2	3	2	2
		CFV	7							1
		RPVb								
		TUG							1	
		CFV	8		2		1	2	2	2
		TUG								1
		RSV			1					
		RKG	1(1)							
	13:30	RSV			1					
		CFV	8	1	3			3		2
		TUG								1
		RKG			1(1)					
		RPVb			1					
	13:45	CFV	12		5	2	1	1	2	2
		RSV			1					
		TUG								1
		RKG	3(1,3,3)							
	14:00	CFV	8		6	2		3		3
		RSV			1					
		RKG	1(6)							
		TUG								1
	14:15	CFV	8		4				2	4
		RSV			1					
		RKG	3(6,1,1)							1
		TUG								
	14:30	CFV	7			3			1	1
		RPVb			1					3
		RKG	3(2,4,1,1,2,1,1)							
		TUG								1
	14:45	CFV	7						1	2
		RKG	4(3,2,1,1)							
		TUG			1					
		RPVb			1					
	15:00	CFV	9		1	3				
		RPVb	1	1	1					
		RSV	1							
		CCV	1							
		RPVs	1							
		RKG	3(3,2,1,1)							

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	15:15	TUG				1				
		CFV	8		2	3	1	2		2
		RPVb			1					
		RSV	1							
		RPVs		1						
		TUG								1
		CCV			1					
		RKG	3(1,1,2)							
	15:30	CFV	5		3			3		3
		RSV			1					
		RPVs	1							
		CCV	1							
		RKG	1(1)							
	15:45	CFV	12	3	1	2	1	3		2
		CCV	1							
	16:00	CFV	8		1	3				2
		CCV		2						
		RPVs			1					
		RKG		1(4)	1(2)					
	16:30	CFV	8	2	2			3	1	2
		CCV			3					
		RSV		1						
		RPVs			1					
	16:45	CCV			3					
		CFV	8		3			3	1	2
		RSV			1					
		RPVs			1					
	17:00	RPVb			1					
		RSV			1					
		CFV	9				1	3	1	2
		CCV			3					
	17:15	CFV	10		3		1	3	1	2
		CCV			4					
		RSV			1					
		RKG	1(1)							
	17:30	CFV	8	1	2		1	3	2	2
		RSV			1					
		RPVs			1					
		RKG			1(6)					
	17:45	CFV	8	2	2		2	3	2	2
		RKG	1(6)							
		RSV			1					
		TUG			1					
		RPVs			1					
	18:00	TUG			1					
		RSV			1					
		CFV	8		3		1	3	2	2
		CCV			3					
		RPVs			1					
	18:15	CFV	9			2	1	3	1	2
		COL			1					
		TUG			1					
		RSV			1					
	18:30	CFV	6	2		2	1	3	1	2
		TUG		1						
		COL							1	
		CFV	6		2	2	1	3	1	2
		TUG			1					
		RSV			1					
	19:00	CFV	6	1	2			3		
		TUG			1					
		CCV			1					
	19:15	CFV	6		1	fog		3	fog	fog
		GPV			1					
		TUG			1					
		RPVs			1					
		RKG			1					
	19:30	CFV	5	1	1	fog	2		fog	fog
		TUG			1					
	19:45	CFV	7	1	1	fog			fog	fog
		CCV			1					
	20:00	CFV	7		2	3		3	1	2
		RPVb			1					
3-Aug	8:00-9:21	all zones obscured by fog								
	9:30	CFV	8		1					3
		TUG			1					
		RPV			1					
	9:45	all zones obscured by fog								
	10:00	zone 5 & 6 obscured by fog								
		CFV	12		3			3		
		RKG	1(1)							
	10:15	CFV	8		3	2	1	4		
		RPV			1					
	10:30	CFV	7	2	1			1	4	2
	10:45	CFV	7		1			1	3	3
		RKG	1(3)							
	11:00	CFV	8	2		6	1	3	1	2
		RKG	1(4)		1					
		RPVs								
		RPVb								
	11:15	CFV	8		3	5	1	3		
		RPV3								
		RKG	2(1,2)							
	11:30	CFV	6		1	5	1	3	2	3
		RKG	1(2)							
		RSV	1							

	CCV	3						
11:45	CFV	8	3	3	3	3	1	3
	RPVs		2					
	RPVb	1						
	RKG	3(6,2,1)	1(1)	1				
	RSV							
	CCV	4						
12:00	CFV	7	3	3	3	1	1	2
	RSV		2					
	CCV	4						
	RKG	1(1)	2(6,1)					
12:15	CFV	10	1	1	3	3		3
	COL		1					
	RSV	1	2					
	CCV	2	2					
	RKG	3(1,1,1)						
12:30	CFV	9		3		3		3
	RKG	2(5,1)						
	RSV	1	2					
	CCV		1					
	RPVs	1	1					
	RPVb	1						
12:45	CFV	9		3	1	3		3
	RSV	1	2					
	RPVb		1					
	RPVs	1						
	RKG	2(1,3)						
13:00	CFV	10	1	5		3		3
	CCV		2					
	RSV		2					
	GPV				1			
	RPVb	2		1		1		
	RKG	1(1)						
13:15	CFV	10	2	3		4		4
	CCV	1	1	2				
	RPV	1		2				
	RKG	1(1)						
13:30	CFV	6		3	5	1	3	1
	RKG	1(1)						2
	RSV		1	1				
	RPVb			3			1	
	CCV		1					
to half hour								
14:00	CFV	8		4	1	3	1	2
	CCV		1					
	RKG	1(1)						
	RSV		2					
	RPVb		1					
14:30	CFV	7		3	2	3	1	3
	RKG	3(1,4,3)						
	RSV	1	1					
	RPVs							
	RPVb		2					
15:00	CFV	9	1	3		3		4
	RSV	2	1					
	RPVb	1						
15:30	CFV	7		3		4	1	3
	RKG	1(3)						
	RSV		1			1		
	TUG	1						
16:00	CFV	10		3	1	1	2	3
	TUG						1	
	RSV	1						
	RKG				1(1)		1(2)	
	RPVb							
16:30	CFV	7		5		4	1	3
	RPVs	2						
	RKG	2(6,6)						
	CCV		2	1				
	RSV		1					
17:00	CCV	2	1					
	RKG	1						
	CFV	7		5		4	2	3
17:30	CFV	7		3		4	1	3
	CCV	4						
18:00	CFV	8		3	1	4	2	3
	CCV		1	3				
	RKG	1(1)						
18:30	CFV	5		6		4	2	3
	COL		1					
	CCV		3					
19:00	CFV	6		3	5		6	1
	TUG		1					
	CCV		2					
19:30	CFV	9		2	5		4	1
	COL		1					
	CCV							
20:00	CFV	8		5	5	1	5	1
	RSV		1					
4-Aug	8:00	CFV	7		5	1	4	2
	RPVs		1				1	
	RSV		1					
	TUG							
8:15	CFV	7		2	4	1	4	2
	RSV							
	TUG		1					

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RPV							1	
	8:30	TUG				1				
		CFV	8			4	1	5	2	2
		RSV		1						
		RPVs								
	8:45	CFV	8		1	4	2	5	2	2
	9:00	CFV	7		2	4	2	4	3	2
		CCV			1					
	9:15	CFV	7		2	4	1	4	2	3
		RPVs			1					
		CCV			1					
		CFVs						1		
	9:30	CFV	10	2		1		4	2	4
		RPVb			1					
		RPVs			1					
		CCV			1					
		CFVs						1		
	9:45	CFV	9	5	4	3		4	2	4
		CCV			1					
		CFVs						1		
	10:00	CFV	13	4	2			4	2	4
		CFVs						1		
	10:15	CFV	10	3	4		1	4	2	4
		RPVb			1					
		RPVs			1					
		CFVs						1		
	10:30	CFV	11	1	3		1	4	2	6
		RKG	1(2)							
		RPVs	2							
		CCV			1					
		CFVs						1		
	10:45	CFV	8		4		2	5	3	4
		RKG	3(12,,1)							
		RPVs			1					
		CFVs						1		
		CCV			1					
	11:00	CFV	10			2	3	3	3	4
		RPVb			5					
		CCV			1					
		RKG	4(2,7,1,1)		1(2)					
		RPVs	1							
		CFVs						1		
	11:15	CFV	13	1	1	2	1	2	2	6
		RKG	3(1,1,1)	1(3)	1(8)					
		RPVb	1							
		RPVs			4					
		CCV			1					
		CFVs						1		
	11:30	CFV	9				4	2	3	4
		RKG	2(2,1)	3(3,1,8)						
		RPVs	3		2					
		CCV			2					
		RPVb			1					
		CFVs						2		
	12:00	CFV	13				2	3	3	5
		RPVs	2	1						
		CAR		1						
		CCV	2							
		RSV	1							
		RKG	3(1,1,10)							
		CFVs	1					2		
	12:30	CFV	9		1		1	3	3	6
		RKG	1(1)	2(2)		1(1)				
		CCV	1		3					
		RSV			2					
		CFVs	1					1		
	13:00	CFV	10	1	2	5	2	4	3	4
		RKG				1				
		RPV			2					
		RSV			2					
	13:30	CFV	8		4	5	3	5	4	4
		RPV								1
		CCV			6					
		RKG			1(1)					
		RSV			1					
		CFV	7	1	3	3	1	4	4	4
		RPVs	1							
		CCV	1	1						
		RSV			1					
		COL			1					
		RKG	1(1)		1(1)					
	14:00	CFV	8			1	3	1	4	4
		RPVs	1							
		CCV	1	1						
		RSV			1					
		RPVb			1					
		RKG	1(B)							
	14:30	CFV	8			1	3	1	5	5
		RSV			1					
		CCV	1		1					
		RPVb			1					
		RKG	1(B)							
	15:00	CFV	9				7	2	6	5
		RPVs					1			
		RPVb			1					
		RKG	4(7,1,7,1)		1(1)					
		CCV	1		1					
	15:30	CFV	10		1	1	6	2	5	6

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RKG	1(4)							
	16:00	CPV	9				6	2	5	4
	16:15	RKG	1(5)							4
	16:15	CPV	9		1		4	2	4	2
	16:30	TUG								
	16:30	RKG	2(3,10)							
	16:30	CPV	7	1		4	2	5	4	4
	16:45	RKG	2(3,6)		1(3)					
	16:45	CAR			1					
	16:45	CPV	8		1	4	2	4	4	4
	17:00	RKG	3(1,6,1)							
	17:00	CPV	fog	fog		4	2	4	4	4
	17:00	CAR			1					
	17:00	RPVb			1					
	17:15-19:30 all zones obscured by fog									
	19:30	COL		2						
		CCV			1					
		CFV	7			4	3	5	5	3
	19:45	COL	fog	fog	1	fog	fog	fog	fog	fog
	19:45	CAR			1					
	19:45	CCV			1					
5-Aug	8:00	CFV	7	1	1	6	2	5	3	5
	8:15	RSV			1					
	8:15	RPVs			1					
	8:15	RPVb			1					
	8:15	RSV			1					
	8:30	CFV	7	1	1	4	2	5	3	4
	8:30	TUG			1					
	8:30	RPVb			1					
	8:45	CFV	8			4	2	5	3	4
	8:45	CFV	7		1	4	3	5	3	5
	8:45	TUG			1					
	8:45	RPVs			1					
	9:00	CFV	9	1	4	4	2	6	3	4
	9:00	TUG		1						
	9:00	RPVb			1					
	9:15	CFV	8		5	7	2	8	3	4
	9:15	RPVb			1					
	9:15	RPVs			1					
	9:30	CFV	9	2	3	6	2	7	3	4
	9:30	CFVs						1		
	9:30	RPVb			1					
	9:45	CFV	8		3		2	5	3	4
	9:45	CCV			1	4				
	9:45	TUG			1					
	9:45	RKG	1(1)							
	9:45	RPVb			1					
	9:45	CFVs						1		
	10:00	CFV	7		1	5	3	6	4	5
	10:00	TUG			1					
	10:00	RPVb			2	3				
	10:00	CAR			1					
	10:15	CFV	9			6	2	5	5	4
	10:15	CFVs					1			
	10:15	RSV			1					
	10:15	CCV		2						
	10:30	RKG	2(1,1)							
	10:30	CFV	11				2	6	3	3
	10:30	CFVs					1			
	10:30	CCV	3	1						
	10:30	PLANE	1							
	10:30	RPVs			1					
	10:30	RSV			1					
	10:30	RKG	1(5)							
	10:45	CFV	8	2			3	4	5	4
	10:45	CFVs					1			
	10:45	PLANE	1							
	10:45	RKG	2(4,5)							
	10:45	CCV	4	1						
	10:45	RSV			1					
	10:45	RPVb			1					
	10:45	RPVs			1					
	11:00	CFV	13				2	2	5	4
	11:00	RKG	3(1,1,5)	1(4)						
	11:00	RSV		1	1					
	11:00	PLANE					1			
	11:00	RPVs		2						
	11:00	RPVb		1						
	11:15	TUG			1					
	11:15	CFV	15	3	1		2	2	5	3
	11:15	CCV	3	1						4
	11:15	RSV			1					
	11:15	TUG			1					
	11:15	RKG	5(1,1,2,3,4)					1		
	11:15	PLANE								
	11:30	RPVb			1					
	11:30	CFV	9	2	1			2	5	3
	11:30	CFVs		1						4
	11:30	RKG	3(1,3,6)							
	11:30	CCV		1						
	11:30	RPVb		1	1					
	11:30	TUG			1					
	11:30	RPVs		1	1					
	11:45	CFV	13	3				2	5	3
	11:45	RKG	4(1,1,3,6)							4
	11:45	RSV			1					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		TUG		1	2					
		RPVs		1	2					
		RPVb		2						
		CCV		2						
	12:00	CFV	12	2		1	2	5	4	4
		RKG		1(5)	1(8)					
		CCV		3						
		TUG			1					
		RPVb		1						
		RPVs		2						1
	12:15	CFV	12	1	2	2	2	6	4	4
		CCV		2						
		RKG	5(2,2,3,3,5)		1(4)					
		RPVb		1						
		RPVs								1
	12:30	CFV	11	2	3	3	3	6	3	4
		RPVs	1	1	1		1(3)			
		RKG	3(1,3,5)							
		RPVb		1						
		CCV		2						
	12:45	CFV	10	2	3	3	3	6	6	4
		CCV	1	2						1
		RPVs		2						
		RKG	1(1)			3(1,2,8)				
		RPVb		1						
	13:00	CFV	9	2		2				
		RKG	1(6)							
		RPVb		1	2	2		6	5	4
		RPVs		2						
		CCV		3						
	13:15	CFV	10	2	3	3	3	6	4	
		COL		1						
		RSV	1							
		TUG	1							
		CCV	1		1					
		RKG	1(1)							
		RPVs			1					
	13:30	CFV	9	3	2	2	2	6	5	4
		RKG	1(6)		1					
		RPVb		2						
		RPVs		3						
	13:45	CFV	10	2	3	3	3	6	4	
		COL		1						
		RSV	1							
		TUG	1							
		CCV	1		1					
		RKG	1(1)							
		RPVs			1					
	13:30	CFV	9	3		3	2	6	4	4
		RSV	1							
		CCV		2						
		RKG	1(2)							
		TUG	2							
		COL		1						
	13:45	CFV	12	3		3	2	5	4	5
		CCV		4						
		GPV		1						
		RSV	1							
	14:00	CFV	12	6	1	6	6	6	3	5
		CCV		2						
		RSV	2							
		RPVs	1	1						
		RKG	1(5)							
	14:15	CFV	13	1	3	7	3	5	4	5
		RSV		2						
		RKG	1(5)							
		RPVs	1							
		CCV		2						
		RPVb			1					
	14:30	CFV	9	6		7	4	6	5	4
		RPVb		1				1		
		RSV		3						
		RKG	4(1,5,8,1)							
		CAR		1						
		CCV		3						
		RPVs	1							
	14:45	CFV	10	6	2	6	3	5	6	4
		RPVs		2						
		RKG	5(1,4,1,1,9)	1(8)						
		RSV		3						
		CAR		1						
		CCV		2						
	15:00	CFV	12	4		2	3	6	4	6
		RSV	1	3						
		RPVs	2	2						
		CAR		1						
		RKG	4(1,1,2,8)							
	15:15	CFV	11	2			4	6	3	4
		RSV		3						1
		GPV								1
		PRV								
		RKG	4(1,1,4,4)							
	15:30	CFV	10	2	1	2	5	5	4	4
		RSV		3						
		RPVs		1						

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		PRV			1					
		GPV						1		
		RKG	5(1,2,2,2,2)							
	15:45	CFV	11	2		3	3	5	6	4
		CCV	1							
		RKG	6(1,1,2,2,3,5)		1(2)					
		RSV	1							
	16:00	CFV	12	3	3	2	3	6	3	5
		RSV	2	1						
		CCV		2						
		RKG	5(1,2,2,3,5)							
	16:15	COL	1							
		CFV	11	2	1	3	3	7	4	4
		RSV			2					
		CCV			1					
		GPV	1							
		RPVs	2		1					
		RKG	4(2,2,2,3)							
	16:30	CV	11	2	4	3	3	7	3	4
		COL	1	1						
		CCV			1	1				
		GPV					1			
		RKG	3(1,3,4)							
	16:45	CFV	11	2	1	3	3	7	4	6
		COL			1					
		CCV				1				
		RPVs				2				
		RKG					1(1)			
	17:00	CFV	14		4	6	8	7	6	5
		CCV								
		RPVs			1					
		RKG							1(1)	
		GPV					1			
		CAR				1				
		RSV			1					
	TO HALF HOUR									
	17:30	TUG		1						
		CFV	10	3		2	6	6	6	4
		CCV			4					
		RPVs		1	1	1				
		RKG	1(2)					1(1)		
	17:45	TUG		1	1					
		CFV	9	4		3	7	5	6	4
		CCV			5					
		RPVs			1					
		RKG	1(2)							
	18:00	TUG		2						
		CFV	11	3	2	3	5	5	5	4
		CCV			4					
		RPVs			1					
		RSV			1					
		RKG	1(2)							
	18:15	CFV	10	4	2	3	4	6	6	4
		CCV	1		2					
		RPVs			1					
		RKG	1(2)							
		RSV			1					
	18:30	CFV	13	2		3	4	5	4	4
		CCV	2	1						
		RSV	1							
		RPVs				1				
	18:45	CFV	8	1		6		6	5	4
		RKG					1(1)			
		CCV	2	1						
		RSV	1							
	19:00	CFV	12	2	1	7	5	5	4	4
		RSV			1					
		COL								
		RPVb			1					
		CCV			2					
	19:30	CFV	9	3		3	7	5	5	4
		COL	1							
		CCV	1							
		RKG	1(2)							
	20:00	CFV	10	2			4	5	4	4
		COL				1				
		RPVs			1					
		TUG			1					
		RKG	1(2)							
6-Aug	8:00	CFV	9		2	5	4	5	4	5
		RPVb	1							
	8:15	CFV	9		1	5	4	6	4	4
		TUG			1					
		RPVb	2		1					
	8:30	CFV	10	12	2	7	3	5	5	5
		TUG			2					
		RPVb	1		1					
		RPVs	1							
	8:45	CFV	12	15	2	9	3	5	5	5
		TUG			2					
		RKG	1(1)							
		RPVb	1		1					
		RPVs			1					
	9:00	CFV	14	6		8	4	5	8	5
		TUG			1					
		RSV			1					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RPVb			1					
		RKG			1(1)					
	9:15	CFV	14	9		7	3	8	5	4
		TUG			1					
		RPVb			1					
		RKG			1(1)					
	9:30	CFV	15		2	6	8	6	5	4
		RPVs			2					
		RKG			1					
	9:45	CFV	18			6	4	7	5	4
		RPVb			2					
		RKG			1					
		COL			1					
	10:00	COL			1					
		RKG		1(1)	1(2)	1(1)				
		CFV	19	1	3	6	4	5	5	4
		RPVb			1					
	10:15	CFV	20	2	7	7	4	6	4	5
		CCV			4					
		RPVb			2					
		RPVs			1					
		RSV								1
	10:30	CCV			4					
		CFV	22	4	7		7	6	6	4
		RPVb			3					
		RSV			1					1
		RKG			1(1)					
	10:45	CFV	18	3	13	3	6	9	5	3
		RSV					1			
		RKG		1(8)						
		CCV			1					
		RPVb			3					
	11:15	CFV	24	5	6	6	5	7	6	4
		RSV			3					
		RPVb			2					
		CCV			3					
		RKG		1(11)		1(1)				
		RPVs			2					
	11:45	CFV	21		9	6	6	6	4	7
		RSV			1	1				
		CCV			4					
		RKG		1(11)		1(1)		1(4)		
	12:15	RSV			4		1			
		CFV	20		5	6	6	7	3	5
		RKG		1(4)			2(3,6)			
		CCV			1	3				
		RPVs				7				1
	12:45	CAR			2					
		CFV	18	2	4	7	5	9	5	5
		RPVb			2					
		RKG			1(5)		1(5)			
		RSV			2					
		CCV			2					
	13:15	TUG			1					
		RSV			4					
		CFV	19	5		7	3	8	6	3
		RPVs			1					
		CCV			1					
		RKG			2(5,1)					
	13:45	CFV	22	1		7	5	9	4	6
		RPVb			1					
		RSV			2					
		CCV			2					
		TUG			1					
		RPVs					1			
		RKG								
	14:15	RPVs			2(5,1)					
		CFV	19	1	10	5	6	7	7	5
		TUG			1					
		RSV			1	1				
		RPVb			1	1				
		CCV								
		RKG			1(5)					
	14:45	CFV	18	2	2	9	6	11	4	5
		CCV			1					
		TUG			1					
		RSV			1					
		RPVb			1					
	15:00	CFV	18	6	3	10	9	12	8	8
		CCV			1					
		TUG			1					
		RPVs				1				
	15:15	CFV	19	6	2	7	10	9	9	10
		RPVs			1					
		TUG			1					
		RKG								
	15:30	RPVs			2(3,4)					
		CFV	19	2	3	8	7	12	10	8
		RPVs			1					
		TUG			1					
		RKG			2(3,4)					
	15:45	CFV	17	3	5	5	10	10	12	9
		RPVs			1					
		TUG			1					
		RKG			1(4)					
	16:00	CFV	15	1	3	5	10	8	12	10
		TUG			1					9

	RKG	1(4)							
16:15	CFV	17	2	6	9	9	14	8	9
	RPVs			1					
	TUG	1							
16:30	CFV	22	2	10	11	7	11	11	11
	TUG	1							
16:45	CFV	17	2	8	7	9	14	7	7
	TUG	1							
17:00	CFV	19	3	7	7	9	9	10	6
	TUG	1							
	GPV			1					
17:15	CFV	19	2	12	8	8	10	7	13
	TUG	1							
	COL			1					
	CAR			1					
17:30	CFV	20	4	12	12	9	13	10	8
	TUG	1							
17:45	CFV	20	7	24	11	6	14	10	8
18:00	CFV	12	6	1	7	5	8	3	5
	CFVg	11	6	18	2	4	8	8	8
	CCV	2							
	RPVb	1							
	COL	1							
	TUG	1							
18:30	CFV	9		11	15	10	8	4	5
	CFVg	15	5	4	12	5	7	11	5
	COL			1					
	TUG	1							
	RPVb			1					
19:00	CFV	11	2	8	12	6	9	3	8
	CFVg	14	11	2	5	4	12	19	9
	TUG			1					
19:30	CFV	12		1	12	8	8	6	8
	CFVg	10	8	8	7	5	10	11	4
20:00	CFV	10		3	11	8	8	7	8
	CFVg	9	10	4	8	4	11	9	6
	TUG			1					
7-Aug	8:00	CFVs	10	6	1	3	5	4	2
	CFVg	3	3	4	2	5	3	3	2
	CFV	4	5	3	2	5	4	1	2
	TUG			1					
	GPV			1					
	CFVs	3		1	7	6	7	4	6
	CFVg		12	7	4	5	4	2	3
	CFV	6	5	6	1	6	1	3	1
	TUG			1					
	CFV	7	5	7	3	7	2		1
	CFVs	5	1	3	7	6	7	6	5
	CFVg	7	7	4	2	4	4		
	TUG			1					
	CFV	8	1	7	2	7	2	1	1
	CFVs	6		2	4	5	5	6	3
	CFVg		4	4	1			5	
	RSV	1							
	GPV			1					
	RPVb	1							
	TUG			1					
	CFV	6	2	7	8	9			5
	CFVs	3	1	2	6	4	2	9	
	CFVg		3	4			2	3	2
	RSV			1		1			
	TUG			1					
	RPVb	1							
	CFV	7	4	6	3	6	6	2	2
	CFVs	4			3	3	3	6	4
	CFVg	1	1			1	1	1	1
	TUG			1					
	RSV			1					
	CFV	6	1	4	1	6	8	2	2
	CFVs	7		3	6	3	4	5	3
	CFVg	1	2			4			
	TUG	1			1				
	CAR			1					
11:00	CFV	5	10	9	4	9	7	3	5
	CFVs	7		1	2	1		4	
	CFVg	1		3					
	TUG			1					
	RPVs				1				
	RKG		1(1)						
11:30	CFV	7	3	7	1	9	5	2	4
	CFVs	6	1	2	1	3	1	3	6
	CFVg		1	6					
	RKG	1(2)							
	TUG			1					
	CFV	6	8	10		5	7	2	1
	CFVs	10	7	9	3	5	6	3	7
	CFVg	1	1	2		1	1		
	TUG			1					
	RKG		1(2)						
	RSV		1						
12:30	CFV			19	4	4	6	1	3
	CFVs	4	13	19	7	5	7	5	8
	CFVg			2	4	2			

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CAR		1						
		RPVb		2						
		RSV		1						
		RKG	1(3)							
		TUG		1	1					
		RPVs		2						
13:00		CFV	2	6	20	4	4	12	9	6
		CFVs	4	17	19	7	4	2		
		CFVg		2						
		RSV		1	2					
		TUG		1						
		RKG	1(3)				1(3)			
		RPVb	1	1	1					
13:30		CFV	7	4	12	1	13	2	2	2
		CFVs	9	10	7	1	8	1	2	2
		CFVg	5	3	5	1	7	1	1	1
		CCV		1						
		RSV		1						
		TUG					1			
14:00		RSV		1	2					
		RPVb		1	2					
		CFV	8	12	13		11	12	2	
		CFVs	8	12	19		4	11	8	5
		CFVg	1	6	5		1	7	1	
		CCV		1						
		TUG	1				1			
		RPVs	1						1	1
14:30		CFV	5	9	16	2	8	14	3	3
		CFVs	11	16	21		3	7	1	2
		RPVb		1						
		RSV		2						
		CFVg	3	2	4		2	2	3	1
		CCV		1						
		TUG					1			1
15:00		CFV	7	5	10	3	3	9		
		CFVs	11	9	19	1	4	9	2	2
		CFVg	2	2	5		2	3	2	
		TUG					1			
		RSV		1						
		RPVs		1						
15:30		RSV		1	1					
		CFV	2	6	11	3	2	6	4	
		CFVs	11	6	13	2	3	7	4	1
		CFVg	5	2	7		1	5	1	
		RPVb	1							
		RKG	1(1)							
16:00		CFV	6	3	10	2	2	12	2	
		CFVs	12	14	14		5	6	1	2
		CFVg	1	1	8	1	1	1	6	
		CCV	1	1						
		RSV	2							
		TUG					1			
16:30		CFV	2	2	22		3	11		2
		CFVs	26	16	18	3		3	2	1
		CFVg	4	3	8	3	3	1	4	3
		TUG					1			
		RSV	1							
17:00		CFV	7	6	8		1	10	5	2
		CFVg	6	5	22	4	4	3	3	4
		CFVs	16	4	2		2	2	1	
		TUG					1			
		RSV		1						
17:30		CFV	12	10	10	4	1	7	3	3
		CFVg	6	1	9	4			9	8
		CFVs	15	3	5	2	8	5	4	
		TUG							1	
		RPVb		1						
18:00		CFV	8	2	6	2	12	7	5	2
		CFVg	6	1	8	2	6	6	12	10
		CFVs	12	2	18	1	4	2	2	3
		TUG							1	
		RSV		1						
18:30		CFV	6	7	22	11	3	1	4	2
		CFVg	9	3	8	1	1		2	11
		CFVs	15	4	2	2	2			
		RPVs			1				1	
		COL		1						
		TUG								1
19:00		CFV	3	2	7	4	3	11	11	5
		CFVg	1	6	11	1	1			1
		CFVs	9		5					
		TUG								1
19:30		CFV	3	2	11	11	5	11	2	6
		CFVg	15	9	8	1	2	1	4	1
		CFVs	3	3	3					
		RPVs	1							
		TUG			1					
20:00		CFV	2	2	14	13	5	9	4	8
		CFVg	12	7	10	3	2		2	
		CFVs	4	3	2					
		TUG								1
8-Aug	8:00	CFV	6		3	3		4	1	2
		CFVt	26	2			14	11	1	1
	8:15	CFV	4	1				2		1
		CFVt	24							
	8:30	CFVt	23	1			haze	9	8	5

		TUG	1					
		RKG	1(2)					
8:45		CFV	5	3				
		CFVI	23	4				
		TUG		1				
		RPVs		1				
		RSV		1				
9:00		CFV	4	1	3	1		
		CFVI	25	1		16	4	1
		RSV		1	1		9	1
		TUG		1				
		CFV4			1			
		RPVs			1			
		RPVb			1			
		RKG	1(2)					
9:15		CFV	4	1	2	2		
		CFVI	31	1	2		15	5
		RPVb					1	6
		RKG	1(2)					
9:30		RPV4				1		
		CFVI	41	3			12	8
		CFV	3	1		1		
		RPVb	1					
		RKG	1(2)					
9:45		GPV				1		
		CFVI	45	1	2		7	9
		CFV	4	1	3			4
		TUG	1		1			
		GPV					1	
		RSV		1				
10:00		GPV	1			glare		
		CFVI	45				11	8
		CFV	4		4			4
		RSV			1			2
		TUG			1			1
		RKG				1(2)		
10:15		RKG	2(2,1)					
		CFVI	48				9	10
		CFV	4	3	4			4
		RSV	1					1
		GPV		1				
10:30		CFV	4	2	2	1		
		CFVI	45				9	10
		RKG	2(1,1)				1(1)	1(2)
		TUG			1			
		RPVs			2			
		RPVb			1			
10:45		CFV	4	2	1	1		
		CFVI	44		1		16	
		TUG			1			
		RKG	2(2,1)					
		CAR						1
11:00		CFVI	46	2				
		CFV	3	4	2	1	17	
		RSV			1			6
		CAR						1
		RPVs			1			
		RKG	2(1,1)					
11:15		CFVI	44	1			21	
		CFV	4		5			10
		RKG	3(1,1,1)					5
		RSV						1
		RPVs	1					
11:30		CFVI	34	4	1			
		CFV	5	3	3			5
		RSV			1			1
		RKG	3(0,1,1)					
		RPVs	1					
		RPVb		1				
11:45		CFV	5	2	2	2		
		CFVI	36	4		1	18	
		RKG	1(0)				1(1)	1(1)
		RSV			1			
		RPVs	1					
		GPV	1					
12:00		RKG	3(5,8,2)				1(1)	
		RPVs	1					
		CFV	4	2	1	2		
		CFVI	36	9	1	1	12	
		RSV	1					1
		GPV			1			
12:15		CFVI	39	7		1	8	
		CFV	5	4	2	1		
		RPVs	1					
		RSV						
		RKG	2(1,5)					
12:30		CFVI	42	6	1	1	6	
		CFV	5	2	4	2		
		RPVs	1	1				
		RKG	2(1,5)					
		RSV		2				
12:45		CFVI	37	10	2	1	7	
		CFV				2		
		RKG	2(1,5)				1(1)	
		RPVb			1			
		CFVs	5					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RSV		1						
	13:00	CFVI	39	9	1	1	8	16	5	3
		CFV	6	1	1	1		4		2
		RSV		1						
		CFVs	1							
		RKG	1(8)				1(1)			
		RPVs			1					
	13:15	RKG	2(1,8)							
		CFVI	40	5		4	8	10	5	
		CFV	6	2	1	2		4		1
		RPVs	1							
	13:45	RKG	2(1,2)							
		CFVI	42	4	2	1	12	9	3	1
		CFV	4		2		1	4		1
		RPV				1				
		CFVs	2						1	
		RSV				1				
		RPVs	1		2	1				
		GPV	2							
		CCV	2							
	14:15	CFVI	34	3	3	2	17	14	2	1
		CFV	5	2	3	1	2	4		2
		CFVs							1	
		RPVb			1					
		CAR			1					
		RPVs	1		1					
		CCV			2					
	14:45	CFVI	27		1			1	19	1
		CFV	6		3	1	1	4	1	2
	15:15	CFV	5	2		1	3	5	2	1
		CFVI	21	5	2	1	15	23	1	
		RKG	2(1,5)							
	15:45	CFV	6	1	3	1	2	5		3
		CFVI	30	4			13	23		
		RPVs			1					
		CCV	1		2					
		RKG	3(5,2,1)							
	16:15	CFVI	29	2	1		19	13	2	
		RKG	3(5,8,1)							
		CFV	6		3	2		4	1	2
		RSV	1	1	1		2			
		TUG			1					
		RPVb			1					
		CCV			1	2				
	16:45	CFVI	35		1	1	15	15	2	4
		CFV	5	1		1	2	3		1
		RKG	3(5,2,1)							
		RPVs			1					
		CCV			3					
		RSV	1		2					
		RPVb			1					
	17:15	CFV	6		1	1		4	1	2
		CFVI	31				12	9	1	
		CCV			2					
		RSV			1	1				
		RPVb			1					
		RKG	2(1,2)							
	17:45	CFVI	33	1			7	9	1	1
		CFV	5	1		2	1	5		1
		RSV					1			
	18:00	CFVI	36	2	1		10	8	1	1
		CFV	5		2	2	1	5		
		RPVb			2					
		RSV			1					
		RKG	1(2)							
	18:15	CFVI	35	2			11	7		1
		CFV	5	1		2	1	5		2
		RSV			1					
		RPVb			1					
		RKG	1(1)							
	18:30	GPV		1						
		CFVI	33	1			11	3	3	1
		CFV	5			1		5		2
		CCV			1					
	18:45	CCV		1	2					
		CFVI	26	2				11	6	1
		CFV	3			2	3	5		2
	19:00	CFVI	24			1	12	9		
		CFV	4		1	1			5	
		RPVb			1					
	19:15	CFV	4	1	1	1	1	5	1	2
		CFVI	22	2		1	9	9		
		RPVs			1					
	19:30	CFV		4	2	2	1	5		2
		CFVI	21	1		1	3	10		
		CCV		1	1					
		RSV			2					
		RPVs			1					
	19:45	CFV	4				2	1	5	
		CFVI	16	2		1	5	10		
		RSV			1					
	20:00	CFV	4				3	1	5	
		CFVI	11	4		1	6	9		2
		RSV			1					
9-Aug	8:00	CFV	2		2	2	1	7	1	2
		CFVI	22		1		14	6	3	

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		GPV				1			1	
		RPVs								
8:15		CFV	3	1		2	1	7	1	2
		CFVt	19				15	10	3	
8:30		CFV	3	5	1		2	5		
		CFVt	18	4	2		12	9	4	
8:45		CFV	4		1	3	2	5	1	2
		CFVt	20	2			12	12	2	
9:00		CFV	4		1	3	2	6	1	2
		CFVt	21				16	10	2	
9:15		CFV	4	6	3	1	1	5	1	3
		CFVt	25	1	1	1	14	14	1	1
		TUG		1						
		RPVb		1	1					
		RSV								1
		CFVs					1			
		CAR			1					
9:30		CFV	4	6	2	3	2	4	1	4
		CFVt	25				14	10	3	
		TUG			1					
		RPVb		1				1		
9:45		CFV	5	2	4	3	1	5	1	3
		CFVt	21			1	16	9	3	
		TUG			1					
		RSV						1		
		RPVb				1				
10:00		CFV	4		4	3	1	5	1	3
		CFVt	24			1	18	5	3	
		CFVs	1							
		RPVb				1				
		RSV						1		
10:15		RKG		1(2)						
		CFV	5	1	3	3	1	5	1	2
		CFVt	26	2			17	7	5	
		RSV						1		
10:30		CFV	4		3	3	5	5	1	2
		CFVt	27	3			12	5	7	
		RPVb				1				
		RSV						1		
10:45		CFV	4	1	1	4	1	4		3
		CFVt	31	4			8	13	5	
		CFVs						1		
		RSV								
11:00		CFV	3		1	3	1	5		3
		CFVt	33	1			10	9	3	
		RSV						1	1	
		CFVs	1							
11:15		CFV	6	4		1	2	5	1	2
		CFVt	31	2			11	9	8	
		RSV		1	1	1				
		RPVs								
		RPVb				1				
11:30		CFVs	1							
		CFV	4	5		2		5	1	2
		CFVt	32	3	1		12	13	4	
		RSV			3					
		RPVs		1						
		RPVb			1					
11:45		CFV	6	4		1	2	5	2	2
		CFVt	21	3	2		13	13	1	2
		RKG		1(2)						
		CFVs	1							
		RSV				2				
		RPVb				1				
12:00		CFV	4	4	1	1	2	6	1	2
		CFVt	29	3	1		18	10	7	
		RKG		2(1,2)						
		RPV			1					
12:15		CFV		2	1		2	5	2	3
		CFVt	34	3			12	13	5	1
		RKG		2(5,1)						
		RSV						1	1	
		GPV		1						
		CFVs	1							
12:30		CFV	4		3	3	2	7	1	3
		CFVt	34	6	2		10	10	7	
		RKG		1(8)				1(1)		
		GPV			1					
		RSV				1		1		
		RPVs		1						
12:45		CFV	5	3		2	2	5	1	3
		CFVt	34			2	11	11	4	2
		RKG		1(10)						
		CCV		2						
		RSV		2						
		RKG					1(2)			
		GPV						1		
13:00		CFV	5			2	2	5	1	3
		CFVt	33	3	1	1	14	13	4	
		GPV			1					
		RSV						1		
		CCV		3	1					
13:15		CFV	5	2		1		5	1	5
		CFVt	35	3		1	16	11	5	1
		RSV			2					

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RKG	1(1)					1(2)		
		GPV		1						
	13:30	CFV	4			2	1	6	1	4
		CFVt	33	4	1		15	8	6	2
		CCV	1							
		RSV	1	1	1			1		
	14:00	CFV	4	3	3	3	3	5	1	2
		CFVt	31	5	1	1	13	12	6	1
		RKG	1(1)							
		RSV	1	1	1					
		CCV	1							
	14:30	CFV	4	7		2	1	5	2	2
		CFVt	33	9	1	2	6	13	3	1
		RPVb		1	4					
		RSV			1					
	15:00	CFV	4	2	4	4	2	4	1	4
		CFVt	24	8	5		6	11	8	1
		RSV			1					
		RPVb		1	1					
	15:30	CFV	4	4	1	2	2	6	2	3
		CFVt	25	5	3	1	3	6	4	2
		RKG						1(2)		
		TUG			1					
		RPVb			1					
		CCV			1					
	16:00	CFV	4	1	6	2	2	5	1	2
		CFVt	16	4	2	3	14	5		
		RKG	1(6)					1(2)		
		RPVb			1					
		CCV		1	3					
	16:30	CFV	4	3	1	2		6	1	3
		CFVt	15	3	3		12	8		
		CCV		1						
		RKG								
	17:00	CFV	3			3	2	5	1	2
		CFVt	9				8	8	3	
	17:15	CFVt	9	1			5	11	3	
		CFV	3		9	2	1	5	1	2
		RKG	1(9)							
		GPV								1
	17:30	CFVg	6			1	4	9	4	
		CFV	4	5	4	4	1	5	1	4
		RKG	1(8)							
	17:45	CFVt	4				2	12	1	
		CFV	6	4	5	2	1	5	1	2
		RKG	1(8)							
	18:00	CFVt	2	1						
		CFV	6	3	3	3	2	11	5	
		RKG	1(8)						1	3
		RPVb			1					
		RSV			1					
	18:15	CFVt					1	6	7	
		CFV	6	2	2	2	1	6	1	2
		RSV			1					
		TUG			1					
	18:30	missed								
	18:45	CFVt	1	2		3	1	2	3	2
		CFV	4		1	4	1	6	2	5
		COL			1					
		CCV	1	1						
	19:00	CFV	5		2	2	1	5	2	2
		CFVt	3			2	1	1	5	2
	19:15	CFV	5	1	1	3	1	6	1	2
		CFVt					1	1	6	1
		CCV	1							
		RPVs	1							
	19:30	RPVs					1			
		CFV	6		1	3	1	5	1	2
		CFVt	1				1		8	
	19:45	CFV	6		1	2	1	5	4	3
		CFVt	2					2		
		RPVs					1			
	20:00	CFV	7	1		4	1	7	1	2
		RPVs	1					3	1	
		CFVt								
10-Aug	8:00	all zones obscured by fog								
	8:15	CFV	FOG	FOG	3	FOG	2	4	2	3
		RPVb			2					
		TUG			1					
	8:30	CFV	FOG	FOG	3		1	5	1	3
		RPVb			1					
		TUG			1					
	8:45	CFV	5	FOG	3		1	4	2	4
		TUG			1					
	9:00	CFV	6		3	2	1	4	1	2
	9:15	CFV	7			1	2	4	2	2
		RPVb			1					
		RSV			1				1	
	9:30	CFV	FOG	FOG			1	1	4	1
		RSV			1				1	2
		GPV			1					
	9:45	CFV	3		3	1	1	4	1	2
		RSV		3						
	10:00	CFV	4	1	4	2	1	4	1	2
		RSV		1	2					

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RKG	1(5)							
	10:15	CFV	4	1	2	1	1	4	2	2
		RSV			2					
	10:30	CFV	4		2	1	1	3	1	2
		CFVs						1		
		RSV			1					
	10:45	CFV	4			1	4	2	2	2
		RSV			2					
		CFVs						1		
		CCV			2					
		RPVs	1		1					
		RPVb			1					
	11:00	CFV	4	1		1	3	1	3	2
		TUG			1					
		CCV			1					
		RPVb	1		1					
		RSV		1	1					
	11:15	CFV	4		3	2	3	2	1	2
		TUG		1			3			
		RPVb			2					
		RPVs	1						1	
		RSV	1							
		CCV	1		1					
	11:30	CFV	3	1	3	2	3	1	1	2
		RSV	1		2					
		CCV			1					
		CFVs					1			
		RPVb			2					
		RPVs	2							
	11:45	CFV	2	3	3	1	2	1	1	2
		CCV			2					
		CAR			1					
		RSV			1					
		RPVb						1		
		RPVs	2	1						
		CFVs					1			
		RKG	1(9)							
	12:00	CFV	3		4	1	3	1	1	2
		RPVs	1		2					
		CAR			1					
		RSV			1					
		RPVb			1					
		CFVs					1			
		RKG	1(5)							
	12:15	CFV	3		3	1	2	1	1	2
		RKG	1(9)		2(2,5)					
		RSV			1					
		CFVs	1							
		RPVs								
	12:30	CFV	3			3	2	2	1	1
		RKG								2
		RSV			1					
		RPVs	1							
		CCV			1					
	12:45	CFV	2				2	2	1	1
		TUG			1					
		RPVs	1						1	
		RSV			1					
		RKG	1(9)		2(5,6)					
		CCV			2					
		CFVs	1							
	13:00	CFV	2		1	3	2	1	1	2
		TUG			1					
		CCV			5					
		RSV	1		1		1			
		RKG	1(5)		1(6)					
		RPVs	1							
		CFVs	1							
	13:15	CFV	4		1	4	2		1	1
		CCV			5					
		RSV	1		1					
		RPVs								
	13:30	CFV	4				3	2		1
		CCV		2	3					
		RPVb			1					
		RSV	1		2					
		CAR			1					
		RPVs	2				3			
		RKG	1(5)							
	13:45	CFV	3							
		CAR						1		
		RSV	1		3					
		CCV			1	1				
		RPVs	2							
		RKG	1(5)							
	14:00	CFV	4				3			
		CCV					1			
		CAR					1			
		RSV	1		2					
		RPVs	1							
		RKG	2(6,4)							
	14:15	CFV	5				3		1	1
		RSV								
		CCV	1							
		RPVs	1		1					
		RPVb			1					

## Appendix B1 - Boat Count Data

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	12:00	RPVs					1	2	1	
		CFV				1				
		GPV								
		RPVb			1					
	12:15	CFV		1				1		1
		GPV	1							
		RPVs			1				2	
		RPVb								1
	12:30	CFV			4		1			
		RPVs			1		1			
	12:45	CFV			3		1			
		RPVs			1					
	13:00	CFV	1		2					
		RKG	1(2)							
		RPVs			1					
	13:15	RPVb			1					
		CFV					1			
	13:30	RSV		1						
		CFV			1					
	13:45	All zones obscured by weather								
	14:00	All zones obscured by weather								
	14:15	TUG		log	1					fog
		RPVs		log			1			fog
		CFV		log	2				1	fog
		RPVb			1					
	14:30	RSV			1					
		CFV			6					
		TUG			1					
		COL			1					
	14:45	CFV			3					
		COL			1					
		RSV			1					
		CAR			1					
	15:00	CAR			1					
		RKG	1							
	15:15	CFV			1					
	15:30	CFV			1					
		RPVb	1							
	15:45	RPVb							5	
	16:00	TUG			1					
		TUG			2					
	16:15 - 16:45	all zones obscured by fog								
	17:00	CFV							1	
	17:15	all zones obscured by fog								
	17:30	CCV		2						
		RPVs			1					
	17:45-18:30	all zones obscured by fog								
	18:45	CFV	1		3					
		CCV			2					
	19:00	CFV			2					
	19:15	TUG		1						
		CFV		1						
	19:30	TUG			1					
		CFV		1	2					
	19:45	TUG			1					
		CFV							1	
	20:00	TUG					1			
		COL	1							
		CFV			1					
12-Aug	8:00	CFV	1	1	2					
		RSV	1							
	8:15	CFV		2	1					
		RSV			1					
	8:30	CFV	1		2					
		RSV			1					
		RPVb			1					
		CCV			1					
	8:45	CFV	1		3					
		RSV			1					
	9:00	CFV	1		1					
		COL			1	2	1			
		RSV								
	9:15	CFV	1	3					1	
		RSV			1					
	9:30	CFV	1	1					1	1
		RSV								
		RPVs			1					
	9:45	CFV		2	7	1				1
		RPVs	1		1					
		RSV			1					
	10:00	CFV			3	1				
		RPVs	1		1					
	10:15	CFV		4	1					
		RPVs			1					
	10:30	CFV		4	1					
		RSV			1					
	10:45	CFV		1	5					
	11:00	CFV			7					
		RPV			1					
		RKG	1(1)							
		TUG			1					
	11:15	CFV			5					
		RPVb		2	1					
		TUG			1					
	11:30	RKG				(4)				
		CFV			2					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RPVb			1					
		TUG		1						
11:45		RPVb			1					
		CFV		2	1					
12:00		CFV			2					
		RPVb			1					
		RSV		1	1					
12:15		CFV	1	5						
		RSV			2					
12:30		CFV			6		1			
		RPVs			1					
		TUG			1					
12:45		CFV			4				1	
		TUG			1					
		RPVb		1						
13:00		CFV			1					
		RPVs		1						
		RPVb			1					
13:15		CFV			2					
13:30		CFV		1	1					
13:45		CFV			1					
		RPVs		1						
		RPVb		1						
14:00		CFV		2	1					
14:15		RPVb		1						
		CFV			3					
14:30		CFV	2	2	3					
		RPVb			1					
14:45		CFV	3		3					
		RPVb					1			
15:00		CFV			1		1	1	2	
		CCV		1						
		RPVs		1						
		RPVb	1							
15:15		CFV			1					3
		RPVb								
		CCV		1						
15:30		CFV			2					
		CCV			1					
		COL		1						
		RPVb			1					
15:45		CFV			3					
		CCV		1						
		COL			1					1
		RPVs								
16:00		CCV	1	2						
		CFV			2					
		COL			1	1				
		RPVs	1	1					1	
		RSV		1						
16:15		CCV	1		1					
		RPVb		2						
		CFV								
		CCV			1					
16:30		CCV			4					
		RPVb			1	1				
		CFV								
		RPVs			4					
		RSV			2					
17:00		CCV			2					
		RSV		1	1					
		RKG					1(1)			
		CFV				1				
		RPVs				2				
17:30		CFV				2				
		RPVb				1				
		CCV				2				
		RPVs				1				
		RSV				1				
17:45		CCV				2				1
		RPVs				1				
		CFV				2				
		CCV				1				
18:00		CCV				2				
		CFV				1				
		RPVs				2				
		CFV				1				
18:15		RPVs				1				
		CFV								
		RPVs				1				
		CCV					2			
18:30		CCV					2			
		CFV				1				
		CCV					1			
18:45		CCV				1	1			
		CFV								
		RSV				1				
19:00		RSV				1				
		CCV				2				
		CFV				2				
		RPVb				2				
19:15		CFV					1			
		RPVb				2	1			
		CCV				1				
19:30		RPVb					3			
		TUG				1				
19:45		TUG				1				
20:00		CCV					1			
		RSV					1			
13-Aug	8:00	CFV					1			

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	8:15	CFV			1					
	8:30	CFV	1		2					
	8:45	CFV					1			
	9:00	CFV						1		
	9:15	CFV		1	2					
	9:30	CCV	1							
	9:30	CFV			3					
		CCV	1							
		RSV			1					
	9:45	CFV			4					
		RSV			2					
		CCV	1							
	10:00	CFV		1	3					
		RSV			1					
		RPVb			1					
		CCV		1						
	10:15	CCV			2					
		RSV			2					
		CFV					1			
	10:30	CCV			2					
		CFV	1							
		RPVs			1					
		RSV			1					
	10:45	RPVs			2					
		RSV			2					
		CCV			1					
	11:00	CFV			2					
		CCV		4						
		RPVs	1							
		RSV			2					
	11:15	RSV			2					
		RPVb			1					
		CFV			1					
	11:30	RSV						1		1
	11:45	RSV			2					
		RPVs			1					
		CFV		2	1					
	12:00	CFV			5					
		RSV			3					
	12:15	CFV		1	7					
		RSV		1	1					
		RPVb			1					
	12:30	CFV			9					
		RPVb		1	2					
	12:45	CFV		2	7					
		RPVb		1						
		RPVs	1							
	13:00	CFV		1	4					
	13:15	CFV		1	6					
	13:30	CFV		2	3					
		RPVs		1	2					
		RPVb			2					
	13:45	CFV			3					
		RSV			1					
		RPVb			1					
		GPV		1						
	14:00	CFV		3	6					
		GPV			1					
		RSV			1					
		TUG			1					
	14:15	CFV		2	7					
		RSV		2						
		TUG			1					
		CCV		2						
	14:30	CFV			4					
		RSV	1							
		CCV	2							
	14:45	CFV			5	10				
		RSV		1						
	15:00	CFV		4	4					
		RSV			1					
		RPVs	1							
	15:15	CFV			1					
		RPVs	1	1	1					
		RSV			1					
		CCV	1							
	15:30	CCV	1		2					
		RPVs	1							
		RPVb			2					
		CFV	1							
		RSV			1					
	15:45	CFV		1	1					
		CCV	1	1	2					
		RPVs	1	1						
		RSV			1					
	16:00	CFV		1	3					
		RSV			2					
		RPVs	1							
		CCV			3					
	16:15	CFV			1	5				
		RSV			2					
		CCV			1					
		RPVs	1							
	16:30	RPVs	1							
		RSV			3					
		CCV		1	1					

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		COL			2					
		CFV			2					1
	16:45	CFV			1					
		CCV			2					
		RPVs							1	
		RSV			1					
		COL			1					
	17:00	COL		1						
		CCV			2					
		RSV			2					
		CFV			2					
		RPVs			1					
	17:15	RPVs			1					
		CFV			3					
		COL			1					
		CCV			2					
		RPVs		1						
	17:30	CFV			1					
		RPVs			1					
	17:45	CCV			1					
		CFV			1					
	18:00	CFV			2					
		CCV			2					
	18:15	CFV		1						
		RPVs		1						
	18:30	CCV			1					
	18:45	CFV			1					
		CCV			2					
		COL			1					
	19:00	CFV			2	3				
		CCV				3				
	19:15	CFV				3				
		CCV				2				
	19:30	CFV			3	3				
14-Aug	08:00 - 08:45	All zones obscured by fog								
	9:00	CFV				1				
	9:15	CFV				1				
		RSV			2					
	9:30	RSV			2					
	9:45	RSV		2						
		RPVb			2					
	10:00	TUG				1				
		RSV				2				
		CFV			1					
	10:15	TUG			1					
		RSV				2				
	10:30	RSV				2				
		RPVb				1				
		CFV			2					
	10:45	CFV		1	2					
		RSV								2
	11:00	CFV			2					
		RSV							1	1
		RPVb			2					
		RPVs		2						
	11:15	CFV	2	RAIN	3					1
		RSV				1				
	11:30	CFV			5	RAIN				RAIN
		CCV		1						
		RPVb			1					
	11:45	CFV			2					
		CCV		1	1					
		GPV			1					
		RSV				1				
	12:00	GPV		1						
		CCV	1	1						
		CFV						1		
		RSV					1			
	12:15 - 16:15	All zones obscured by rain								
	16:15	RSV			1					
		CCV			2					
		RPVb		1						
		RPVs		2						
		CFV		1						
		RKG	1(2)		1					
	16:30	RSV				1				
		RPVb				1				
		CCV			2					
		CFV		2						
		RKG	1(2)							
	16:45	CFV			1					2
		RKG	1(1)							
		RPVb			1	1				
	17:00	CFV				1				
		RKG	2(1,1)							
	17:15	RKG	2(1,2)							
	17:30	COL			1					
	17:45	RKG	1(2)							
	18:00	CFV				1				
	18:15	CCV			2					
		CAR				1				
	18:30	CCV		1						
		RSV			1					
		PRV			1					
	18:45	CCV		1						
		RSV		1						

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	19:00	PRV			1					
		RSV								
		CCV	1	1						
	19:15	CCV	1	1						
		PRV		1						
	19:30	CFV	1	1	1					
	19:45	CFV	1	1	1					
	20:00	PRV		1	1		1			
		CFV			1					
15-Aug	8:00	TUG	1							
		CFV	1							
		CAR			1					
	8:15	CFV	1(S)						1	
		CAR			1					
		TUG	1							
	8:30	CFV	1(S)		1		1			
		TUG	1							
	8:45	CFV	1		1					
		TUG	1							
	9:00	CFVs	1							
		CFV	1		1					
		TUG	1							
		CAR		1						
	9:15	TUG	1							
		CAR			1					
		CFV	1(S)	1						
	9:30	TUG	1							
		CFVs	1							
		CFV		1						
		CCV	1							
	9:45	RPVs			1					
		CFVs	1							
		CFV			1					
		GPV								1
		CCV	1							
		TUG	1		1					
	10:00	CCV	1							
		GPV			1					
		CFV								
		TUG		2			1			
	10:15	CCV								
		GPV	1							
		TUG					1			
		CFV						1		
	10:30	PRV			1					
		CCV		2						
		RSV			1					
		CFV		3						
		TUG					1			
		RPVs			1					
		RKG	1(1)							
	10:45	CCV			3					
		RSV			1					
		RPVs			1					
		RPVb			4					
		PRV			1					
		CFV			2					
		TUG					1			
	11:00	CCV		1	4					
		RPVb			3					
		RSV			1					
		CFV			1					
		TUG					1			
		PRV			1					
	11:15	TUG					1			
		CFV			1					
		CCV			5					
		PRV			1					
		RPVb			2					
		RSV			1					
		RKG	3(8,2,3)			1(1)				
	11:30	CCV		1	3					
		CFV								
		TUG								
		RKG	2(2,8)							
		RPVb			1					
		PRV			1					
		RPVs			1					
		CFVs								
	11:45	CFV								
		TUG								
		CCV		4						
		RKG	2(2,8)							
		PRV	1							
		RPVs	1							
	12:00	CCV	3							
		CFV								
		TUG								
		PRV	1							
		RKG	2(8,2)							
		RPVs	5							
	12:15	RPVs								
		CFV								
		TUG								

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RKG	1(2)				1		1	
	12:30	CFV							1	
		TUG							1	
		RPVs	1							
		RKG	1(2)							
	12:45	TUG							1	
		CFV					1(S)	1		
		RPVb		1						
		RPVs		1						
	13:00	TUG			2			1		
		RPVs		1						
		RSV								
		CFV	1				1(S)	1		
	13:15	CCV		1						
		TUG							1	
		CFV		1			1	1		
		RSV		1						
		RPVs		1				2		
		RPVb		1						
	13:30	CFV		2					1	
		TUG								
		RSV		1						
		RPVs		1						
		RPVb		1						
	13:45	GPV	1							
		CFV	1(S)		2			1		
		RPVb		1						
		TUG								
		GPV						1		
		RSV		1						
		RKG	1(1)							
		RPVs			1					
	14:00	RPVs			1					
		CFV	1(S)	3				1		
		TUG								
		RSV		1						
		RKG	1(1)							
	14:15	TUG								
		CFV	1		4			1		
		RSV			1					
		RKG	1(1)							
	14:30	GPV			1					
		CFV	2		3			1		
		RPVb	1							
		RKG	1(1)	1(1)						
		RPVs	1							
	14:45	CFV	3	1	1					
		RPVb		2	2					
		TUG								
		RKG	1(7)							
		RPVs	1							
	15:00	RPVb			2					
		CFV	4		1			1		
		CCV		1						
		CFVs	1							
		RKG	3(16T)							
		RPVs	1							
		TUG								
		TUG					1			
	15:15	CFV	1		3				1	
		RPVb			1					
		CCV	1							
		RKG	2(6,8)							
		RPVs	2							
	~15:30	CCV	1		1					
		CFV				2		2		
		RKG	2(6,8)							
		TUG			1	1				
		RSV	1							
		RPVb	1							
		RPVs	1							
	15:45	TUG			1	1				
		CCV			1					
		CFV		1		1				
		CAR			1			2		
		RPVb	1							
		RKG	1(8)							
		RPVs	1							
		RSV	1	1						
	16:00	CFV		2	2		RAIN		2	
		RSV	1	1						
		RPVs	1							
		RPVb	1							
	16:15	CFV			2				1	
		RSV			2					
		RPVb	1		1					
		RPVs	1							
	16:30	CFV			1				1	
		RSV		1	1					
		COL		1						
		RPVb	1							
	16:45	RPVb			2				1	
		CFV		2						
		RSV		1						
		COL		1						
		TUG		1						

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	17:00	TUG		1	1					
		CFV		3	3					
		RSV		3	2					
		RPVb			1					
		CCV		2	1					
		RPVs		1						
		RKG		1(4)						
	17:15	RPV4			1					
		TUG			1					
		COL			1					
		CCV	1		2					
		CFV		2	2			1		
		RPVb			1					
		COL			1					
		RSV		2	1					
	17:30	all zones obscured by rain								
	17:45	CCV	1		1					
		CFV			2			1		
		TUG			1					
		RKG			1(2)					
	18:00	CCV	1		1					
		CFV				1		1		
	18:15	CCV	1		1					
		CFV						1		
		RKG		1(2)						
	18:30	CCV	1		1					
		CFV						1		
	18:45	CFV						1		
	19:00	CFV			1			1		
		RKG		1(1)						
	19:15	CFV			1	2				
		RKG		1(2)						
	19:30	CFV			1	4				
	19:45	CFV			1	2				
		CAR				1				
	20:00	RSV				1				
		CFV	1		2					
16-Aug	8:00	CFV			2					
	8:15 - 9:00 all zones obscured by fog									
	9:15	TUG			1					
		CFV		4	4		1	2		
		RPVb								
		CFVs					1			
		RKG			1(1)					
	9:30	CFV		2	6			2		
		CAR								
		RSV			1					
		CFVs					1			
	9:45	RSV		1						
		RPVs		1						
		CFV			7			2		
		CFVs					1			
		CAR			1					
	10:00	RSV			1					
		CFV	1		2	2	1	2		
	10:15	CFV			5				3	
		RSV			1					
	10:30	CFV		6	1				3	
		RKG		1(2)						
	10:45	CFV	1		8				3	
	11:00	CFV	2		2	9		1	2	
		RSV			1					
		CFVs						1		
	11:15	CFV	1	1	4	1		3	2	2
		CFVs					1	1		
		RKG		1(2)						
		TUG			1					
		RSV			1					
	~11:30	CFV		2	4		1	2		2
		TUG			1					
		CFVs					1			
	11:45	CFV	1	1	4		2			2
		RSV			2					
		CFVs					1			
		RKG		1(2)						
	12:00	CFV	1	8	4	1				2
		RSV			1					
		RKG		1(4)						
		CFVs						1		
	12:15	CFV			6		3	3		1
		CFVs					1			
		RKG		3(4,4,1)						
		CCV				1				
	12:30	CFV		3	8	2	1	3		1
		CFVs					1			
		RPVb			1					
		RPVs		1						
		RKG		4(3,3,1,6)						
		CCV				1				
	12:45	CFV			4	9	2	1	2	2
		CCV			1					
		RKG		2(6,1)						
		RPVs		1						
	13:00	CFV	2	1	5	2		3		2
		RPVs	1		1					
		RKG		3(2,6,1)						

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RPVb			2					
		CFV	4				1	4	2	2
		RSV	1							
		CFVs	1							
		RKG	1(2)		1(2)					
	13:30	CCV			3					
		RSV		3			1			
		PRV			1					
		RPVs			1					
		RKG	2(2,2)		1(2)					
		RPVb			1					
		CFV	6		1		1	3	2	2
	13:45	RPVb			2					
		CCV		1						
		CFV	6				2	3	2	2
		RSV	2		1					
		RKG	3(2,2,3)							
	14:00	CFV	7				1	3	2	3
		CFVs	2							
		RSV	2		1					
		RKG	2(4,1)							
	14:15	RPVb			2					
		RSV	1		2					
		RKG	2(1,1)		1(4)					
		CFV	7				1	3	2	3
	14:30	CFV	7				1	4	2	3
		RKG	1(1)		1(3)					
		RSV			4					
	14:45	RSV			4					
		RPVb			1					
		RKG	1(2)		1(1)					
		CFV	6				1	3	3	3
	15:00	RSV			2					
		CFV	6				1	1	3	2
		RKG	1(1)		1(1)					
	15:15	CFV	7	1			1	1	3	2
		RPVs		1						
		RSV			2		1	4	3	3
		RKG			1(1)					
	15:30	RPVb			1					
		CFV	4		2		2	4	3	5
		RSV			1					
		RKG	1(2)		1(1)					
	15:45	CFV	6				1	3	3	2
		RKG	2(5,2)							
		RPVb	1							
	16:00	CFV	6				1	1	3	2
		RKG	2(5,2)							
		RPVb	1							
	16:15	CFVs								1
		CFV	5				4	2	4	2
		RPVb							1	
		RKG	3(1,2,4)							
	16:30	CFV	7	1			2	2	4	3
		RPVs	1							
		CAR			1					
		RKG	2(2,1)							
		RPVb			1					
	16:45	CFV	5		2	3	1	3	3	3
		RPVs			5					
		RPVb			1					
		RKG	1(3)							
	17:00	skipped								
	17:15	CFV	4				2	1	3	2
		RKG	1(3)							
	17:30	CFV	GLARE				4	1	3	2
	17:45	CFV	GLARE	1			3	1	3	3
	18:00	CFV	GLARE	1	1	3	1		3	2
		RPVs			1		1			
		TUG			1					
	18:15	COL			1					
		RPVs			1					
		CFV	5		2	3	1	3	2	3
		RSV			1					
		TUG		1	1					
	18:30	CCV			1					
		TUG			1					
		RPVs	1		1					
		CFV	6		2	3	1	3	2	3
		COL			1					
	18:45	TUG			2					
		CFV	7		1	2	1	3	2	3
		RPVs	2							
		COL		1						
	19:00	TUG			2					
		COL			1					
		RPVs	1		2					
		CFV	5	1			3	2	3	2
	19:15	TUG		2						
		RPVs			2					
		CFV			1					
	19:30	RPVs								
		CFV	6				1	3	4	3
		RKG	1(4)							
	19:45	CFV	6				4	1	5	2
		PRV			1					

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFV								
	20:00	CFV	5	1	1	3	1	4	2	4
		RPVb			1					
18-Aug	8:00	CFV	7		2	3	1	5	2	3
	8:15	CFV	7		2		1	4	2	3
	8:30	CFV			2		1			
		COL	7		1	1		5	2	3
	8:45	CFV	7		1	2	1	5	2	4
		COL			1					
		RKG								
	9:00	CFV	6			2	1		1(3)	
		RKG						4	2	3
		COL			1				1(3)	
	9:15	CFV	6			4	2	4	2	3
		RKG							1(3)	
	9:30	CFV	6		1	3	2	4	2	3
		RKG							1(3)	
	9:45	CFV	6		1	3	2	4	2	5
		RKG							1(3)	
	10:00	CFV	8		1	2		4	3	3
		RKG							1(3)	
	10:15	CFV	7	1	2	2	3	6	2	3
		RPVb			2					
	10:30	CFV	8	2	4	2	2	4	2	4
		RPVb			1					
	10:45	CFV	8	1	4	2	1	4	2	3
		RPVs		1						
	11:00	RSV			1					
		CFV	7		2	2	1	4	2	2
	11:15	CFV	6		1	3	1	4	2	3
		RSV			2					
	11:30	CFV	6		1	2	2	4	2	3
		RSV			2					
	11:45	CFV	7		1	2	1	4	2	2
		RSV			2					
	12:00	CFV	7		2		rain	2	4	2
		RSV			2					
	12:15	CFV	7		2		rain	1	4	2
		TUG			1					
		RSV			1					
	12:30	CFV	8	1			rain	1	4	2
		TUG			1					
		RSV			1					
	12:45	CFV	7				rain	1	4	3
		RSV			1					
		TUG			1					
	13:00	CFV	7		1		rain	1	5	2
		TUG			1					
		RSV								
	13:15	CFV	7	1			3	2	4	2
		RPVb			2					
		TUG			1					
		RSV								
	13:30	CFV	6	2	3			1	5	2
		RPVb		2						
	13:45	CFV	7	2	2	2	1	5	2	3
	14:00	CFV	9		2	1	1	6	1	3
	14:15	CFV	9	2	2		1	5		3
		RSV		1						
	14:30	CFV	8		1	3	1	5	1	3
		RSV			1					
		RPVs				1				
	14:45	CFV	9		2	4	1	5	1	3
		RPVs								
	15:00	CFV	6		3	3	1	7	1	3
		TUG			1					
	15:15	CFV	7		1		rain	1	6	1
		TUG			1					
	15:30	CFV	8		2	1	1	6	1	2
		TUG			1					
	15:45	CFV	7				1	1	5	1
		TUG			1					
	16:00	CFV	6				rain	1	6	1
		PRV			1					
		CAR			1					
		TUG								
		CCV			1					
	16:15	CFV	rain	rain	1	3	1	7	2	3
		TUG			1					
	16:30	CFV	6	1	3	3	1	6	1	3
		TUG			1					
	16:45	CFV	8	1		3	1	6	1	3
		TUG			1					
	17:00	CFV	6			3	1	6	1	3
		TUG			1					
	17:15	CFV	6		2	3	1	6	1	3
		TUG			1					
	17:30	CFV	6	2	1	3	1	6	1	3
		COL		1						
	17:45	CFV	fog		3	fog	1	6	2	2
		TUG		1						
	18:00	CFV	fog		1	fog	1	7	2	2
		TUG			1					
		COL			1					
	18:15	COL			1					
		TUG			1					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFV	6		2	1	6	1	2	
	18:30	CFV	4		1		5	1	2	
	18:45	CFV			4		5	1	1	
	19:00	CFV	10		5		5	2	4	
	19:15	CFV	10		10	2	1	7	1	2
		COL		1						
	19:30	CFV	8	3	2	3	5	6	1	3
		COL			1					
	19:45	CFV	fog	2	4	3	1	7	1	3
	20:00	CFV	fog	1	4	fog	1	6	1	3
19-Aug	8:00	CFV	15	1	1	2	1	5	3	2
		CAR			1					
		TUG			1					
		RPVb			1					
	8:15	CFV	8		4	2	3	6	3	3
		TUG			1					
		CAR			1					
		RPVs		1	1					
		RPVb			1					
	8:30	CFV	13		3	1	2	5	4	3
		TUG			1					
		RPVb			2					
	8:45	CFV	10	1	1	rain	1	5	2	rain
		CFVI	6							
		RPVb			1					
	9:00	CFV	11	1		1	1	5	2	3
		CFVI	6							
		RKG	1(5)							
	9:15	CFV	7		3	1	2	5	2	3
		CFVI	6	4						
		RKG	1(5)							
	9:30	CFV	8		2	2	1	5	2	3
		CFVI	6	3						
		RKG	1(5)							
	9:45	CFV	7	3		3	1	6	3	3
		CFVI	7	1						
		RSV			2					
	10:00	CFV	8	3		3	1	5	2	4
		CFVI	6							
		RPVb			1					
	10:15	CFV	10		5	5	1	6	2	3
		RPVb			1					
		CFVI	6	1						
		RKG	1(2)							
	10:30	CFV	8	2	4	3	3	6	3	3
		CFVI	9	1						
	10:45	CFV	11	1	1	3	1	7	3	3
		CFVI	11							
		RPVb	1							
		RKG	1(2)							
		TUG			1					
	11:00	CFV	8	3	1	2	2	8	2	5
		CFVI	16	1			1		1	
		RPVs								
		RPVb				1				
		TUG				1				
		RKG	1(2)							
	11:15	CFV	11	1	6	4	4	5	3	3
		CFVI	13		1					
		RPVb	1		1					
		RKG	1(2)							
		TUG			1					
	11:30	CFV	8	1	1	4	2	5	4	3
		CFVI	16	3						
		TUG			2					
		CAR			1					
		RPVs	1							
		RKG	1(2)							
	11:45	CFV	7		2	5	2	5	2	4
		CFVI	9	5						
		CAR			1					
		TUG			1					
		CCV			1					
		RKG			1(1)					
	12:00	CFV	8	4	2	4	1	5	3	2
		CAR			1					
		TUG			1					
		RPVb			1					
		CFVI	3	5						
		RKG	1(4)							
	12:15	CFV	7	2	3	5	1	6	2	3
		RPVs			1					
		RSV			1					
		CFVI	4	3						
	12:30	CFV	8	2	3	4	2	5	2	3
		CFVI	5	3						
		TUG			2					
		RSV			1					
	12:45	CFV	9	2	3	4	1	6	2	3
		CFVI	5	1		1				
		RPVb	1							
		RKG	2(2,1)							
	13:00	CCV	7	2	2	4	1	5	2	3
		CFV	4	1						
		CFV								
		RPVb	1							

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RPVs	1							
		RKG	2(2,2)							
13:15		CFV	8		2	3	1	5	3	2
		RKG	2(2,2)		1(2)					
		CFVt	2	2						
		CCV			1					
13:30		CFV	8	2	2	rain	1	5	2	2
		RPVb			1					
		RSV			1					
		CFVt	2							
13:45		RSV			1					
		CAR			1					
		CFV	9				2	2		
		CFVt	2					5	2	2
		RKG			1(2)					
14:00		TUG			1					
		CFVt	2	2						
		CFV	10		2	6	1	5	3	3
		RKG	2(2,1)		1(2)					
		RPVs	1							
14:15		CFV	8			4	1	6	3	3
		RKG	2(2,1)		1(2)					
		CFVt	1							
		TUG			1					
		RPVs			1					
14:30		RSV			1					
		RPVs			1					
		CFV	9				4	1	5	2
		RKG	1(1)		1(2)					
14:45		CFV			2(2,2)					
		RKG			1					
		RSV			1					
		RPVs			1					
		CFV	8	1			2	1	6	2
		CFVt	1							
15:00		RKG			2(2,2)					
		CFV	10		1	3	2	5	2	3
		CFVt	1							
15:15		CFV	9			3	2	5	3	3
		CFVt	2							
15:30		CFV	9			3	2	5	2	3
		CFVt	2							
		RPVb			1					
15:45		RSV			2					
		CFV	8			3	1	5	2	3
		CFVt	2							
		RPVs			1					
16:00		RSV			2					
		CFV	8		2	3	1	6	3	3
		CFVt	3							
16:15		CFV	8	1	3	3	1	5	3	4
		RSV			1					
		RPVs			2					
		CFVt	3							
16:30		CFV	8		2	3	2	5	2	4
		RPVs			1					
		TUG			2					
		RSV			1					
		COL			1					
		CFVt	5							
16:45		CFV	9		2	3	1	5	2	3
		TUG			3					
		COL			1					
		CFVt	8							
		RKG	1(2)							
17:00		RPVb	(2)		1(4)					
		RPVs			1					
		TUG			3					
		CFV	8			3	1	6	2	3
		CFVt	10							
17:15		CFV	8	1		6	1	5	2	3
		CFVt	12							
		TUG			1					
17:30		CFVt	11							
		CFV	8		1	4	1	5	4	3
		RKG			1(2)					
17:45		CFVt	9							
		CFV	8			4	1	6	2	3
18:00		CFV	glare	glare	glare	3	3	5	2	3
18:15		CFV	9	1	5	2	2	5	4	3
		RPVs			1					
		CFVt	9							
18:30		CFV	8	1	7	6	3	6	2	3
		RKG					1(1)			
		CFVt	7							
18:45		RKG					1(1)			
		CFV	10	2	9	6	2	5	3	3
19:00		CFVt	10							
		CFV	9	3	3	4	3	7	2	3
		CFVt	12	1						
		RKG					1(1)			
		RPVs			1					
19:15		CFV	9	1	3	5	2	5	4	3
		RKG					1(1)			
		RPVs			1					
		COL			1					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFVt	8	3						
	19:30	CFV	10	1	5	7	2	5	3	3
		COL			1					
		CFVt	6	4						
	19:45	CFV	11	1	3	6	2	5	3	3
		RPVs	1							
		CFVt	4							
	20:00	CFV	10	1	2	7	2	6	4	3
		CFVt	5							
		TUG		1						
20-Aug	8:00	CFV	10	1	6	8	3	6	3	3
		CFVt	6	1						
		RPVb			1					
		TUG							1	
	8:15	CFV	9		7	6	2	5	6	3
		TUG							1	
		CFVt	6							
		RPVs			1					
	8:30	CFV	9		2	5	1	5	2	3
		TUG							1	
		CFVt	10							
		RSV			1					
	8:45	CFV	11		2	5	1	6	3	3
		CFVt	9							
		TUG								1
	9:00	CFV	11			5	3	6	3	3
		CFVt	12							
		TUG								1
		RKG	1(1)							
	9:15	CFV	9	1			4	3	6	4
		CFVt	11	3						
		TUG			1					
	9:30	CFV	9	1	1	4	1	5	5	3
		CFVt	18							
	9:45	CFV	13			4	1	6	3	4
		RPVb			1	1				
		CFVt	20							
	10:00	CFV	11		2	3	1	6	3	3
		CFVt	21							
		RPVb			1					
		RSV								
		RKG	3(1,4,3)							
	10:15	CFV	10	1			3	1	6	4
		CFVt	13	4						
		COL		1						
		RSV			1					
		RKG	3(1,4,3)							
	10:30	CFV	14		1	3	1	5	3	3
		TUG			1					
		RSV			1					
		CFVt	17							
		RKG	2(1,4)							
	10:45	CFVt	9	7						
		CFV	10		3	4	2	7	3	3
		TUG		1						
		CAR			1					
		RKG	1(1)							
	11:00	CFV	9	2	5	4	1	6	5	4
		CFVt	6	6						
		CAR			1					
		RPVs			1					
	11:15	RSV			1					
		CFV	9		1	5	1	6	3	3
		CFVt	4	5						
		GPV		1						
		CFV	9			4	1	5	4	3
		CFVt	4	4						
		GPV			1					
		RSV			1					
	11:45	CFV	9	2			3	1	6	4
		CFVt	9	2						
		CFV	7	4	2	3	4	5	4	3
	12:00	CFVt	10							
		CFV	12		3	3	2	6	5	4
		CFVt	10							
	12:15	CFVt	8							
		CFV	9		4	5	2	6	3	5
		RPVs			1					
		RSV			1					
	12:45	CFV	9		2	2	3	6	3	5
		CFVt	8	1						
		TUG			2					
		RPVs			1					
		CFV	9							
		CFVt	7							
	13:00	TUG			2					
		CFV	13		2	2	2	5	4	4
		CFVt	7							
		RPVs			1					
	13:15	TUG			1					
		RPVs			1					
		CFV	12		1	3	2	5	4	3
		CFVt	7							
		RPVb			1					
	13:30	CFV	9		1	2	2	5	4	6
		TUG			1					
		CFVt	5							

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RPVs			1					
	13:45	TUG		1						
		CFV	10	1		2	3	5	3	4
		RPVb		1						
	14:00	CFVt	3		1					
		RPVb								
		CFV	12	1	1	2	3	6	3	4
		CFVt	4							
	14:15	CFV	9		3	3	3	7	3	3
		CFVt	3							
	14:30	CFV	10	1	1	3	2	5	4	4
		CFVt	3							
	14:45	CFV	15		2	4	3	6	4	3
		CFVt	7							
		RKG	2(1,2)							
	15:00	CFV	12		1	3	2	6	3	4
		CFVt	2							
		RKG	2(1,2)							
	15:15	CFV	10		1	2	2	6	3	5
		CFVt	2							
		RKG	2(1,2)							
		CCV	1							
	15:30	CCV	1		1					
		CFV	11				3	2	5	4
		CFVt	4							
		RKG	1(2)							
	15:45	CAR			1					
		CCV	1	1	1					
		CFV	12	1	1	2	2	5	4	4
		CFVt	4							
		RKG	2(1,2)							
	16:00	CFV	11		2			2	5	4
		CFVt	1							
		RPVs	1							
		RKG	3(1,1,2)							
		CCV	2	1						
		RSV	1							
		PRV			1					
	16:15	CCV	2	1						
		RKG		1(3)						
		CFV	12				3	2	5	4
		CFVt	1							
		PRV			1					
	16:30	PRV			1					
		CFV	19	1	2	2	3	7	3	5
		CFVt	2							
		RSV			1					
		CCV			3					
	16:45	CFV	12	2	8	2	2	5	4	
		CCV	3		2					
		PRV			1					
		CFVt	2							
		RPVs	2							
		COL	1							
		RSV			1					
		RKG	1(3)							
	17:00	RSV			1					
		RPVb		1						
		CCV			4					
		PRV			1					
		CFV	9		3	3	3	6	3	4
		CFVt	3							
		RKG	1(3)							
	17:15	PRV			1					
		RSV			1					
		CCV			3					
		CFV	11	1	4	2	2	6	5	5
		CFVt	2							
	17:30	PRV	glare	1						
		CFV	1	1		6	4	6	3	3
		RSV			1					
		CCV			3					
	17:45	CFV	11	1	3	8		6	5	3
		CFVt	2	2						
		RSV			1					
		CCV			2					
	18:00	CFV	11	2		5	2	6	4	4
		CFVt	4							
		RSV			1					
		CCV			2					
		RKG	1(1)							
	18:15	CFV	9		2	5	2	7	4	3
		CFVt	9							
		CCV		1						
		RSV			1					
		RPVs	2							
		CAR			1					
	18:30	CFV	9		1	4	3	7	4	3
		CFVt	10							
		RPVs			1					
		CCV			1					
		CAR	1							
	18:45	CFV	10	3		4	2	6	4	2
		CFVt	6	2						
		COL			1					
	19:00	CFV	11	1	1	3	2	6	5	2

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFVL	5							
	19:15	COL			1					
		TUG			1					
		CFV	10		5	3	4	6	4	4
		CCV		2	1					
		CFVt	5	3						
	19:30				2					
		TUG			1					
		COL								
		CFV	10		1	4	3	7	4	4
		CFVt	5	2						
	19:45				5	3	3	6	3	3
		TUG			2					
		CFVt	5	1						
	20:00				4	2	3	6	3	3
		CFV	13	1						
		TUG			2					
		CFVt	6	1						
21-Aug	8:00 - 9:45 all zones obscured by fog									
	10:00	CFV	13		2	FOG	4	6	5	2
		RPVb			1					
		CFVt	5	2						
		CCV		1						
	10:15	RPVb		1	1					
		CCV			1					
		CFV	13			2	3	6	5	2
		CFVt	5	2						
		RPVs		1						
		RKG	1(2)							
	10:30	RKG	3(2,2,5)							
		CCV		1	2					
		RPVs			1					
		CFV	14		2	2	4	6	4	4
		CFVt	2	3						
	10:45	CCV			2					
		CFV	15	1	1	3	3	7	3	3
		CFVt	3							
		RPVs	1	1	1					
		RKG	3(2,2,5)							
	11:00	RPVs			2		1			
		RPVb			2					
		RSV			1					
		CFV	12			3	4	6	6	4
		CFVt	4	2						
		RKG	2(2,5)							
	11:15	CCV			2					
		RPVs		1	1					
		RPVb			1					
		CFVt	9							
		CFV	13	1		3	6	6	5	3
		RKG	1(5)							
	11:30	RPVs			1					
		CCV			3					
		RPVb		1	1					
		CFV	15			3	4	6	5	4
		CFVt	8							
		RKG								
	11:45	RPVb		1	1					
		CCV			1					
		CFV	13	1		3	4	8	5	4
		CFVt	8							
		RKG	3(2,2,7)							
	12:00	RKG	2(2,5)							
		CFV	14	1	1	3	5	8	6	3
		CFVt	9	2						
		RPVb			1					
		RSV			1					
		CFV	14		2	3	4	7	4	4
		CFVt	11	3						
		RPVb			1					
		RKG				2(2,5)				
		RPVs			1					
	12:30	CFV	13	1	2	3	5	6	4	4
		CFVt	10	3						
		RPVb			1					
		RKG	1(5)				1(2)			
		RPVs	1							
	12:45	CFV	15		2	4	6	6	4	4
		CFVt	14	8						
		RPVb	1							
		TUG			1					
		RKG			1(2)					
	13:00	TUG			2					
		RPVb			1					
		RKG			1(2)					
		RPVs	1							
		CFV	15		2	3	4	6	5	4
		CFVt	14	7						
		CFVt	15	4						
		CFV	16		2	6	4	7	5	5
		RPVs	1				1			
		TUG			1					
		CFV	15		3	7	6	6	5	4
		CFVt	13	3				1		
		RPVs	1							
		RPVb			1					
	13:45	CFVt	15							
		CFV	15	1	1	6	5	8	4	5

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RKG	2(6,1)				1			
		RPVs								
	14:00	RKG			1(5)					
		CFVI	8	3						
		RPVs	1			2				
		RPVb							1	
		CFV	14			1	6	5	9	5
		TUG								4
	14:15	CFVI	8			1	6	4	10	7
		CFV	16							5
		RPVs	1							
		RKG	1(5)							
		TUG				1				
	14:30	CFV	15			1		4	10	3
		CFVI	12							4
		RPVs	1				1			
	15:00	CFV	14		2	6	6	8	6	4
		CFVI	9							
		RPVs	1							
		RKG	1(5)							
	15:15	CFV	14			2	5	5	7	5
		RKG	3(3,3,5)							4
	15:30	CFV	14							
		CFVI	4		3	6	6	9	5	4
		RKG	2(3,3)							
		GPV	1							
	15:45	CFV	12							
		CFVI	3		3	3	5	9	5	4
		GPV								
		CCV		1	1					1
		RPVs	1							
		RKG	2(3,3)			1(2)				
	16:00	CCV			2					
		CFV	13	2	1	4	7	7	5	3
		CFVI	3	2						
		RSV			1					
		GPV							1	
		RKG				1(2)				
	16:15	RSV			1					
		CFV	15	1	1	4	4	9	5	4
		CFVI	2	1						
		CCV	1		1					
		RKG				1(2)				
		RPVs	2							
	16:30	CCV			3					
		RKG				1(2)				
		CFV	12				4	5	8	4
		CFVI	2							4
		RPVs	2							
		RSV				1				1
	17:00	CCV		2	1					
		CFV	14	2	4		5	8	4	3
		RSV			1					
	17:15	RSV	RAIN	RAIN	1					
		CCV			1					
		CFV					4	7	10	7
	17:30	all zones obscured by rain								3
	17:45	all zones obscured by rain								
	18:00	CFV	RAIN	RAIN	2	4	7	10	3	4
	18:15	CFV	5	2		6	6	9	4	3
		TUG			1					
	18:30	TUG	RAIN	RAIN	1	RAIN	RAIN	RAIN	RAIN	RAIN
	18:45 - 20:00 all zones obscured by rain									
22-Aug	10:15	CFVs	FOG	FOG	1	FOG	FOG	FOG	FOG	FOG
		CFV			2					
		TUG			2					
		RPVb			1					
	10:30	CFV	8		1	FOG	FOG	FOG	FOG	FOG
		CFVs	1		3					
		TUG			1	1				
	10:45	CFVs	4	FOG	3	FOG	FOG	FOG	FOG	FOG
		CFV	6		3					
		TUG			2					
		RKG	1(1)							
	11:00	CFV	6	1	7	GLARE	1	6	1	GLARE
		CFVs	3		1			2	6	
		RKG					1(1)			
	11:15	CFV	3	2	4	GLARE		5	2	2
		CFVs	11		1			3	4	2
		RSV		2						
		RKG	1(8)			1(1)				
		TUG			1					
	11:30	CFV	2	1	3	2	1	6		3
		CFVs	12			1		1	6	2
		RSV			2					
		PLANE						1		
		RKG	1(8)		1(1)					
		GPV			1					
		TUG			1					
	11:45	CFV		2			3	5	1	
		CFVs	15			2		2	3	6
		RKG	2(2,8)		2(6,2)					
		GPV			1					
		RSV							1	
		TUG			1					
	12:00	CFV	10	1	2	2		6	2	2

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFVs	7							
		RKG	1(1)		1(6)		3	1	4	1
		PLANE								1
		RPVs	1							
		GPV	1							
	12:15	CFV	9	1	8	2	3	6	2	3
		RSV		2						
		RPVs	1							
		TUG		2						
		CFVs	6			1	2	2	1	1
		RKG	1(2)							
		PLANE						1		
	12:30	CFV	9	1	3	2	1	5	3	1
		CFVs	9				1	2	1	2
		RKG	1(2)							
		PLANE						1		
		TUG		2						
		RPVb	1							
	12:45	CFV	11		1	2		6	2	1
		CFVs	9			1	3	1	3	1
		RPVb	1	1	3					
		RKG	2(2.8)							
	13:00	RPVb	1		1					
		CFV	8	2		2	1	5	3	3
		CFVs	9				2	1	2	1
		RKG	2(5.2)							
		RPVs			1			1		
	13:15	CFV	9	.2		1	3	6	4	2
		CFVs	8	1			2	1	1	2
		RPVb	1		1					
		RPVs			2					
	13:30	CFV	7				2	8	3	2
		CFVs	8	1			3	1	2	3
		RPVb			1		1			
		RSV			1					
	13:45	CFV	8				3	7	4	3
		CFVs	7	2			2	3	2	1
		RPVs			1					
		GPV	1							
		RKG	1(1)							
	14:00	CFV	11	1	1	3	4	6	4	3
		CFVs	7	1			3	4	1	2
		GPV	1							
		RSV			1					
		RPVb	1							
	14:15	RPVs			1					
		RPVb			1	1				
		CFV	15				4	7	4	4
		CFVs	6				5	2	3	1
		RSV		2						
	14:30	TUG		1		1				
		CFV	11				4	9	1	5
		CFVs	7				7	3	3	1
		TUG			1					
		RSV			2	1				
	14:45	CFV	9				3	7	1	2
		CFVs	9				10	4	3	3
		TUG			1					
		RSV			1					
		RPVb			1					
		RPVs			1					
	15:00	CFV	10			1	5	3	1	6
		CFVs	7			1	9	2	4	1
		RSV			1					
		RKG	1(2)							
	15:15	CFV	13			1	3	7	2	2
		CFVs	5	1			7	3	2	3
		RKG	1(7)		1(6)					
	15:30	RKG	1(9)		1(6)					
		RPVs	1	1						
		CFV	14				2	6	3	3
		CFVs	5	2			6	4	1	1
	15:45	RKG	1(9)							
		RPVb			2					
		RPVs			1					
		CFV	12	3		2	5	5	1	2
		CFVs	7	2		1	2	6		1
		GPV	1							
		TUG	1							
	16:00	CFV	8	4		2	4	7	1	4
		CFVs	5	4			5	2	1	1
		TUG	1							
		GPV	1							
		RKG	1(9)							
		RPVs			1					
	16:15	TUG	1							
		CFV	7	4			5	5		4
		CFVs	8	4		1	6	2		2
		GPV								
	16:30	CFV	9	7		3	4	5	1	3
		CFVs	8	1			3	1	1	1
		RSV			1					
		RPVs	1							
		TUG	1							
	16:45	CFV	7	2	3	2	4	3	1	4
		CFVs	8	4		1	2	2		1

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	17:00	TUG		1						
		CFV	5	7	2	2	4	4	1	3
		CFVs	4	6			1	1	1	1
	17:15	TUG	1							
		TUG	GLARE	GLARE		2	2	4	3	1
		CFV							1	3
		CFVs							1	1
23-Aug	8:00	CFV	1		1			3		1
		TUG			1					
	8:15	CFV			2			3		1
		RKG	1(2)							
		RPVb			1					
	8:30	CFV			2			3		1
		RKG	1(2)							
	8:45	CFV			1		1		3	1
		RKG	1(2)							
	9:00	CFV					1		3	1
		RKG	1(2)							
	9:15	CFV					1		3	1
		RKG	2(1,2)							
		RPVb		2						
	9:30	CFV						3	1	1
		RKG	2(1,2)							
		RPVb		2						
	9:45	CFV	1					1	2	1
		RKG	1(1)					1(2)		
		RPVs	1							
		RPVb	1		2					
	10:00	CFV	1					2		1
		RKG	1(1)					1(2)		
		RPVb			1					
		RPVs						1		
	10:15	CFV					1		2	1
		RKG	1(2)			1(6)		1(1)		
		RPVs								1
		RPVb			1					
	10:30	CFV		1					2	1
		RKG	4(2,1,1,1)			1(6)				
		RPVb		2						
		RSV	1							
	10:45	CFV			2				2	1
		RKG	4(2,1,1,1)		2(1,8)					
		RSV			2					
		RPVb		1						
	11:00	CFV	1	1					2	1
		RPVb	1	1						1
		RKG	3(2,1,1)							
	11:15	CFV			1				2	1
		TUG			1					
		RPVb			2					
		RKG	1(2)							
		RSV							1	
	11:30	RKG	1(2)							
		TUG			1					
		CFV			1				2	1
		RPVb			1					
		RSV							1	
	11:45	CFV						2	1	1
		RSV							1	
		RKG	2(2,2)							
		RPVb			3					
		TUG			2					
	12:00	CFV	1		3				2	1
		RSV			2					
		TUG			1					
		RKG	2(1,1)					1(2)		
		RPVs								1
	12:15	CFV	1		4				2	1
		TUG		1						
		RSV			2		1			
		RKG	1(2)							
		RPVs						1		
		RPVb			1					
	12:30	CFV	1	3			1		2	1
		RSV	1	2						
		RPVb			1					
		RPVs	1		1					
		RKG	1(4)							
	12:45	CFV	1						1	1
		RSV			2				2	
		RKG	1(1)							
		RPVs	1							
	13:00	CFV					1	1	2	1
		RSV			2		1			
		RKG	2(3,1)							
	13:15	RKG	2(2,1)							
		CFV	1					1	2	1
		RSV								
		RPVb		1						
	13:30	CFV	1	2					2	1
		CCV	2		1					
		RSV			1					
		RKG	2(1,1)					1(1)		
		RPVb			1					
	13:45	CFV			1				1	2
		RPVb	1	1	3					1

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RSV			1					
		RKG			1(7)		1(1)			
		CCV	1		1					
	14:00	RPVb			2					
		CFV			1					
		CCV	1	3			1	2		1
		RSV		1	1					
		RKG	1(1)		1(1)					
	14:15	CCV			4					
		RKG			1					
		RSV			3					
		CFV	1	1			1	2		1
	14:30	CCV			4					
		RSV			2					
		CFV	1	1			2	2		1
		RKG	1(3)		1(1)					
	14:45	RPVs	3	3			1	3		1
		CFV			3					
		CCV			4					
		RSV			2					
		RKG	1(3)							
	15:00	CFV	1		3		1	2	2	2
		CCV	1		1					
		RSV			2					
		RPVs	1							
		RKG	2(3,7)							1
	15:15	CFV	1	1			2	1	3	1
		CCV			2					
		RSV			1					
		RKG	3(7,2,2)							
		RPVs	1							
	15:30	CFV	3	1	2	1	1	2		1
		CCV			1					
		RSV			2					
		RPVb			1					
		RKG	3(7,2,1)		1(2)					
	15:45	RSV			1			1		
		CFV	3		1			1	2	2
		RKG	2(7,2)							
		CCV			1					
		RPVs					1			
	16:00	CFV			3		3	2		2
		CCV			1					
		RSV			1			1		
		RPVs	1							
		RKG	2(7,1)							
	16:15	RPVb			1					
		RSV			1					
		CFV			3		2	2		1
		RPVs	1							
		RKG	2(7,2)							
	16:30	CFV			2			2	3	
		RPVs	1							
		RPVb	1							
		RSV			1					
		CFV	1		3			3		1
		RSV			2					
		RPVs	1							
		TUG	1							
	16:45	CFV			1			3	3	
		RSV			2					
		RPVs	1		1					
		TUG	1							
	17:00	CFV			1	1	3	3	1	1
		RSV			2					
		TUG	1							
		RPVb	1							
		RPVs			1					
		RKG	2(1,1)							
	17:15	CFV	3		1	2	3	4		1
		RKG	1(1)							
		RPVs	1							
		RPVb	1							
		TUG	1							
		RSV			1					
	17:30	CFV	10	RAIN	2		3	4		1
		TUG			1					
		RSV			1					
		RPVs			1					
	17:45	CFV	3				6	6		1
		TUG			1					
		CCV			1					
		RKG	1(2)							
		RSV			1					
	18:00	CFV	2				4	7	3	1
		CCV			1					
		RKG					1(1)			
		CFVg	1							
	18:15	CFV	GLARE	1	1	3	5	5	2	1
		CCV			1					
		RKG					1(1)			
	18:30	CFV	GLARE	1			3	5	1	2
	18:45	CFV	GLARE	1		1	4	6	1	1
		RPVs					1			
		RKG	1(7)				1(1)			
	19:00	COL			1					
		CFV	2				5	5		1
		RKG					1			
		CAR			1					
	19:15	CFV	FOG	FOG			4	6	1	1

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	19:30	CAR			1					
	19:45	all zones obscured by rain								
	19:45	CFV	2				4	6	3	1
	20:00	RKG	1(2)							
	20:00	CFV	1			1	5	6		1
24-Aug	8:00	CFV	16			2	13	8	2	
		CFV	1	2		4	1	2		1
		CFVs					1			
		RPVb		1						
	8:15	CFV	19			2	13	8	2	
		CFV	1	2		4	1	2		1
		CFVs					1			
		RPVs	1							
	8:30	CFV	1		2	1	2	2		1
		CFV	23				13	9	3	
	8:45	CFV			3		3	2		1
		CFV	21				13	8	4	
	9:15	CFV	3	1	3	1	2	3		1
		CFV	31				9	6	2	1
		RPVb		1						
		CCV		1						
	10:00	CFV	37	2			11	5	1	6
		CFV	2				1			
		TUG			1					
	10:15	CFV	2	2	1		1			1
		TUG			1					
		CFV	35				11	4	2	4
	10:30	TUG				1				
		RPVb		1						
		CFV	3		1		1	1	1	1
		CFV	26	3			12	5		5
	10:45	RPVb		4						
		RPVs	1							
		CFV	23	4	1	2	15	7	1	4
	11:00	RPV			2					
		CFV		4	1					
		CFV	22				16	4	3	2
		CFVs	2							
		GPV								1
	11:30	RKG	2(1,8)	1(3)						
		RSV			1					
		CFV	2		1	1	1	4		1
		CFV	25	2		1	15	1	2	2
		CFVs	1							
		RPVb		2						
	11:45	CFV	2	1	2	1	1	2		2
		CFV	33			1	8	3	3	1
		CFVs	1							
		CAR			1					
		RPVb		1						
		RKG	3(1,8,3)							
	12:00	CFV	34			2	4	4	2	1
		CFV		2		1	1	2		1
		RPVs			1					
		RKG	4(16T)							
		CAR		1						
	12:15	RPVs			1					
		CFV	2				1	2		1
		CFV	33	1			3	4	2	2
		RPVb		3						
		RKG	4(16T)							
	12:30	RPVs			1					
		CFV	33				4	4	2	1
		CFV	1			1	2	3		1
		RKG	2(5,1)	1(5)						
	12:45	CFV	32	2			4	2	2	1
		CFV			2	1	2	2	2	1
		RKG	3(1,1,3)							
	13:00	RPV			2					
		CFV	3		4		2			1
		CFV	29			1	6	5	2	1
		RKG			1					
		CCV			2	2	1	2		1
		CFV	22	1	2		9	5	3	
		CFV			1					
		RPV		1						
		RPVs	2	2	3	1	2	4	1	4
	13:30	CFV	16				8	3	1	
		CFV		1						
		CAR			2					
		RPVs	3			1	1	2		2
	13:45	CFV	11	4			10	4	1	1
		CFV	1							
		CAR	1							
		RSV		1	1					
		RKG	1(6)							
		CCV	2							
		PRV		1						
	14:00	CFV	9				10	3	4	1
		CFV	2		1	1	3	2	2	1
		RSV			1					
		CAR			1					
		RKG	1(6)							
		CCV	2							
		PRV	1							
	14:15	CFV	10				10	3	3	

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFV	6		1	1	1	2		
		RPVs		1	1					
		CCV	2							
		PRV		1						
		RKG		1(3)						
		RSV		1						
	14:30	CFVI	17				8	4	2	3
		CFV	3		1	1	1	2		1
		RPVb	1							
		CCV	2							
		RKG	1(3)							
		PRV	1							
		RPVs	1							
		RSV					1			
	14:45	CFVI	18				4	7	1	4
		CFV	1		1		1	3	1	
		TUG		1						
		RSV					1			
		RPVb	1							
		CCV		1						
	15:00	CFVI	21				7	7	1	3
		CFV	1		2					
		RSV					1			
		CCV		1						
		RPVb	2							
	15:15	CFVI	11			3	4	6	4	
		RPVb		1			1			
		RPVs				1				
		CFV	3			1				
		RSV			2					
	15:30	CFVI	21				5	6	3	3
		RPVs	1							
		RPVb	2					1		
		RSV	1							
	15:45	CFV	24				2	1		1
		CFVI				2	5	8	4	3
		RSV		1			1			
	16:00	CFVI	10				8	8		3
		CFV	3			3	1	1	1	
		RSV			1					
	16:15	RSV			1					
		CFVI	12				6	8	2	3
		CFV	3			2	1	1		1
	16:30	CFVI	6			1	11	6	3	1
		CFV	4				1	2		1
		RSV	1			1				
		RPVb							1	
		RKG	1(8)							
	16:45	CFV	4			2	1	2		3
		CFVI	2	1		2	15	5	3	1
		CCV					1			
		RKG	1(8)							
	17:00	CFVI	2			4	16	4	2	2
		CFV	4		2		2	2		2
		RPVb			1					
		CCV		1						
	17:15	CCV			3					
		CFVI	7		4	4	14	6	2	2
		CFV	4		1	3	1	2	1	3
		PRV			1					
	17:30	CFVI	9			3	12	6	2	3
		CFV	3		1	2	1	2		3
		CCV			2					
		PRV			1					
		CAR			1					
		RPVb			1					
	17:45	CFVI	7			2	13	6	5	4
		CFV	3			2	1	3		2
		CCV			2					
		PRV			1					
		CAR			1					
		RSV			1					
	18:00	CFVI	10			2	10	7	6	2
		CFV	3			2	1	2		2
		RSV			1					
		CCV		1						
	18:15	CFVI	12				8	6	7	3
		CFV	3			1	1	2		2
		RSV			1					
		RPVs			1					
	18:30	RSV			1					
		CFVI	17					13	4	2
		CFV	1				2	1		1
		CCV			1					
		PRV			1					
	18:45	CFVI	17					15	6	3
		CFV	1				2			1
		CCV			2					
		PRV			1					
	19:00	CFVI	20				3	14	3	1
		CFV	1				1		2	2
		CCV			2					
		PRV			1					
	19:15	CFVI	22				2	13	5	4
		CFV	1				1		2	1

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CCV			1					
		PRV			1					
		GPV	1							
	19:30	CFVI	20			2	14	5	2	2
		CFV	1			1		2		2
		CCV			1					
		RKG			(6)					
	19:45	CFVI	21					15	4	2
		CFV	1	3				2		1
		PRV			1					
		RKG	(6)							
	20:00	CFVI	18					14	2	2
		CFV	1		2	2		2		2
		COL		1						
		PRV			1					
25-Aug	8:00	CFV	3				1	2	1	3
		CFVI	12					12	3	9
		TUG								1
	8:15	CFV	3			1		2	1	3
		CFVI	21			3	12	4	8	
		TUG							1	
	8:30	CFVI	23	1	1	2	10	5	6	4
		CFV	1			2	1	3		2
		RSV			1					
		TUG							1	
	8:45	CFVI	24	3	2	1	11	8	6	
		CFV	3				1	2		
		RSV			1					
		GPV	1							
		TUG							1	
	9:00	CFVI	24	1	2			12	9	3
		CFV	3				1	2		2
		TUG							1	
	9:15	CFVI	23		1	3	11	7	3	2
		CFV	3				1	2		2
		TUG			1				1	
	9:30	CFVI	25			1	8	7	5	3
		CFV	3				1	2		
		RPVb	1							
		TUG			1				1	
	9:45	CFVI	27	2				7	6	4
		CFV	3				1	3		2
		TUG			1				1	
	10:00	CFVI	26			1	6	6	5	3
		CFV	3				1	1		2
		RPVb	1							
		CFVs							1	
		RPVs							1	
		TUG								1
		RSV			1					
	10:15	CFVI	25	2	1	1	9	2	4	3
		CFV	3				1	2		2
		RPVs	1							
		CCV	1							
		CFVs							1	
		TUG								1
		RSV			1					
	10:30	CFVI	26	3				9	5	1
		CFV	3				1	1	2	
		RPVs	1							
		TUG								1
		CCV	1	2						
		RPVb	1							
		RSV	1							
	10:45	CFVI	23	2	2	1	10	3	1	3
		CFV	3				1	2	1	2
		RPVb	1							
		RSV	1	1						
		CFVs					1			
		RPVs					1			
		TUG								1
		CCV			1					
	11:00	CFVI	25			1	6	1		2
		CFV	3	2	1	2	1	3	4	2
		CFVs	1							
		RPVb	1	2						
		RSV	1							
		RPVs							1	
		TUG				1				
	11:15	CFVI	24	1		2	6	1	4	2
		CFV	4			1	2	2		
		TUG	1		1					
		RPVs						1		
		RPVb	1	1						
		RSV	1							
	11:30	CFVI	28	2				5	2	4
		CFV	5	1		3	1	2		2
		TUG			1	1				
		RPVb			1					
	11:45	CFVI	25	1				2	3	4
		CFV	5		2	2	1	2		2
		RSV	1							
		TUG			1	1				
		RPVb			1					
		RPVs			1					
	12:00	CFVI	26	1				2	3	4

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFV	3		1	3	1	2		2
		RSV		3						
		CCV			1					
		TUG				1				
	12:15	CFVI	24		1	1	3	3	6	
		CFV	4		1			2		2
		RSV		2						
		RPVs		1						
	12:30	CFVI	25			2	1	3	3	
		CFV	3			1	3	5		2
		RSV		3						
	12:45	CFV	4			3	1	4		2
		CFVI	22			1	4	7		1
		RPVb					1			
		RPVs								
		RKG	1(6)							
	13:00	CFV	4			3	1	3		3
		CFVI	22				4	6	3	
		CCV		2						
		RPVb		2						
		RSV		1						
		RKG	1(6)							
		RPVs		1(2)						
	13:15	CFV	5			2	1	3	1	3
		CFVI	22			3	6	4	3	
		RKG	1(6)		1(2)					
		CCV		1						
		RPVb		1						
		RSV		1						
		RPVs		1						
	13:30	CFV	3		1	1	1	4		2
		CFVI	22			1	4	5	2	
		RSV		1						
		RPVb		2						
		CCV		1						
	13:45	CFV	4		1	2	1	2		2
		CFVI	23			1	7	5	2	
		RSV		1						
		RPVs		1						
		RPVb		1						
		CCV	1							
	14:00	CFV	5	1	1	3	1	3		2
		CFVI	22			1	4	7	1	
		RSV		1						
	14:15	CFV	4			3	1	3		3
		CFVI	21			1	4	7	1	
		GPV						1		
		RSV		2						
		COL	1							
	14:30	CFV	5			2	4	4	2	4
		CFVI	19	1	1		1	3		
		RSV		1						
		RPV		1						
		COL	1							
	14:45	CFV	5		1	2	1	4		4
		CFVI	20	1			4	7		1
		RSV		1						
		RPVb		1						
	15:00	CFV	3	1		2	1	3		3
		CFVI	20		1		3	7		1
		RSV		2	1					
	15:15	CFV	6		1	3	3	3		3
		CFVI	21				1	6	2	
		RSV		3						
	15:30	CFV	4			3		4		3
		CFVI	20				2	5	1	
		RPVs		1						
		RSV		1						
	15:45	CFVI	24			1	3	4	2	
		CFV	5	1		2	1	4		2
		RPVs		1	2					
		RSV		1						
	16:00	CFV	6		1	2	1	4		2
		CFVI	28			2	3	5	1	
		RSV		1						
	16:15	CFVI	27			1	4	4	1	
		CFV	6		2	2	2	4	2	2
		RKG					1(2)			
		RSV		1						
		RPVb		2						
		RPVs		2						
	16:30	CFV	6		1	2	3	3	1	2
		CFVI	22			1	4	6	1	
		RSV		1			1			
		TUG		1						
		GPV					1(2)			
		RKG	6	4	3	3	1	3		2
	16:45	CFV	23			1	2	4	1	
		CFVI								
		RKG	1(1)				1(2)			
	17:00	CFVI	22	1						
		CFV	6	2	2					
		TUG		1						
		RSV		1						
		RKG	1(2)							

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	17:15	CFV	22	1		2	1	5		1
		TUG	1				3		2	
		CFV	5							
		RPVs	1							
		RKG	1							
	17:30	CFV	5			2	1	3		2
		CFV	27	1	1	1	1	4	1	1
		TUG	1							
		RPVs		1						
	17:45	CFV	4			2	1	3		2
		CFV	27				4	3	2	1
		TUG	1		1					
	18:00	CFV	GLARE	GLARE		2	1	3	3	2
		CFV					6	2		
		TUG			1					
		RPVs								
		RSV				1				
	18:15	CFV	GLARE		1		1	4	2	2
		CFV				2	6	3		
		RPVb		1						
	18:30	CFV	GLARE				1	3		2
		CFV					7	6	2	
	18:45	CFV	GLARE		1	2	1	3		2
		CFV					5	7		
	19:00	CFV	GLARE	GLARE	2	2	1	4		2
		CFV					4	5	1	
		COL			1					
	19:15	CFV	3	GLARE	1	2	3	4		2
		CFV	19				3	4		
		COL			1					
	19:30	CFV	20				7	3		
		CFV	6		1	2	1	3		2
		TUG	1		1					
	19:45	CFV	20	1			7	2	1	
		CFV	6		1	2	1	3		2
		TUG	1		1					
	20:00	GPV						1		
		CFV	20	1			6	2	2	
		CFV	6		1	2	1	3		2
		TUG	1		1					
26-Aug	8:00	CFV	4		1	1	1	4	3	2
		CFV	14				12	7		
	8:15	CFV	7	1	1	1	1	4		2
		CFV	14			1	8	8	4	
		RPVb		1						
	8:30	CFV	19				10	7	2	
		CFV	2			2	1	3		1
		CFVs	1							
		RPVb	1							
		COL			1					
		RPVs		1						
	8:45	CFV	20				10	11	FOG	FOG
		CFV	3		2	1	1	4		
		RSV	1							
	9:00	CFV	25				10	5	4	FOG
		CFV	5		1	GLARE	1	4		
		TUG			1					
		RSV	1							
		GPV	1							
	9:15	CFV	24			GLARE	9	5	1	GLARE
		CFV	5				1	4	1	
		RPVb		2						
		TUG			1					
		RSV		1						
	9:30	CFV	24				6	10	1	
		CFV	5				1	4	1	
		RSV		1						
		TUG		1						
		CCV		1						
	9:45	CFV	30				5	11		
		CFV	6		2		1	4		
		CCV		1	1					
		RPVb		1						
		GPV	1							
		RSV	1							
	10:00	CFV	32				6	10	GLARE	GLARE
		CFV	5	1	2		1	5		
		CCV			2					
		RPVs		1						
		RPVb		1						
		RSV		1						
		CFVs	2							
	10:15	CFV	33				9	10	GLARE	GLARE
		CFV	5	1			1	4		
		RSV		1						
		CCV			1	1				
		RPVs			1					
		CFVs	1							
	10:30	CFV	34			GLARE	10	6	GLARE	GLARE
		CFV	4		3		2	5		
		RSV			1					
		CFVs	1							
		CCV			2					
		RPVs			1					
	10:45	CFV	37	2	1	GLARE	8	5	GLARE	GLARE
		CFV	5				1	5		

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CCV			2					
		RSV			1					
	11:00	CFV	38	1		GLARE	10	7	GLARE	GLARE
		CFV	6	1			1	4		
		RPVs			1					
		GPV	1							
	11:15	CFV	35	2	1	FOG	6	6	GLARE	GLARE
		RPVs		1						
		CFV	6		1		1	5		
	11:30	CFV	34	1			8	5	FOG	FOG
		CFV	6		1	1	1	5		
		TUG			1					
		CCV			1					
		RPVs			1					
	11:45	CFV	7	1	1	FOG	1	4	FOG	FOG
		TUG			1					
		CFV	33				11	4		
	12:00	TUG			1					
		CFV	4	1	1		1	4	FOG	FOG
		RSV			1					
		RPVs			1	1	8			
		CFV	34					6		
	12:15	CFV	31				7	6	FOG	FOG
		CFV	6	2			1	4		
		TUG		1	1					
		RKG	1(1)							
	12:30	CFV	32	1			7	9	FOG	FOG
		CFV	6				1	4		
		TUG		1						
		RKG	1(1)							
		CCV			2					
		RPV			2					
	12:45	RPVs			2					
		CCV			2					
		TUG			1	2				
		CFV	3			1	1	4	1	3
		CFV	28				7	8		
	13:00	CFV	25				5	6	2	
		CFV	7		1		1	4	1	3
		TUG			2					
		CCV			1					
		TUG		1	1	1				
	13:15	CFV	34	1			6	8		1
		CCV			1					
		CFV	7		1		3	4	2	2
	13:30	CAR			1					
		RPVb			1					
		GPV			1					
		TUG			1					
		CFV	6				2	4	2	2
		CFV	28				6	5		1
	13:45	CFV	25	2		1	7	4		
		CFV	8				1	4	3	2
		RSV			1					
		COL			1					
	14:00	CFV	26	2			7	3		
		CFV	6		1	2		4	2	2
		CFVs					1			
	14:15	CFV	28	3			6	3		
		CFV	6		1	1	1	4	2	2
	14:30	CFV	26	1			7	2		
		CFV	7			1	1	4	3	2
		COL			1					
	14:45	CFV	30	3			6	1		
		COL			1					
		CFV	7		1		2	4	2	2
	15:00	CFV	29	2			2	3		
		CFV	7				2	5	2	2
		RPVs			1	1				
		CCV			1					
	15:15	CFV	29	2	1		2	4		
		CFV	8				1	5	2	3
		COL			1					
		RPVs			1		1			
		RSV			1					
	15:30	CFV	31				2	2		
		CFV	7	1	1		1	7	2	2
		GPV			1					
		COL			1					
		RSV			1					
	15:45	CFV	31				3	5		
		CFV	7		1	1	1	5	3	2
		RPVs					1			
		RSV			1					
	16:00	CFV	33				2	4	2	
		CFV	7		1	1	1	5	3	2
		RSV			1					
		RPVs					1			
	16:15	CFV	30				2	4	1	
		CFV	6	1	2	2	2	5	2	2
		RSV			1					
		RPVs					1			
	16:30	CFV	32				2	4	2	
		CFV	6	1			1	5	2	2
		RPVs			1					
	16:45	CFV	27				5	4	1	

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFV	7	1		2	1	5	2	2
		CAR			1					
		RKG	1(1)							
	17:00	CFVt	26				5	4		
		CFV	6	3			1	5	2	2
		RPVb	1							
		RPVs		1						
	17:15	TUG		1						
		CCV	1	2						
		CFVt	23		2		8	2	1	1
		CFV	8		1		1	5	2	2
		RPVs	1							
	17:30	CFVt	27			2	6	3	2	2
		CFV	4		2		1	4	2	2
		TUG		1				1		
		RPVb								
	17:45	TUG			1					
		CFVt	22				11	3		1
		CFV			1		2	5	2	2
		CCV	2							
	18:00	CFV		1						
		RSV	1	1						
		CCV	2							
		CFVt	20				12	4		1
		RPVb			1					
		CFV		2			1	5	2	2
		TUG		1						
		GPV		1						
	18:15	CPV	7	1		1	1	5	2	2
		CFVt	16				11	3	1	
		CCV		1						
		RSV	1		1					
	18:30	CFVt	18	1			12	3	1	
		CPV	8		1		1	5	2	2
		RSV		1	1					
	18:45	CFVt	11	1			11	4		
		CFV	7		1		1	5	2	2
	19:00	CFVt	19				6	4	1	
		CFV	7		1	1	1	5	2	2
	19:15	CFVt	15				6	4	1	
		CFV	7			2	1	5	2	2
	19:30	CFVt	13				7	5		
		CFV	5		1	2	2	5	2	2
	19:45	CPV	14		3	2	7	5	2	2
		CFVt	6				1	5		1
	20:00	CFVt	15				3	5		2
		CFV	6		1	2	1	5	2	1
27-Aug	8:00	CFVt	25				1	4	3	6
		CFV	8		1	1	1	6	3	2
		TUG		1						
		GPV		1						
	8:15	CFVt	24	1		1	7	2	5	1
		CFV	7		2	2	1	5	2	1
		GPV		1						
	8:30	CFVt	25			3	6	2	5	
		CFV	7		3	1	1	5	3	1
	8:45	CFVt	23				10	1	7	1
		CFV	5		3	1	2	5	3	1
	9:00	CFVt	21				FOG	12	4	1
		CFV	7	1	3		1	5	2	2
	9:15	CFVt	22				FOG	11	2	6
		CFV	6		1		1	5	2	2
	9:30	CFVt	23		1			14		
		CFV	8				1	5		3
		COL		1				5		
		GPV	1							
	9:45	CFVt	21		1			14	8	
		CFV	9		1	4	1	5	2	2
		GPV						1		
		RPVb		1	1					
		RSV		1						
		RPVs		1						
	10:00	CFVt	30					8	8	1
		CFV	10	2		1	2	5	3	2
		CCV			2					
		RPVb		1						
		RSV		1						
		GPV								
	10:15	CFVt	31	2				7	5	4
		CFV	11		1		3	6	2	2
		CCV			4					
		RSV		1						
		RPVb		2						
	10:30	CFVt	35					9	5	4
		CFV	9		3		3	5	3	2
		CCV			2					
		RSV		1						
		RPVb		1						
	10:45	CFVt	32					7	6	2
		CFV	9		1		2	6	4	3
		RSV			1					
		CCV	1							
		RPVb			1					
		RPVs								
		RKG	1(1)							1

## Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
	11:00	CFVt	39				6	5	1	
		CFV	9	1	1		2	6	3	3
		RPVb					1			
		RSV			1					
		CCV	1		1					
		RKG		1(1)						
	11:15	CFVt	33				5	2	3	
		CFV	9		1		5	5	2	2
		RSV			1					
		CCV	1							
		RPVb	1							
	11:30	CFVt	25				5	1	5	
		CFV	11		1		3	5	2	3
		RSV			1					
		RPVb	1							
		CCV	1							
	11:45	CFVt	24				4	1	3	
		CFV	12			1	2	5	4	3
		TUG			1					
		RSV	1							
		CCV	1							
		RPVb	1							
	12:00	CFVt	22				6	1	1	
		CFV	10	1	6		3	6	2	4
		RSV			2					
		RPVb			1					
		CCV	1							
		CAR	1							
		RKG		1(4)						
	12:15	CFVt	15				6	3		
		CFV	12		3	2	4	7	4	4
		RSV			1					
	12:30	CFVt	21			3	7	6	1	1
		CFV	14	3	7	1	6	5	2	3
	12:45	CFVt	18			2	3	3	2	
		CFV	13	3	6	4	3	11	3	3
		RKG							1(3)	
	13:00	RPVs			1					
		CFVt	20			1	2	2	1	2
		CFV	11		3	4	5	9	2	5
		RKG								1(3)
	13:15	CFV	12	1	3	3	4	9	3	3
		CFVt	22					3	2	
		RKG								1(3)
	13:30	CFVt	21				2	4	1	
		CFV	13		2		5	6	2	2
		RPVb	1							
	13:45	CFVt	19				3	2	1	
		CFV	15		1	1	4	6	3	4
		RPVb			1					
	14:00	CFVt	19				3	3	2	
		CFV	12	3	2	2	3	5	5	
		RSV			1					
	14:15	CFVt	20				3	5		
		CFV	13	1	4	1	5	9	4	2
	14:30	CFVt	18				1	3	1	
		CFV	13	1	3		4	9	2	2
		RPVs			2					
		RKG					1(3)			
	14:45	CFVt	19				1	5		
		CFV	12	4	5		3	10	2	2
		RSV	1			1				
		RKG					1(3)			
	15:00	CFVt	16				1	3		
		CFV	14		2	4	6	10	2	2
		RSV			1	1				
		COL	1							
		RKG					1(3)			
	15:15	CFVt	15				1	3		
		CFV	17		4	3	5	13	2	2
		RSV	1		1	1				
		CCV			1					
		RPVs	1							
	15:30	CFVt	14				1	4		
		CFV	13				6	12	3	5
		COL	2							
		RSV			2	1				
		RPVb	2							
	15:45	CFVt	15				1	2		
		CFV	13			2	7	9	4	3
		COL	1							
		RSV	2		1					
		RPVs	1							
		RKG	1(2)							
	16:00	CFVt	15				1	2		
		CFV	20	1	3	3	5	10	3	6
		RSV			1					
		RPVs			1					
		GPV	1							
	16:15	CFVt	14					3		
		CFV	12	1	2	3	6	11	4	5
	16:30	CFVt	15	3			1	5		1
		CFV	13	2	2	7	7	7	5	5
		RPVb			1					
	16:45	CFVt	15	2			5	4	6	5
		CFV	14	2	5	7	4	8		

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		RSV	1							
		CFVs		1						
		RPVb			1					
		GPV			1					
	17:00	CFVI	12	2		1		2		
		CFV	18	1	1	7	11	11	6	5
		GPV		1						
	17:15	CFVI	8	1				2	1	1
		CFV	17	1	2	13	13	11	4	4
	17:30	CFVI	2			1	1	3		
		CFV	24	2	4	8	10	9	5	6
		COL				1				
	17:45	CFVI	5			1		3		
		CFV	23	8	9	9	14	12	7	6
		COL		1						
		RKG		1(1)						
	18:00	CFVI	2					1		
		CFV	21	6	24	11	13	12	8	9
		CFVg					1		1	
	18:15	CFV	15	3	7	4	4	10	3	4
		CFVI	2					1		
		CFVg	4	1	3	4	7	3	3	2
	18:30	CFV	13	3		5	7	9	4	5
		CFVg	10	1	2	3	3	4	4	3
	18:45	CFV	12		1	6	5	9	5	3
		CFVI	1		1		2			
		CFVt	10	4	4	5	4	3	4	4
		RPVs			1					
	19:00	CFV	12	3	2	8	5	13	4	3
		CFVI	1		1		2			1
		CFVg	10	6	5	5	1	4	5	6
	19:15	CFVg	11	4	2	5	1	4	5	6
		CFV	12		3	5	6	8	6	6
		CFVI	1				1			
	19:30	CFVg	9	4	2	3	3	2	1	6
		CFV	10		4	2	8	11	3	3
		CFVI	1				1			
	19:45	CFVg	4		1	4	2	4	3	5
		CFV	12	1	2		4	8	3	2
		CFVI	1		2		2		1	
	20:00	CFVg	7	5		3	5	1	3	3
		CFV	14		3	3	5	9	3	2
		CFVI	2		1			2		
28-Aug	08h00 - 11h00 all zones obscured by fog									
	11:00	CFV		1	6		2	14	1	4
		CFVs	30		4		7	5	1	1
		CFVg						2		
		RSV			1					
		RKG		1(3)						
	11:30	CFV	28	4	7	4	3	4		3
		CFVs	6		6		10	7	1	
		RPVb			1					
		RSV			1					
		CFVg	1	3						
		RKG		1(3)						
	12:00	CFV	17	3	6	4	5	9	1	4
		CFVs	8		4		3	7	2	1
		RSV			1					
		RPVb	1	1						
		RKG		1(3)						
		CFVg	2							
		RPVs	1							
	12:30	CFV	4	1	3	11	4	9	1	4
		CFVs	19	2		5	5	6	2	1
		RPVb		1	1	1			1	
		RKG		1(3)						
		CFVg	6				1			
		TUG								
		GPV			1					
	13:00	CFV	14		1	8		15		6
		CFVs	7			1	8	2	5	1
		CFVg	4	9	2	1	2			
		GPV	1							
		RPVb			1					
	13:30	CFVs	7		2		3	1	1	
		CFV	22	5	7	5	3	11	5	2
		RPVb			1					
	14:00	CFV	12		3	4	3	10		
		CFVs	5	1		1	1		5	11
		CFVg	6	6						
		RPVb	1							
		GPV			1					
		CFVI							1	
	14:30	CFVs	10			1	2	2	3	
		CFV	8	2	3	5		13	2	9
		CFVg	4	8		3				
		CCV	1							
		GPV			2					
		RPVs								1
	15:00	CFVI								1
		CFV	7	1	3	7		10	5	11
		CFVs	13			1	2		2	
		RSV			1					
		CCV			1					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFVg		3	9		2			
	15:30	CFV	9	3	2	9		9	2	9
		CFVt				1		1	1	
		CFVs	11				3	1	2	2
		CFVg	2	2	10		1			
		RKG		1(3)						
		RSV			1					
		CCV								
	16:00	CFVs	10				5	2	3	3
		CFV	8		1	6	3	12	1	10
		CFVg	1	3	8	4		2		
		RKG	1(3)							
		RPVs		2						
		RPVb			1					
		CCV			1					
	16:30	CFV	3	1	2	7	2	9	3	8
		CFVs	11				4	10	2	3
		CFVg	1	4	11					
		RKG	1(3)							
		CCV			1					
	17:00	CFV	GLARE	1	4	6		14	4	7
		CFVg	2	13			1			
		RSV			1					
		CFVs			2				2	2
	17:30	CFV	GLARE	2	3	3	4	14	12	7
		CFVg	3	14				2		
		CFVs				1	6	2	3	3
		CAR		1						
		CFVt			1					
		RSV			1					
		RPVs							1	
	18:00	CFV	6	1		3	5	12		2
		CFVg	7	1	9	3	1		2	6
		CFVs	13				6	8	2	1
		TUG			1					
	18:30	CFV	10			3	4	10	2	
		CFVg	5		7					2
		CFVs	9			5	5	2	1	5
		RSV			2					
		GPV						1		
		TUG			1					
	19:00	CFV	15	GLARE	1	3	2	12	1	1
		CFVg	5		7	3	2	3	6	2
		CFVs	6				5		1	1
		CCV			1					
	19:30	CFV	25		2	3	7	8	1	1
		CFVg	4		8	2	1	5	6	3
		CFVs				3		4	1	
		TUG			1					
	20:00	CFV	26	4	5	3	7	18	2	4
		CFVg	3			2	1	4	3	2
		CFVs					1			
		RSV		1						
29-Aug	8:00	CFV	24	6	1	2	2	15	1	1
		CFVg		1		2			1	
		CFVs	3			2	5	5	2	3
		TUG			1					
	8:30	CFV	16	1	1		4	13	1	3
		CFVg				2			1	
		CFVs	10	1		4	5	7	3	3
		GPV			1				1	
		TUG		1						
	9:00	CFV	14	4	2		5	14	1	5
		CFVs	10			2	3	3	3	2
		RSV			1					
	9:30	CFV	19	2	1	1	1	13	2	2
		CFVs	7			1	6	11	3	2
		CCV			1					
	10:00	CFV	14	2	2	1	5	13	1	3
		CFVs	6				7	5	6	
		RKG	1(2)							
		RSV				1				
	10:30	CFV	13	3		2	5	14	5	5
		CFVs	9	1		1	6	3	2	1
		RKG	3(1,6,3)							
		CCV				1				
	11:00	CFV	16	2	1	4	3	13	1	3
		CFVs	6			1	5	3		
		GPV								
		RKG	5(15T)		3					
		RPVb			1					
	11:30	CFV	16	2		4	6	13	1	1
		CFVs	6			1	3	4	2	1
		CCV			3					
		GPV					1			
		RSV		1		1				
		COL			1					
		RKG	3(6,3,2)							
	12:00	CFV	10	2	2	1	7	13	3	1
		CFVs	7			2	3	4	1	1
		COL			1					
		RPVs			2					
		RSV			1					
		RKG	1(4)			1(2)				
		RPVb			1					
	12:30	CFV	11	2	4	5	4	13	2	1

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFVs	7		1		5	4	1	
		COL			1(4)					
		RKG	1(1)							
	13:00	CFV	12			3	4	11	1	2
		CFVs	6		1		3	5	5	2
		COL			1					
		CAR			1					
		RPVb			2					
	13:30	CFV	12	1	6	5	5	13	1	3
		CFVs	4			2	3	1	5	2
		RPVb			1					
		RPVs							1	
		G/V								
		RKG	1(2)							
	14:00	CFV	8		3	4	3	10	2	1
		CFVs	5			1	6	3	3	3
		TUG			1					
		GPV						1	1	
	14:30	TUG		1						
		CFV	9		2	2	2	9	2	3
		CFVs	4			2	3	2	2	2
		RPVs			2					
	15:00	CFV	6	1	4	4	2	7	1	4
		CFVs	5			2	6	1	1	2
		TUG			1					
		COL			1					
		CAR			1					
		CCV			1					
	15:30	CRV	6	1		2	2			
		CFVs	5			2	4			
		RPVs		1	2					
	16:00	CFV	8		1	3	2	7	1	2
		CFVs	6			2	2			1
		RSV						1		
		RKG			1(4)					
	16:30	CFV	6	1	3	4	2	6		
		CFVs	4			1	1	2		
		RKG			1(4)					
		RSV				1				
	17:00	CFV	7			3	1	8	2	2
		CFVs	4			2	6	1	1	1
		RKG			1(1)					
		GPV						1		
	17:30	CFV	GLARE		1	3	2	5	3	2
		CFVs				1	3	3	1	
		RKG			1(2)					
	18:00	CFV	GLARE		2	3	3	8	1	1
		CFVs					2	3	2	
		GPV						2		
	18:30	CFV	GLARE	1	3		3	10	2	
		CFVs				2	3	2	1	
		GPV				1				
		RPVs						1		
	19:00	CFV	6	GLARE	1	3	2	7	3	1
		CFVs					1	1		
		GPV					1			
		CCV	1							
	19:30	CFV	3		4	3		2	3	
		RPV			1					
	20:00	CFV	1	1	8			3	1	
30-Aug	8:00	CFV	1	1	2	FOG	1	1		
		CFVI	8				5	2	1	
	8:30	CFVI	7				3	6		
		CFV	1		4	GLARE			1	2
		RKG			1(2)					
	9:00	CFV			1			1	2	
		CFVI	7				2	6		
		CAR			1					
		RSV			1					
	9:15	CFVI	8					5	1	
		CFV		1	2			2	1	
		RSV			1					
		CAR			1					
	9:30	CFVI	10	1			1	6		
		CFV				1		2	1	
	10:00	CFVI	14			3		2	1	
		CFV						7		
		CAR			1					
		RKG			1(4)					
	10:30	CFVI	12				4	4		
		CFV			1	1		2	1	
	11:00	CFV			2	1	3	2	1	
		CFVI	17					5		
	11:30	RSV			1					
		GPV			1					
		CFV			1			3	1	
		CFVI	21				2	5		
		RKG			1(1)					
		RPVb			1					
	12:00	CFV		3	2			1		
		CFVI	20					4	1	
		RPVb			1					
		CAR			1					
		RKG			1(1)					
	12:30	CFVI	20		1			4	6	
		RSV	1		2					

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFV		2				2	1	
		RPVb		1						
		RKG	2(1,1)							
	13:00	CFV		3				2		
		CFVI	25		1		3	5	2	
		TUG			1					
		CCV			1					
		RKG	1(4)							
		RSV		1			1			
	13:30	CFV	1		3			2	1	
		CFVI	18				2	3	3	
		CCV			1					
		RSV			1					
		RPVs			1					
		RPVb			1		1	4	3	
	14:00	CFVI	19				2	2	5	1
		CFV	1		1	1			3	
		RPVb			3	1				
	14:30	CFVI	12			1			6	1
		CFV	1		3			2		
		RSV			1					
		RPVs			1	1				
		CCV			1					
		RPVb			1	1				
	15:00	RSV			1					
		RPVb			1					
		CFV	1							
		CFVI	12				2	4	2	1
	15:30	CAR			1					
		CFVI	10				1	4		1
		CFV	2	2	2		1		3	
		CCV			1					
		RPVb			1					
		RKG	1(4)							
		RSV			1					
	16:00	RKG	1(2)					1(3)	1(1)	
		CFVI	8				1		4	1
		CFV	1		4				2	1
		RSV		1	1					
		RPVb			2					
		RPVs	1							
		CCV			1					
	16:30	CFV							1	
		CFVI							7	1
		RKG	1(6)		1(1)					
		RSV		1						
	17:00	CFV	GLARE	1	6					
		CFVI					2		4	
		RKG								
		RSV			1					
		CCV			1					
		CCV			3					
	17:30	CFV	GLARE	4	3				3	
		CFVI					3		5	
		RSV			2					
		CCV			4					
		COL			1					
		RPVb			1					
		TUG			1					
		RKG			1(1)					
	18:00	CCV			1					
		RSV	1		2					
		RPVs			2					
		TUG			1					
		CFV	1	2	3	1				
		CFVI	3				2		5	
		RKG			1(1)					
	18:30	CAR	GLARE	1						
		CFV			4				2	
		CCV			1				5	
		CFVI							4	
	19:00	CFVI	6	GLARE			1		3	
		CFV	2							
		RPVs	1							
		RSV	2							
		CCV	1							
31-Aug	8:30	CFV	2		1	GLARE	1	2		GLARE
		CFVI	11				2	10	2	
		RPVb	1							
	9:00	CFV	2	1					2	
		CFVI	15				3	13	1	
		RPVb	1							
	9:30	CFV	1		1				2	
		CFVI	14				3	10	4	
		RPVb			1					
	10:00	CFV	1	1	2				2	
		CFVI	10				3	13	3	
		RPVs			1					
	10:30	CCV			1	1				
		CFV			1	2	2			
		CFVI	12				7		12	
		RKG	1(1)							
	11:00	CFVI	13					4	14	
		CFV	3		2		3		2	
		CCV	2							
		RPVs	2							
		TUG			1					
	11:30	CFVI	16				1		15	

Appendix B1 - Boat Count Data

Date	Time	Vessel	Zone X	Zone 2A	Zone 2B	Zone 2C	Zone 3	Zone 4	Zone 5	Zone 6
		CFV	2	1	1			2		6
		TUG			1					
		RPVs			1					
	12:00	CFVI	13			1		16		
		CFV	2		3	2	1	2	1	1
		RPVs	1							
		RKG	1(1)							
	12:30	CFVI	5			4	1	14	1	5
		CPV	2	3	2			3	1	
		RKG	1(1)							
	13:00	CFVI	5				2	12	1	
		CFV		2	8	3		2	2	2
		RSV			1					
		RKG	1(1)							
	13:30	CPV	1		3	2		8		
		CFVI	8	1			2	6	4	5
		RPVb			1					
		GPV			1					
		RKG	1(1)							
	14:00	CPV	2	3				3	1	2
		CFVI	6		3	2	3	7	1	1
		GPV			1					
		RPVb			1					
	14:30	CFV	2	1	3	1		2	1	1
		CFVI	6			1		8	2	
		RPVb			1					
		RSV	1							
	15:00	CFVI	GLARE			1		4	2	2
		CFV		1	2			2		1
		RSV			1					
		RPVb			1					
	15:30	CFV	1	3	2			2		2
		TUG			1					
		CFVI	1							
	16:00	CFV	3	1	2			4		2
		CFVI	1	1				2		2
		CCV					1	3		
	16:30	CFV	2		3			3		2
		COL			1					
		CFVI	3					2	1	
	17:00	CFV	4	3	2			2		2
		CFVI	2					1	3	2
		TUG			1					
	17:30	CFV	2	3	5	1		3	1	2
		CFVI	1					2		
		TUG					1			
	18:00	obscured by glare								

**APPENDIX B2      Vessel Traffic Data****Interpretive Notes:****A) Abbreviated Headings**

- In/Out: Indicates whether the vessel crossed the line while within (I) or outside (O) the reserve boundaries.
- Direction: Indicates the direction the vessel was travelling when it crossed the line.

**B) Vessel Category Codes**

- RKG = Recreational Kayak Group  
RPVs = Recreational Power Vessel, under 5 m.  
RPVb = Recreational Power Vessel, over 5 m.  
RSV = Recreational Sailing Vessel  
CFV = Commercial Fishing Vessel  
CCV = Commercial Charter Vessel  
COL = Commercial Ocean Liner  
TUG = Tug boat with or without barge  
CAR = Self propelled cargo vessel  
PRV = Professional Research/photography Vessel  
GPV = Government Patrol Vessel



1995 Vessel Data				
Date	Time	Vessel	In/Out	Direction
1-Jul	8:19	CFV	O	W
	8:20	CFV	O	W
	8:27	CFV	O	W
	8:28	RPVs	I	E
	8:34	COL	O	W
	8:45	CFV	O	W
	8:45	CFV	O	W
	8:45	RPVs	O	W
	8:58	RSV	O	W
	8:59	RPVs	O	W
	9:01	RSV	O	W
	9:08	CFV	O	W
	9:09	CFV	O	W
	9:10	CFV	O	W
	9:10	CFV	O	W
	9:12	RPVs	O	W
	9:23	CFV	O	W
	9:29	RSV	I	W
	9:33	RSV	O	W
	9:34	CFV	O	W
	9:48	CFV	O	W
	9:48	CFV	O	W
	9:49	CFV	O	W
	9:50	CFV	O	W
	9:50	CFV	O	W
	9:51	CFV	O	W
	9:57	RPVs	O	W
	9:58	CFV	O	W
	10:00	CFV	O	W
	10:00	RPV	O	W
	10:09	CFV	O	W
	10:09	CFV	O	W
	10:10	CFV	O	W
	10:10	CFV	O	W
	10:11	CFV	O	W
	10:12	CFV	O	W
	10:13	CFV	O	W
	10:15	CFV	O	W
	10:25	TUG	O	W
	10:33	CFV	O	W
	10:34	RPV	O	W
	10:36	CFV	O	W
	10:39	RSV	O	W
	10:39	RSV	O	W
	10:44	CFV	O	W
	10:46	CFV	O	W
	11:59	CFV	O	W
	12:02	CFV	O	W
	12:03	CFV	O	W
	12:04	CFV	O	W
	12:04	CFV	O	W
	12:05	CFV	O	W
	12:12	CFV	O	W
	12:16	RPVs	O	E
	12:33	CFV	O	W
	12:38	CFV	O	W
	12:53	CFV	O	W
	12:54	TUG	O	E
	12:54	CFV	O	W
	12:54	CFV	O	W
	13:01	CFV	O	W
	13:01	CFV	O	W
	13:07	CFV	I	E
	13:18	CFV	O	W
	13:34	CFV	O	W
	13:46	TUG	O	W
	13:55	CFV	O	W
	13:56	CFV	O	W
	13:57	CFV	O	W
	13:58	CFV	O	W
	14:01	CFV	O	W
	14:03	CFV	O	W
	14:05	CFV	O	W
	14:05	CFV	O	W
	14:09	CFV	O	W
	14:09	CFV	O	W
	14:10	CFV	O	W
	14:11	CFV	O	W
	14:21	CFV	O	W
	14:28	CFV	O	W
	14:29	CFV	O	W
	14:36	RSV	I	W
	14:42	CFV	O	W
	14:45	CFV	O	W
	14:46	CFV	O	W
	14:50	CFV	O	W
	14:50	CFV	I	E
	15:09	CFV	O	W
	15:16	CFV	O	W
	15:21	CFV	O	W
	15:25	CFV	I	W
	15:25	CFV	I	W

- Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	15:28	RPV	O	W
	15:28	CFV	O	W
	15:34	CFV	I	W
	15:57	CCV	O	W
	16:06	CFV	O	W
	16:09	TUG	O	W
	16:11	CFV	O	W
	16:27	CFV	O	W
	16:32	CFV	O	W
	16:32	CFV	O	W
	16:41	RPVs	O	W
	16:41	COL	O	E
	17:03	COL	O	E
	17:18	CFV	O	W
	17:22	CFV	O	W
	18:10	CFV	O	W
	18:15	CFV	O	W
	18:33	TUG	O	W
	18:34	CAR	O	W
	18:39	CFV	O	W
	19:03	CFV	O	W
	19:04	CFV	O	W
	19:12	CFV	O	W
	19:12	CFV	O	W
	19:13	CFV	O	W
2-Jul	8:52	CFV	O	W
	9:06	CFV	O	W
	9:07	RPVb	O	W
	9:24	CFV	O	W
	9:24	CFV	O	W
	9:26	CFV	O	W
	9:27	CFV	O	W
	9:27	CFV	O	W
	9:28	CFV	O	W
	9:31	CFV	O	W
	9:39	CFV	O	W
	10:01	CFV	O	W
	10:13	CFV	O	W
	10:13	CFV	O	W
	10:14	CFV	O	W
	10:17	CFV	O	W
	10:26	CFV	O	W
	10:26	CFV	O	W
	10:31	RPVb	O	E
	10:42	CFV	O	W
	10:48	RSV	O	E
	10:49	CFV	O	W
	10:55	CFV	O	W
	11:08	CFV	O	W
	11:09	CFV	O	W
	11:21	CFV	O	W
	11:30	CFV	I	W
	11:34	CFV	O	W
	11:35	CFV	O	W
	11:36	CFV	O	W
	11:49	RPV	O	E
	12:02	CFV	O	W
	12:02	CFV	O	W
	12:03	CFV	O	W
	12:16	CFV	I	W
	12:17	RSV	I	E
	12:20	CFV	I	W
	12:39	CFV	O	W
	12:59	CFV	O	W
	13:01	CFV	O	W
	13:03	TUG	O	E
	13:09	TUG	O	E
	13:09	RPVs	O	E
	13:20	CFV	O	W
	13:21	CCV	O	W
	13:28	CFV	O	W
	13:31	CFV	O	W
	13:34	CFV	O	W
	13:34	CAR	O	W
	13:49	CFV	I	W
	13:50	RPVs	I	W
	13:53	CFV	I	W
	13:58	CFV	I	W
	14:05	CFV	O	W
	14:08	CFV	O	W
	14:09	CFV	O	W
	14:10	CFV	O	W
	14:15	CFV	O	E
	14:23	CFV	I	W
	14:23	CFV	I	W
	14:38	CFV	O	W
	14:43	CFV	O	W
	14:49	CFV	O	W
	14:52	CFV	O	W
	14:52	CFV	I	W
	15:03	CFV	O	W
	15:03	CFV	O	W
	15:10	CFV	O	W
	15:16	RSV	I	E
	15:30	CCV	O	E

Date	Time	Vessel	In/Out	Direction
	14:40	RPV	O	W
	14:41	CCV	O	E
	14:45	RPV	O	W
	15:27	CFV	O	W
	15:32	RPV	O	W
	15:52	RPV	I	E
	16:09	CFV	O	W
	16:15	CFV	O	E
	16:19	RPVb	O	W
	16:31	RSV	O	W
	16:53	CFV	O	E
	16:56	RPVs	O	E
	17:04	CFV	O	E
	17:07	COL	O	E
	17:27	CFV	O	E
	17:44	COL	O	E
	18:20	CFV	O	W
	18:27	CFV	O	W
	18:41	RPVb	O	E
	19:42	CFV	O	W
	19:55	CFV	O	W
5-Jul	8:00	COL	O	W
	8:23	CAR	O	W
	9:02	CFV	I	E
	9:04	TUG	O	W
	9:09	RSV	O	W
	9:48	CFV	O	E
	10:03	CFV	O	E
	10:38	CFV	O	W
	10:38	CFV	O	W
	11:00	RSV	O	W
	11:03	RPVs	O	W
	11:07	RSV	O	W
	11:31	RSV	O	W
	13:09	RPV	O	E
	13:11	RPV	O	W
	13:17	CCV	O	W
	13:20	CAR	O	E
	13:22	RPV	O	E
	13:39	CFV	O	W
	13:50	RPV	O	W
	14:05	RPV	O	W
	14:06	RPV	O	W
	14:10	CFV	O	W
	14:20	CFV	I	W
	14:37	CFV	O	W
	14:43	CFV	O	W
	14:58	CCV	O	E
	15:53	RSV	O	W
	15:53	RSV	O	W
	16:01	RPVs	O	E
	16:01	RPVs	O	E
	16:15	RSV	O	W
	16:27	RPVb	O	W
	16:53	RPVs	O	W
	17:03	CFV	O	W
	17:05	CV	O	W
	17:15	TUG	O	W
	17:15	GPV	O	W
	17:37	COL	I	E
	17:38	CFV	O	W
	17:40	RPVs	O	E
	17:42	RSV	O	E
	17:47	RPVs	O	W
	17:52	RPVb	O	E
	17:54	CFV	O	W
	18:20	CFV	O	W
	18:33	TUG	O	W
	18:48	RSV	O	E
	18:53	RSV	O	E
	18:58	RSV	O	E
	19:02	TUG	O	W
	19:03	COL	O	E
	19:09	TUG	O	W
6-Jul	8:58	COL	O	W
	9:06	RPVs	O	E
	9:06	RPVs	O	E
	9:10	RSV	O	W
	9:15	CFV	O	E
	9:22	RPV	O	E
	9:27	CFV	O	E
	9:37	CFV	O	W
	9:46	RPVb	O	W
	9:56	RSV	O	E
	9:52	TUG	O	W
	9:56	CFV	O	W
	9:56	CFV	O	W
	9:57	CFV	O	W
	10:44	RPVb	O	E
	11:09	RPVs	O	E
	11:09	RPVs	O	W
	11:16	RSV	O	W
	11:29	RSV	O	W
	11:30	RSV	O	W
	11:32	RPVb	O	W
	11:59	CFV	O	E

- Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	11:59	RPVb	O	W
	12:05	RPVs	O	W
	12:14	RPVb	O	E
	12:32	RSV	O	W
	13:02	CFV	O	W
	13:05	RSV	O	W
	13:16	TUG	O	E
	13:33	CFV	O	E
	13:41	RPVb	O	W
	14:00	RPVs	O	W
	14:06	CFV	I	W
	14:10	CFV	I	W
	14:28	RPVs	I	E
	14:31	CFV	O	W
	14:37	TUG	O	E
	14:50	GPV	I	E
	14:53	CAR	O	W
	14:56	TUG	O	E
	14:58	RSV	O	E
	15:01	RPVs	O	E
	15:28	GPV	O	W
	16:13	CFV	O	W
	16:16	RSV	O	E
	16:33	RPVs	O	W
	16:39	RPVb	O	W
	17:01	CFV	O	W
	17:31	RPVb	O	E
	17:34	RPVs	O	W
	17:41	RKG(4)	O	E
	17:45	PRV	I	W
	18:00	CFV	O	W
	18:29	RPVb	O	W
	18:35	GPV	O	W
	18:50	CFV	O	W
	19:06	COL	O	E
	19:43	CFV	O	W
	19:45	CFV	O	W
	19:56	COL	O	E
7-Jul	8:31	CFV	O	W
	9:03	CFV	O	W
	9:11	CFV	O	W
	9:35	RPVs	O	W
	9:58	RKG(4)	O	W
	10:01	CFV	O	W
	10:20	RSV	O	W
	10:29	CFV	O	W
	10:42	RPVs	O	E
	10:42	RPVs	O	E
	11:01	TUG	O	W
	11:12	CFV	O	W
	11:36	CFV	O	W
	11:39	RPVb	O	W
	11:58	CFV	O	W
	12:25	CFV	O	W
	12:36	CFV	O	W
	12:37	TUG	O	W
	12:40	RPVb	O	W
	12:48	RSV	I	W
	13:01	CFV	I	W
	13:02	RPVb	O	W
	13:13	GPV	O	W
	13:14	RSV	O	W
	13:16	RPVs	O	W
	13:16	RPVs	O	W
	13:18	RPVs	O	W
	13:36	TUG	O	W
	13:39	RPVs	O	W
	14:04	CFV	I	W
	14:06	CCV	O	W
	14:24	TUG	O	E
	14:34	RSV	O	W
	14:38	CCV	O	E
	14:44	RPV	O	E
	14:47	RPV	O	W
	14:52	RPV	O	W
	14:55	CFV	O	E
	15:04	CFV	O	W
	15:28	CFV	O	W
	15:30	CFV	O	W
	15:47	CFV	O	W
	15:48	CFV	O	W
	15:52	RPV	O	E
	15:54	CFV	O	E
	16:11	COL	O	E
	16:19	COL	O	E
	16:42	CFV	O	E
	17:02	RSV	O	W
	17:14	RKG(1)	O	W
	17:23	CFV	O	W
	17:36	CAR	O	E
	17:53	CFV	O	W
	18:12	CFV	O	W
	18:17	CFV	O	W
	18:18	CFV	O	W
	18:18	CFV	O	W
	18:35	CFV	O	W

## Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	18:36	CFV	O	W
	18:37	CAR	O	W
	18:38	CFV	O	W
	18:42	CFV	O	W
	18:47	CFV	O	W
	19:23	CFV	O	W
	19:36	CFV	O	W
	19:37	CFV	O	W
	19:47	CFV	O	W
11-Jul	fog until 9:45			
	9:48	CFV	O	W
	9:58	RSV	O	W
	10:14	RPVs	O	E
	10:14	RPVb	O	E
	10:30	CCV	O	E
	10:42	CFV	O	W
	10:47	CFV	O	W
	10:54	RSV	O	E
	10:55	RPVb	O	W
	11:02	CFV	O	W
	11:02	CFV	O	W
	11:24	RSV	O	E
	11:25	TUG	O	W
	11:28	CFV	O	W
	11:27	RSV	O	E
	11:49	RSV	O	E
	11:59	RSV	O	W
	12:00	RPV	O	E
	12:00	RPV	O	E
	12:07	CCV	O	W
	12:18	CCV	O	W
	12:18	RPV	O	E
	12:27	RSV	O	W
	12:28	RSV	O	W
	12:38	RPV	O	W
	12:41	CFV	O	W
	12:42	CFV	O	E
	12:43	CFV	O	W
	12:48	RPV	O	E
	12:55	CFV	O	W
	13:00	CFV	O	W
	13:01	CFV	O	W
	13:01	RPVb	O	W
	13:02	CFV	O	W
	13:02	RPV <sub>s</sub>	O	W
	13:05	RPV <sub>s</sub>	O	W
	13:07	CFV	O	W
	13:17	CCV	O	W
	13:24	TUG	O	E
	13:31	CCV	O	W
	14:28	CFV	O	W
	14:29	RSV	O	W
	14:45	CFV	O	E
	14:49	CFV	O	W
	14:56	CFV	O	W
	15:02	CCV	O	E
	15:09	CFV	O	W
	15:14	CFV	O	W
	15:16	RSV	O	W
	15:19	RPVs	O	W
	15:21	RSV	O	W
	15:21	CFV	O	W
	15:22	CFV	O	W
	15:39	RPVs	O	E
	15:43	CFV	O	W
	15:53	RSV	O	W
	16:17	PRV	O	W
	16:17	CFV	O	W
	16:17	CFV	O	W
	16:24	CFV	I	W
	16:47	COL	O	E
	17:20	CFV	O	E
	17:25	RPVb	O	W
	17:25	RPVs	O	W
	17:25	CFV	O	W
	17:27	COL	O	E
	17:29	RPV	O	W
	17:29	RPV	O	W
	17:29	RPV	O	W
	17:43	CFV	O	W
	17:47	CFV	O	W
	18:14	CFV	I	W
	18:15	CFV	I	W
	18:15	CFV	O	W
	18:16	CFV	I	W
	18:29	CFV	O	W
	19:22	CFV	O	W
	19:29	CFV	O	W
	19:30	CFV	O	W
	19:38	CFV	O	W
	19:43	GPV	O	E
	19:50	CFV	O	W
9-Jul	8:04	CFV	O	W
	8:06	RPVb	O	W
	8:08	CFV	O	W
	8:09	CFV	O	W

## B2 - Vessel Traffic Data

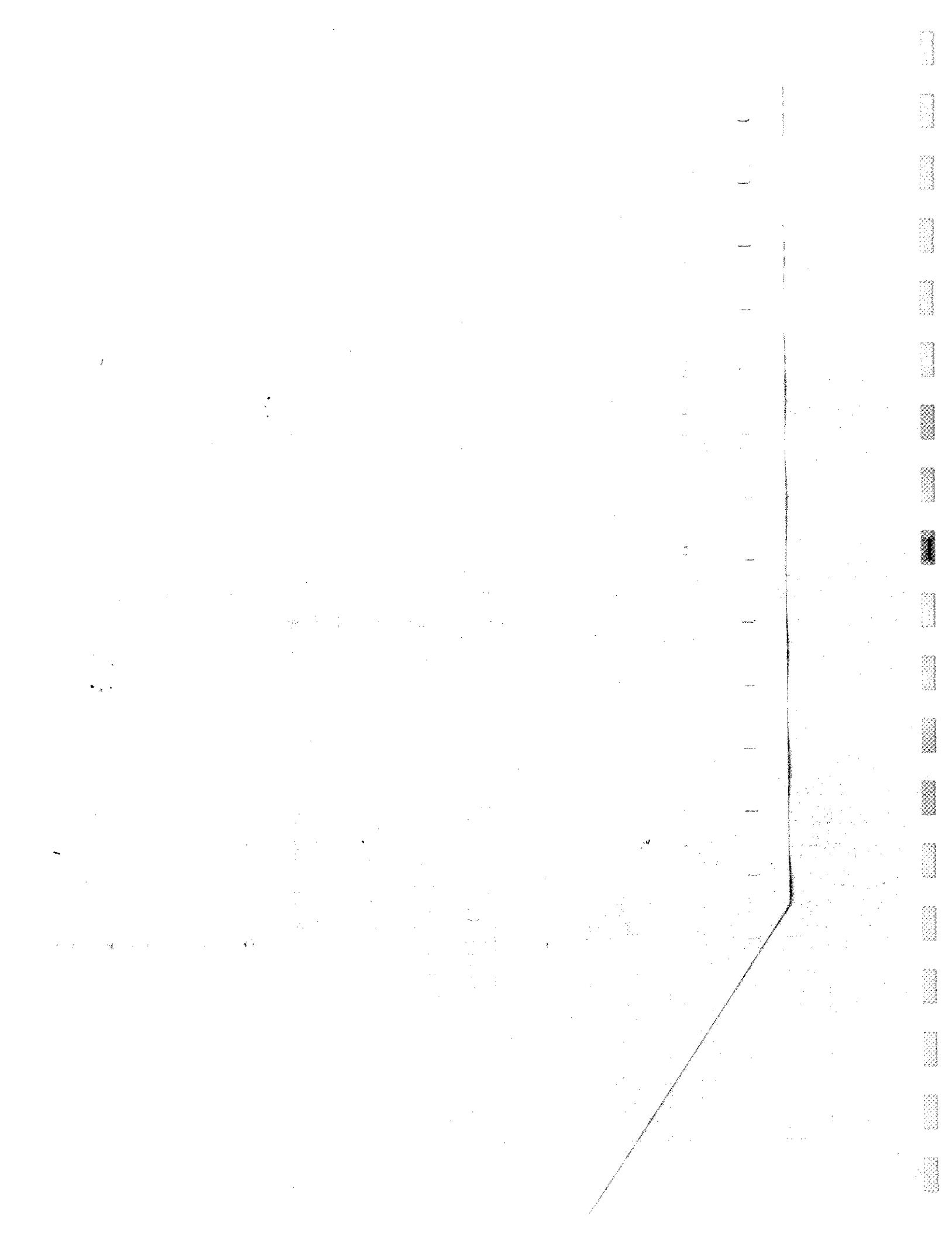
Date	Time	Vessel	In/Out	Direction
	8:11	CFV	O	W
	8:12	TUG	O	E
	8:13	CFV	O	W
	8:13	CFV	O	W
	8:15	CFV	O	W
	8:17	CFV	O	W
	8:19	CFV	O	W
	8:21	CFV	O	W
	8:23	CFV	O	W
	8:25	CFV	O	W
	8:25	CFV	O	W
	8:27	CFV	O	W
	8:36	CFV	O	W
	8:49	CFV	O	W
	8:49	CFV	O	W
	8:50	CFV	O	W
	8:51	CFV	O	W
	9:00	TUG	O	W
	9:08	CFV	O	W
	9:09	CFV	O	W
	9:10	CFV	O	W
	9:25	TUG	O	W
	9:27	CFV	O	W
	9:30	CFV	O	W
	9:35	RPVs	I	W
	9:43	TUG	O	W
	9:42	CFV	I	W
	9:50	RSV	O	E
	9:50	CFV	O	E
	9:54	CFV	O	W
	10:04	RPVs	O	E
	10:05	CFV	O	W
	10:06	CFV	O	W
	10:09	CCV	O	E
	10:12	RPVs	O	E
	10:13	CFV	O	W
	10:14	CFV	O	W
	10:15	CFV	O	W
	10:16	CFV	O	W
	10:17	RSV	O	E
	10:18	RPVs	O	W
	10:19	CFV	O	W
	10:23	CFV	O	W
	10:24	RSV	O	E
	10:26	RSV	O	E
	10:28	CFV	O	W
	10:29	CFV	O	W
	10:30	CFV	O	W
	10:32	RSV	O	W
	10:35	CCV	O	W
	10:36	RPVs	O	W
	10:37	CFV	I	W
	10:37	RPVs	O	E
	10:47	CFV	O	W
	10:49	CFV	O	W
	10:50	CFV	O	W
	10:55	CFV	O	W
	11:08	CV	O	W
	11:21	CCV	O	W
	11:22	RPVs	O	W
	11:29	CAR	O	E
	11:30	RSV	O	W
	11:44	CCV	O	W
	11:45	RPVs	O	W
	11:47	RPVs	O	W
	11:49	RPVs	O	E
	11:50	CFV	O	W
	11:59	CFV	O	W
	12:11	CFV	O	W
	12:27	RPVs	O	W
	12:33	RPVs	O	E
	12:39	CFV	O	W
	12:44	RSV	O	W
	12:45	CFV	O	W
	12:52	CCV	O	E
	13:01	RSV	O	W
	13:09	CFV	I	W
	13:12	CFV	O	E
	13:13	TUG	O	E
	13:30	CFV	O	W
	13:37	RPVs	O	E
	13:37	TUG	O	W
	13:40	RSV	O	W
	13:46	RPVs	O	W
	13:50	CFV	O	W
	14:03	CFV	O	W
	14:03	CFV	O	W
	14:12	RPVs	O	E
	14:26	CFV	O	W
	14:29	RPV	O	W
	14:32	CFV	O	W
	14:33	CFV	O	E
	14:38	CCV	O	W
	14:39	RPV	O	W
	14:39	CFV	O	W
	14:44	CFV	O	W

Date	Time	Vessel	In/Out	Direction
	14:50	CFV	O	W
	14:55	CFV	O	W
	15:02	RPVb	O	W
	15:28	CFV	O	W
	15:28	TUG	O	E
	15:29	CFV	O	W
	15:30	RSV	O	W
	15:30	RSV	O	W
	15:46	RPVs	O	W
	15:58	CPV	O	W
	16:04	RPVb	O	W
	16:08	RPVs	O	E
	16:19	RSV	O	W
	16:21	CFV	O	W
	16:24	CFV	O	W
	16:34	CFV	O	W
	16:53	CFV	O	W
	16:57	CV	O	W
	17:05	RSV	O	W
	17:06	CFV	O	W
	17:06	CFV	O	W
	17:06	CFV	O	W
	17:11	CFV	O	W
	17:16	CFV	O	W
	17:36	CFV	O	W
	17:44	RPVs	O	W
	18:25	RPVs	O	W
	18:39	CFV	O	W
	18:54	COL	O	E
	19:09	COL	O	W
	19:20	CFV	O	W
	19:21	COL	O	W
	19:58	RPVb	O	W
10-Jul	8:01	CFV	O	W
	8:09	RPV	O	W
	8:16	CFV	O	W
	8:17	CFV	O	W
	8:20	CFV	O	W
	8:24	CFV	O	W
	8:55	CFV	O	W
	9:01	CFV	O	W
	9:06	CFV	O	W
	9:17	RPVb	O	E
	9:26	RSV	O	E
	9:27	RPVb	I	E
	10:09	RPVs	O	W
	10:16	CFV	O	E
	10:16	CFV	O	W
	10:29	RPVs	O	W
	10:32	RSV	O	W
	10:42	RPVs	O	W
	11:29	RPVb	O	W
	11:47	RSV	O	W
	11:55	RSV	I	W
	12:16	RPVb	O	W
	12:26	RSV	O	W
	12:54	RSV	O	W
	12:56	RPVs	O	W
	13:00	RSV	O	E
	13:10	CFV	O	E
	13:16	CFV	O	W
	13:38	RPVs	O	E
	13:39	RSV	O	W
	14:21	RPVs	O	W
	14:48	RSV	I	W
	15:44	RPVb	O	E
	16:13	RPVb	O	W
	16:27	CAR	O	W
	16:50	RSV	O	W
	16:52	RSV	O	W
	16:52	CFV	O	W
	17:07	RPVb	O	E
	17:20	TUG	O	W
	17:55	RPVb	O	E
	18:29	TUG	I	E
	18:38	GPV	O	W
	19:24	COL	O	E
	19:25	RSV	O	W
	19:37	CFV	O	E
11-Jul	8:00-8:33 line of crossing obscured by fog			
	8:34	CFV	I	E
	9:33	RSV	O	W
	9:34	CFV	O	W
	9:41	CFV	O	W
	9:44	RPV	O	W
	9:45	RPV	O	W
	9:45	RPV	O	W
	10:05	CFV	O	W
	10:15	CFV	O	W
	10:18	TUG	O	W
	10:27	TUG	O	W
	10:28	CPV	O	W
	10:29	RPV	O	E
	10:45	CFV	I	W
	11:08	CFV	O	W

## sei Traffic Data

Date	Time	Vessel	In/Out	Direction
	11:44	CFV	I	E
	11:53	RPVb	O	E
	11:59	RSV	O	E
	12:30	RPV	O	W
	13:05	CFV	O	W
	13:10	RPVs	O	E
	13:24	TUG	O	W
	13:29	RSV	O	E
	13:34	CFV	O	E
	13:35	RPVb	O	W
	13:36	BSV	I	W
	13:42	RPVb	O	E
	13:43	RPVb	O	E
	13:44	TUG	O	E
	14:20	RPVb	O	W
	14:21	CFV	O	W
	14:29	RPVs	O	W
	14:42	RSV	O	W
	14:50	RPVb	O	W
	15:25	RPVb	O	E
	15:40	CCV	O	E
	15:45	RPVb	O	W
	16:12	RPVb	O	W
	17:05	CFV	O	W
	18:24	CFV	O	W
	18:33	CFV	O	W
	18:43	RPVb	O	W
12-Jul	8:09	RPVs	O	W
	8:12	TUG	O	E
	8:38	RSV	O	W
	8:41	RSV	O	W
	8:45	RSV	O	W
	8:47	CFV	O	E
	8:55	CFV	O	W
	9:16	TUG	O	E
	9:47	RSV	O	W
	9:54	RSV	O	W
	9:55	CFV	O	E
	10:00	CFV	O	E
	10:16	RPVb	O	W
	10:33	CFV	O	E
	10:33	CFV	O	W
	10:34	RPVb	O	W
	10:34	RSV	O	W
	10:39	RPVb	O	W
	10:40	RPVb	O	W
	10:41	RPVb	O	W
	10:47	RPVb	O	E
	11:00	RSV	O	W
	11:10	CFV	O	W
	11:14	CFV	O	W
	11:17	RPVs	O	W
	11:36	RPVs	O	W
	11:36	RPVs	O	W
	11:37	CFV	O	W
	11:45	RPVs	O	E
	11:45	CFV	O	E
	12:00	RPVs	O	W
	12:23	TUG	O	E
	12:40	RSV	O	E
	13:14	CCV	O	E
	13:30	TUG	O	E
	13:43	RPVs	O	E
	13:43	CFV	O	W
	13:45	RSV	O	W
	13:52	RSV	O	W
	14:07	RSV	O	E
	14:37	RSV	O	W
	14:49	RPVb	O	W
	14:56	CFV	O	W
	14:57	CFV	O	E
	15:05	RSV	O	W
	15:13	TUG	O	E
	15:15	CCV	O	W
	15:27	RPVs	O	E
	15:37	CFV	O	W
	15:39	RPVb	O	W
	16:41	RPVs	O	W
	16:58	RPVs	O	E
	17:22	CFV	O	E
	17:29	CFV	O	W
	17:31	RPVb	O	E
	17:36	CFV	O	W
	17:45	RSV	O	E
	17:55	CFV	O	W
	19:20	RPVs	O	W
13-Jul	8:29	RSV	O	W
	8:39	CFV	O	W
	9:25	RSV	O	E
	9:28	CFV	O	W
	10:01	CCV	O	W
	10:02	CFV	O	E
	10:11	CFV	I	E
	10:30	RSV	O	W
	10:33	RSV	O	W
	10:37	RSV	O	W

Date	Time	Vessel	In/Out	Direction
	10:40	RPVb	O	W
	10:47	CCV	O	W
	10:50	TUG	I	E
	10:50	RSV	O	W
	11:00	CFV	O	E
	11:05	CFV	O	W
	11:06	RPVb	O	E
	11:07	CCV	O	W
	11:13	RPVs	O	W
	11:13	RPVs	O	W
	11:22	RPVs	O	W
	11:25	CFV	O	W
	11:33	TUG	O	E
	11:39	RPV	O	W
	11:41	RPV	O	W
	11:47	CCV	O	W
	11:50	CCV	O	W
	11:55	TUG	O	W
	12:30	RSV	O	W
	12:33	RSV	O	E
	12:45	CCV	O	W
	12:56	TUG	O	W
	12:56	RSV	O	W
	12:57	CFV	O	W
	13:02	CFV	O	W
	13:09	CFV	O	E
	13:26	CFV	O	W
	13:42	RPV	O	W
	13:42	RPV	O	W
	13:48	RSV	O	W
	13:52	RSV	O	W
	13:58	RPV	O	E
	14:13	CCV	O	E
	14:21	TUG	O	W
	14:28	RPV	O	W
	14:30	RSV	O	W
	14:45	CFV	O	W
	16:22	CFV	O	E
	16:32	RPVs	O	W
	17:16	CFV	O	E
	17:54	RPV	O	W
	17:58	RPV	O	W
	18:05	CFV	O	W
	18:45	CFV	O	W
	19:41	CFV	O	W
	19:49	COL	O	E
	19:53	CFV	O	W
14-Jul	9:01	RPV	O	E
	9:26	CFV	O	W
	10:10	RPV	I	W
	10:10	RPV	I	W
	10:14	RSV	I	W
	10:16	GPV	O	W
	10:18	GPV	O	W
	10:22	CFV	O	W
	10:23	GPV	O	W
	10:34	GPV	O	W
	10:48	TUG	I	E
	10:49	RSV	O	E
	11:28	RPV	O	W
	11:33	CFV	O	W
	11:47	RSV	O	W
	11:47	RSV	O	W
	12:13	RPV	O	W
	12:14	CFV	O	W
	12:18	CFV	O	W
	12:29	RPV	O	W
	12:30	CFV	I	W
	12:32	CFV	O	W
	12:33	CFV	O	W
	12:48	CFV	O	E
	13:03	CFV	O	W
	13:03	CFV	O	W
	13:10	RPV	O	W
	13:12	CFV	O	W
	13:16	CFV	O	W
	13:16	RKG(1)	O	E
	13:24	RSV	O	W
	13:37	CFV	O	W
	13:45	CFV	O	W
	13:50	RPVs	O	E
	13:50	RPVs	O	E
	13:59	RPVs	O	W
	14:22	RPVs	I	E
	14:50	CCV	O	E
	15:00	RSV	O	E
	15:00	RSV	O	E
	15:23	RPVs	O	W
	15:30	TUG	O	W
	15:40	TUG	O	E
	16:07	RSV	O	W
	16:09	PRV	O	E
	16:09	CFV	O	E
	16:12	COL	O	E
	16:22	COL	O	E
	16:22	COL	O	E



Date	Time	Vessel	In/Out	Direction
	16:25	CFV	O	W
	16:29	CFV	O	W
	16:31	CCV	O	W
	17:13	RPV	O	E
	17:44	CFV	O	W
	17:50	RPV	O	W
	19:10	RPV	O	W
	19:46	RSV	O	E
15-Jul	8:05	RPVb	O	W
	8:13	TUG	O	E
	8:38	RSV	O	W
	8:43	CFV	O	W
	9:13	RPVb	O	E
	9:14	TUG	I	W
	9:20	RPVs	O	E
	9:42	RSV	O	E
	9:42	RPV <sub>s</sub>	I	W
	9:46	RSV	O	W
	9:47	RSV	O	W
	9:51	RSV	O	W
	10:39	RSV	O	W
	10:45	CFV	O	W
	12:08	GPV	O	W
	12:12	CFV	O	W
	12:12	RSV	O	E
	12:30	CFV	O	E
	12:34	CFV	O	W
	12:37	RPV	O	W
	12:39	RPV	O	W
	12:41	CFV	O	W
	12:42	CFV	O	W
	12:57	RPV	O	W
	13:20	RSV	O	W
	13:34	RPV	O	W
	13:36	CFV	O	W
	13:49	CFV	O	W
	13:50	RPV	O	E
	13:54	CFV	O	W
	13:54	RSV	O	E
	14:09	CFV	O	W
	14:35	TUG	O	E
	14:38	CFV	O	W
	14:40	RPVb	O	W
	14:41	RPVb	O	E
	14:41	GPV	O	E
	14:48	GPV	O	W
	14:54	CFV	O	W
	15:05	RPVb	O	W
	15:32	CCV	O	E
	15:35	RPVb	O	W
	15:39	COL	O	E
	15:45	CFV	O	W
	15:47	RPVb	O	W
	15:57	COL	O	E
	15:58	TUG	O	W
	16:04	TUG	O	W
	16:07	CFV	O	W
	16:33	COL	O	E
	17:04	TUG	O	E
	18:34	RSV	O	W
	18:34	RSV	O	W
	19:07	CFV	O	W
	19:21	CFV	O	W
16-Jul	8:05	RPVs	O	W
	8:05	RPV <sub>s</sub>	O	W
	8:11	RPVb	O	W
	8:39	CFV	O	W
	8:40	CFV	O	W
	8:41	CFV	O	W
	8:42	CFV	O	W
	8:42	TUG	O	E
	8:42	RSV	O	E
	8:55	CFV	O	W
	8:55	CFV	O	W
	8:57	CFV	O	W
	9:09	CFV	O	W
	9:23	RKG	O	W
	9:31	RSV	I	W
	9:41	RPVs	O	E
	9:46	CFV	I	W
	9:54	CFV	O	W
	9:56	RPVs	O	E
	10:41	RPVb	O	W
	10:55	RPV	O	W
	11:00	CFV	O	E
	11:13	TUG	O	W
	11:20	RPVb	O	W
	12:21	RPVb	O	W
	12:21	RPVb	O	W
	12:55	RKG(1)	I	E
	13:00	CFV	O	W
	13:23	CAR	O	E
	13:32	CFV	O	W
	13:54	CFV	O	W
	14:01	RPVb	O	W
	14:11	GPV	O	W

## essel Traffic Data

Date	Time	Vessel	In/Out	Direction
	14:13	CFV	O	W
	14:14	CFV	O	W
	14:23	CFV	O	W
	14:28	CFV	O	W
	14:32	CFV	O	W
	14:33	RPVb	O	W
	14:37	CFV	O	E
	14:47	CFV	O	W
	14:51	CFV	O	W
	15:37	RPVb	O	E
	15:50	CFV	O	W
	15:54	RSV	O	E
	15:55	CFV	O	W
	16:03	RPVs	O	E
	16:12	CFV	O	W
	16:31	RPVb	O	E
	16:32	CFV	O	W
	16:39	COL	O	E
	16:58	CFV	O	W
	17:22	COL	O	E
	17:39	CFV	O	W
	17:47	COL	O	E
	18:29	CFV	O	W
	18:49	CFV	O	E
	18:59	TUG	O	W
	19:01	COL	I	W
	19:27	CFV	O	W
17-Jul	8:06	CFV	O	W
	8:09	CFV	O	W
	8:35	RSV	O	E
	8:39	CFV	O	W
	8:41	CFV	O	W
	8:44	RPVb	O	E
	9:12	RPVb	O	W
	9:37	RSV	I	W
	9:47	RSV	O	W
	10:47	CFV	O	E
	10:47	CFV	O	E
	10:55	RPVb	O	W
	10:58	RPVb	O	W
	11:00	RSV	O	W
	11:02	RSV	O	W
	11:05	RPV	O	W
	11:35	TUG	O	E
	11:49	CCV	O	E
	12:01	TUG	O	W
	12:25	RPVs	O	E
	13:01	RSV	O	W
	13:28	CCV	O	W
	13:44	RPVb	O	E
	13:54	RPVs	O	W
	13:55	CCV	O	E
	13:57	RPVb	O	E
	14:18	RPVb	O	E
	14:41	RSV	O	E
	14:58	CFV	O	W
	14:59	CFV	O	E
	15:09	GPV	O	E
	15:12	RPVb	O	W
	15:13	CCV	O	W
	15:14	RPVs	O	E
	15:24	RPVb	O	E
	15:31	RPVb	O	W
	15:32	RPVs	O	W
	15:33	RPVs	O	W
	15:36	RSV	O	E
	16:03	CAR	O	E
	16:04	TUG	O	E
	16:09	COL	O	E
	16:33	RSV	O	E
18-Jul	8:04	TUG	O	W
	8:53	CAR	O	E
	9:16	CCV	O	E
	10:07	CCV	O	E
	10:48	RPVs	O	E
	10:56	CCV	O	E
	11:30	CCV	O	W
	11:56	CFV	O	W
	12:02	TUG	O	W
	12:37	RPVs	O	E
	12:47	CCV	O	W
	13:09	RPVs	O	W
	13:14	RPVs	O	W
	13:28	CFV	O	E
	13:45	CCV	O	E
	13:48	RPVs	O	E
	13:51	RPVs	O	E
	13:55	RPVb	O	E
	14:12	CCV	O	E
	14:39	RSV	O	W
	14:45	CCV	O	W
	15:13	CCV	O	W
	15:32	RPVs	O	W
	15:36	RPVs	O	W
	15:46	RPVs	O	E
	16:25	RSV	O	E

Date	Time	Vessel	In/Out	Direction
	17:00	CFV	O	W
	17:17	COL	O	E
	17:46	CAR	O	W
	17:52	CCV	O	E
	17:56	CCV	O	E
	17:59	RPVb	I	E
	18:24	RPVs	O	W
	18:57	CCV	O	W
	19:12	CCV	O	W
	19:29	RPVb	I	E
19-Jul	8:11	RPVb	O	E
	8:27	RPVb	O	W
	8:51	RPVb	O	W
	10:24	RSV	O	W
	10:26	RSV	O	W
	10:55	RSV	O	W
	10:59	RPVb	O	W
	11:02	CFV	O	W
	11:15	RSV	O	W
	11:21	RPVb	O	E
	11:33	CFV	O	W
	11:44	RPVb	O	E
	11:51	RPVs	O	E
	11:55	CFV	O	E
	11:58	RSV	O	W
	12:08	RSV	O	W
	12:36	RSV	O	W
	12:50	TUG	O	W
	12:54	RPVb	O	W
	12:55	CFV	O	W
	13:02	RPVs	O	E
	13:16	RPVs	I	W
	13:19	CCV	O	E
	13:31	CFV	O	E
	13:45	CFV	O	W
	13:47	RPVs	O	W
	13:52	RPVb	O	W
	13:54	RSV	O	E
	14:01	RPVs	O	W
	14:04	TUG	O	E
	14:12	RSV	O	W
	14:13	RPVs	O	W
	14:53	CCV	O	W
	14:59	RPVs	O	W
	15:02	RPVs	O	W
	15:27	RPVb	O	E
	15:27	RPVs	O	E
	15:34	RSV	O	E
	15:36	CFV	O	E
	15:50	RPVs	O	W
	15:55	RSV	O	W
	15:57	CFV	O	E
	15:58	CFV	O	W
	16:08	RSV	O	W
	16:13	CCV	O	E
	16:16	CFV	O	E
	16:16	CFV	O	E
	16:18	CFV	O	E
	16:19	CFV	O	E
	16:21	CFV	O	W
	16:22	CFV	O	W
	16:44	CFV	O	E
	16:54	CFV	O	E
	17:22	CFV	O	E
	17:38	CAR	O	E
	18:02	CFV	O	W
	18:27	COL	O	E
	19:05	RKG(1)	O	E
	19:26	CFV	O	E
	19:45	CFV	O	E
	19:56	RPVb	O	E
20-Jul	8:00- 14:00	Crossing line obscured by fog		
	14:27	TUG	O	W
	14:27	RPVb	O	W
	14:36	RSV	O	W
	14:38	CCV	O	W
	14:38	TUG	O	E
	14:38	PRV	O	W
	14:40	RSV	O	W
	14:53	CFV	O	E
	14:53	CFV	O	E
	14:59	PRV	O	E
	16:20	CFV	O	E
	16:49	RSV	O	E
	16:58	CAR	O	W
	17:23	CCV	O	E
	17:57	CCV	O	E
	18:00	CAR	O	E
	18:02	CAR	O	E
	19:52	COL	O	E
	19:56	CFV	O	W
21-Jul	8:03	RKG(1)	I	E
	8:28	RPVs	O	W
	8:32	COL	O	W
	9:04	CFV	O	W
	9:06	RPVb	O	W

## B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	9:09	RPVb	O	W
	9:13	RPVs	O	E
	9:26	RPVb	I	E
	9:33	CFV	O	E
	9:43	RPVs	I	S
	9:47	RPVs	O	W
	9:48	RSV	O	E
	9:53	PRV	O	W
	10:16	RPVb	O	W
	10:17	RPVb	O	W
	10:19	RPVb	O	W
	10:41	RSV	O	W
	10:53	RPVb	O	W
	10:58	COL	O	W
	11:28	RSV	I	E
	11:37	RPVs	O	E
	11:57	RPVs	O	W
	12:02	RPVb	O	W
	12:05	TUG	O	W
	12:15	RPVb	O	E
	12:19	RPVb	O	W
	12:26	RPVb	O	E
	12:33	RPVb	O	E
	12:35	RPVb	O	E
	12:52	PRV	O	E
	12:54	CFV	O	W
	12:55	TUG	O	E
	13:24	PRV	O	W
	13:30	RPVb	I	W
	13:31	RPVs	O	E
	13:33	RPVs	O	E
	13:41	RPVb	O	E
	14:01	CFV	O	E
	14:17	RPVb	O	W
	14:30	RPVs	I	E
	14:30	RSV	O	W
	14:43	RPVs	O	W
	14:55	RSV	O	E
	15:36	RPVs	O	E
	15:40	RSV	O	W
	15:58	RPVb	O	E
	16:11	CCV	O	E
	16:11	CFV	O	E
	16:36	CCV	O	W
	16:36	GPV	O	W
	16:38	RPV	O	W
	17:15	CCV	O	E
	17:25	CAR	O	E
	17:40	CCV	O	E
	18:12	TUG	O	E
	18:21	CFV	O	E
	18:27	RSV	O	E
	18:29	CFV	O	W
	18:35	RPVb	O	E
	18:39	CCV	O	W
	18:47	CCV	O	W
	18:51	COL	O	W
	19:00	CFV	O	E
	19:04	TUG	O	E
	19:09	CCV	O	W
	19:30	CFV	O	E
	19:41	COL	O	E
	19:49	CFV	O	E
	19:54	COL	O	E
22-Jul	8:00 - 12:18 All zones obscured by fog			
	12:29	RSV	I	E
	12:30	TUG	O	E
	12:32	CFV	O	E
	12:32	CFV	O	E
	12:34	RSV	O	E
	12:38	TUG	O	E
	12:41	CFV	O	E
	12:49	CFV	O	E
	13:03	CAR	O	W
	13:07	CCV	O	E
	13:08	PRV	O	E
	13:18	RPVs	O	E
	13:26	RPVs	I	E
	13:26	CCV	O	W
	13:31	RSV	O	W
	13:31	RSV	O	E
	13:34	RPVb	O	W
	13:34	CCV	O	W
	13:39	CCV	O	E
	13:43	CAR	O	E
	13:46	CFV	O	E
	13:47	CFV	O	W
	13:51	RPVb	O	W
	13:52	RPVb	O	W
	14:00	CAR	O	E
	14:18	CFV	O	W
	14:26	CCV	O	W
	14:38	CFV	O	W
	14:55	RSV	O	W
	15:01	CCV	O	E
	15:30	RPVs	I	E

Date	Time	Vessel	In/Out	Direction
	15:32	RPVs	I	W
	15:34	RSV	O	E
	15:36	RSV	O	E
	15:37	RSV	O	E
	15:48	CFV	O	W
	16:20	TUG	O	W
	16:38	RSV	O	E
	17:31	COL	O	E
	17:37	RSV	O	E
	18:12	COL	O	E
	18:12	CFV	I	E
	18:34	RPVs	O	W
	18:52	CFV	O	E
	19:03	PRV	O	E
	19:07	CFV	O	E
	19:31	RPVb	O	W
	19:33	CAR	O	E
	19:53	CAR	O	W
	19:56	CFV	O	W
23-Jul	8:18	CFV	O	W
	8:24	CFV	O	W
	9:00	CFV	O	W
	9:01	RPVb	O	E
	9:12	RPVb	O	E
	9:13	CFV	O	W
	9:15	RSV	O	W
	9:16	RPVb	O	E
	9:25	RSV	O	W
	9:30	RSV	O	W
	9:45	RPVb	O	W
	10:00	RPVb	O	E
	10:02	RPVb	O	W
	10:22	CFV	O	W
	10:24	RPVb	O	W
	10:25	CFV	O	W
	10:58	RPVb	O	E
	11:00	RPVb	O	E
	11:00	CFV	O	E
	11:01	RPVb	O	E
	11:10	TUG	O	E
	11:12	RPVs	O	E
	11:23	RPVs	O	W
	11:29	RPVs	O	W
	11:47	CFV	O	E
	11:57	RSV	O	W
	11:59	RPVb	O	E
	12:04	RPVs	O	E
	12:20	RSV	O	W
	12:27	CFV	O	W
	12:47	CFV	O	W
	13:07	PRV	O	W
	13:24	RPVs	O	W
	13:24	RPVs	O	E
	13:24	RPVs	O	E
	14:18	CFV	O	W
	14:28	RPVs	O	W
	14:35	RPVb	O	E
	14:56	CFV	O	W
	15:05	PRV	O	E
	15:21	RPVs	O	E
	15:52	CFV	O	W
	16:01	CFV	O	W
	16:14	RPVs	O	E
	16:27	RPVb	O	E
	16:49	RPVb	O	E
	17:03	CFV	O	E
	17:05	CFV	O	E
	17:21	CFV	O	E
	17:49	RPVs	I	E
	17:51	RPVb	O	W
	18:12	COL	O	E
	18:31	TUG	O	E
	18:48	CFV	O	W
	19:08	CFV	O	W
	19:38	CFV	O	W
24-Jul	8:05	TUG	O	E
	8:12	RSV	O	W
	8:18	CFV	O	E
	8:39	RPVs	I	W
	8:44	RPVb	O	W
	8:45	RPVs	O	W
	8:45	RPVs	O	W
	8:45	CAR	O	E
	9:00	RPVs	I	W
	9:10	RPVs	O	E
	9:23	CFV	O	E
	9:41	CFV	O	E
	10:01	CFV	O	W
	10:02	RSV	O	E
	10:07	RSV	O	E
	10:09	RPVb	O	E
	10:10	RSV	O	E
	10:13	RPVs	O	E
	10:15	RPVs	O	E
	10:30	RPVb	O	E

## 2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	11:04	RPVs	O	W
	11:09	RPVb	O	E
	11:13	GPV	I	W
	11:28	RSV	O	W
	11:38	RPVs	O	E
	11:59	CPV	O	E
	12:17	CPV	O	E
	12:17	CPV	O	E
	12:17	CPV	O	E
	12:23	RPVs	O	W
	12:26	RPVb	O	E
	13:10	RPVb	O	E
	13:26	CCV	O	W
	13:50	RPVb	O	W
	13:59	RSV	O	W
	14:21	TUG	O	W
	14:27	RPVs	O	W
	14:28	RPVb	O	W
	14:37	RPVb	O	W
	14:48	CPV	O	E
	14:53	CPV	O	E
	15:37	CAR	O	E
	16:02	RSV	O	E
	16:12	RSV	I	W
	16:35	RPVb	O	W
	16:38	RPVb	O	W
	16:41	RPVs	O	W
	16:42	RPVs	O	W
	17:00	CPV	O	W
	17:36	CPV	O	W
	17:40	CPV	O	E
	18:50	RPVs	O	W
	19:00	CPV	O	W
19:10 - 20:00 Crossing line obscured by rain				
25-Jul	8:16	RPVs	O	E
	8:50	CPV	O	W
	9:36	CPV	O	W
	9:40	CAR	O	E
	9:51	CPV	O	W
	10:01	RSV	O	W
	10:04	CPV	O	EE
	10:05	CPV	O	E
	10:52	RPVs	O	W
	11:05	RSV	O	W
	11:13	CPV	O	WE
	11:29	RPVs	O	W
	11:33	CPV	O	W
	11:53	RPVb	O	W
	12:11	RSV	O	E
	12:19	RPVs	O	W
	12:31	RPVb	O	E
	12:51	RSV	O	E
	13:10	CPV	O	W
13:20 - 14:00 Crossing line obscured by rain				
	14:19	RPVb	O	W
	14:24	RSV	O	E
	14:28	CCV	O	E
	14:31	CPV	O	W
	14:40	CCV	O	E
	14:52	RPVs	O	W
	14:54	CCV	O	W
	15:02	RPVs	O	W
	15:35	RPVs	O	E
	15:40	CPV	O	W
	16:09	TUG	O	W
	16:13	RSV	I	W
	16:41	RSV	O	W
	16:47	TUG	O	E
	16:51	RSV	O	W
	17:00	TUG	O	E
	17:04	RSV	O	W
	17:51	COL	O	E
	19:29	COL	O	E
	19:32	RSV	O	E
26-Jul	8:47	CPV	O	mm
	9:02	RPVb	O	mm
	9:23	CPV	O	mm
	9:23	CPV	O	mm
	9:50	CPV	I	mm
	10:25	CPV	O	mm
	10:31	TUG	O	W
	10:32	RSV	O	E
	11:22	RSV	O	E
	11:24	RSV	O	E
	11:25	PRV	I	W
	11:25	RPVs	O	W
	11:28	RSV	O	E
	11:34	RPVb	O	mm
	11:45	RSV	O	mm
	12:09	RPVb	O	mm
	12:09	RPVb	O	mm
	12:15	RSV	O	mm
	12:38	RPVb	O	W
	12:44	CPV	O	W
	12:50	RPVb	O	W

Date	Time	Vessel	In/Out	Direction
	13:07	CFV	I	E
	13:12	CFV	O	E
	13:13	CFV	O	E
	13:19	RPVb	O	W
	13:25	CCV	O	W
	13:54	CFV	O	W
	14:10	CFV	O	E
	14:26	RPVb	O	W
	14:31	RSV	O	W
	14:36	CCV	O	E
	14:50	RPVb	O	W
	14:54	GPV	O	W
	15:15	RPVb	I	E
	15:16	RPVb	O	E
	15:22	RPVs	O	W
	15:25	RPVb	O	W
	15:46	TUG	O	E
	16:00	RSV	O	E
	16:02	RSV	O	E
	16:06	RPVs	O	E
	16:09	CCV	O	E
	16:14	RSV	O	W
	16:30	CFV	O	W
	16:30	RPVs	O	W
	16:30	CFV	O	E
	16:30	CFV	O	E
	16:41	RKG	O	W
	16:43	CAR	O	W
	17:01	CFV	O	E
	17:11	RPVs	O	W
	17:18	CFV	O	E
	18:02	CFV	O	E
	18:15	COL	O	E
	18:34	COL	O	W
	19:05	COL	O	E
	19:39	CFV	O	E
	19:45	CFV	O	E
	19:47	CFV	O	E
	19:56	CCV	O	E
	19:57	RSV	O	W
	20:00	CFV	O	E
27-Jul	8:09	RPVb	O	W
	8:16	TUG	O	E
	8:42	TUG	O	E
	8:44	CFV	O	E
	9:05	RPVb	O	W
	9:05	RPVb	O	W
	9:14	CCV	O	E
	9:17	RSV	O	E
	9:19	CFV	I	E
	9:20	CFV	I	E
	9:33	CCV	O	W
	9:45	CFV	O	E
	9:45	CFV	O	E
	9:49	CFV	O	E
	9:54	CFV	O	E
	9:56	CFV	O	E
	10:26	CFV	I	W
	10:27	RPVs	O	W
	10:28	RPVb	O	W
	10:30	RPVb	O	W
	10:46	TUG	O	E
	11:04	CFV	O	E
	11:08	RPVs	O	E
	11:09	RPVs	O	E
	11:09	CFV	O	E
	11:15	RPVs	O	W
	11:34	RPVs	O	W
	11:44	RPVs	O	W
	11:59	RSV	O	W
	12:14	CFV	O	E
	12:19	CFV	I	E
	12:30	RPVs	O	E
	12:35	CFV	I	E
	12:50	RSV	O	E
	12:52	RPVs	O	W
	12:58	RPVs	O	W
	13:17	RSV	O	E
	13:24	RPVb	O	W
	14:10	RPVb	O	W
	14:11	RPVb	O	E
	14:11	RSV	O	W
	14:48	RKG	O	W
	14:54	RPVs	O	W
	15:00	CFV	O	W
	15:14	RPVb	O	W
	15:29	RSV	O	E
	15:48	CFV	O	W
	15:50	RPVb	O	E
	16:38	RPVs	O	E
	16:58	CFV	O	E
	17:07	CFV	O	E
	17:47	CFV	O	E
	17:47	CFV	O	E
	17:47	CFV	O	E

## B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	17:52	CAR	O	W
	18:45	CFV	O	E
	18:50	TUG	O	W
28-Jul	8:20	CFV	I	E
	8:22	CFV	O	E
	8:22	CFV	O	E
	8:27	RPVs	O	W
	8:29	RPVs	O	W
	8:39	RPVs	O	E
	9:37	CFV	O	E
	10:14	RPVs	O	E
	10:31	RPVs	O	W
	10:35	RPVs	O	E
	10:36	RPVs	O	E
	10:36	RPVs	O	W
	10:36	RPVs	O	W
	10:41	CFV	O	E
	10:41	CFV	O	E
	10:42	CFV	O	E
	10:42	RPVs	O	W
	10:44	CFV	O	E
	10:59	CFV	O	W
	11:14	RPVs	O	E
	11:15	RPVs	O	E
	11:40	CFV	O	W
	12:02	CFV	O	E
	12:15	RSV	O	W
	12:16	CFV	O	E
	12:38	TUG	O	E
	12:50	CFV	O	E
	13:00	CFV	O	E
	13:04	CFV	O	E
	13:14	RSV	O	E
	13:16	CFV	O	W
	13:28	CFV	I	E
	13:32	CFV	I	E
	13:40	GPV	O	E
	13:44	CFV	O	E
	13:50	CFV	O	W
	14:04	RSV	O	E
	14:08	TUG	O	E
	14:14	RPVs	O	E
	14:15	RPVs	O	E
	14:30	CCV	O	E
	14:32	CFV	I	W
	14:32	RPVs	O	E
	14:55	CFV	O	E
	15:14	CFV	O	W
	15:27	CFV	O	E
	15:37	COL	O	E
	15:42	CFV	O	E
	16:53	TUG	O	E
	17:20	CFV	O	E
	17:32	RPVs	O	E
	17:32	GPV	O	W
	17:44	CFV	O	E
	17:44	CV	O	E
	18:45	CFV	O	E
	19:07	CFV	O	E
	19:07	CFV	O	E
	19:07	CFV	O	E
	19:08	CFV	O	E
	19:09	CFV	O	E
	19:37	COL	O	E
29-Jul	8:15	TUG	O	W
	8:50	CFV	O	E
	9:27	COL	O	W
	9:28	RPVs	O	W
	9:40	CFV	O	W
	9:41	RPVs	O	E
	10:13	RPVs	O	E
	10:39	CFV	O	W
	10:39	CFV	O	E
	10:45	RPVs	O	W
	10:47	RPVs	O	W
	10:48	RPVs	O	W
	10:50	RSV	O	E
	10:56	CFV	I	E
	11:07	CFV	O	E
	11:07	CFV	I	E
	11:08	CFV	O	E
	11:10	CFV	O	E
	11:20	CFV	O	E
	11:21	CFV	O	E
	11:26	CFV	O	E
	11:43	RSV	O	E
	11:47	CFV	O	W
	11:49	RPVs	O	E
	11:49	CFV	O	E
	11:58	RSV	O	E
	12:02	CFV	O	E
	12:04	CFV	O	E
	12:07	RPVs	I	E
	12:10	RSV	O	E
	12:17	CFV	O	E
	12:22	CFV	O	E

## vessel traffic data

Date	Time	Vessel	In/Out	Direction
	12:23	RPV3	O	E
	12:29	RSV	O	E
	12:36	CFV	O	E
	12:38	RSV	O	E
	12:38	CFV	O	E
	12:39	CFV	I	E
	12:51	CFV	I	W
	12:52	RPVb	O	E
	13:03	RPVb	O	E
	13:05	CFV	O	W
	13:06	CFV	O	W
	13:11	CFV	O	W
	13:14	CFV	O	W
	13:18	CFV	I	E
	13:19	CFV	I	E
	13:21	CFV	O	E
	13:23	CFV	O	E
	13:23	CFV	O	E
	13:23	CFV	I	E
	13:23	CV	I	E
	13:23	CFV	O	E
	13:24	CFV	O	E
	13:27	CFV	O	E
	13:42	RSV	O	E
	13:43	CFV	O	E
	13:47	CFV	O	E
	13:48	CFV	O	E
	13:48	CFV	O	E
	13:49	CFV	O	E
	13:50	CFV	O	E
	14:06	RSV	O	E
	14:07	CFV	O	E
	14:08	CFV	O	E
	14:11	CFV	O	E
	14:12	CFV	O	E
	14:31	CFV	I	E
	14:31	CFV	I	E
	14:38	CFV	O	W
	14:52	CFV	O	E
	14:56	TUG	O	W
	14:57	CFV	O	E
	14:57	CFV	O	E
	15:00	TUG	O	W
	14:58	CFV	O	W
	15:10	CFV	O	W
	15:12	RSV	I	W
	15:25	CFV	O	E
	15:32	CFV	O	W
	15:32	COL	O	E
	15:37	CFV	O	E
	15:44	CFV	O	E
	15:44	CFV	O	E
	15:54	CFV	O	E
	15:58	CFV	I	E
	16:01	CCV	O	E
	16:01	CFV	O	E
	16:01	CFV	O	W
	16:01	COL	O	E
	16:02	CFV	O	E
	16:02	CFV	O	E
	16:02	CFV	O	E
	16:03	CFV	O	E
	16:04	CFV	O	E
	16:06	CFV	O	E
	16:06	CFV	O	E
	16:07	CFV	O	E
	16:08	CFV	O	E
	16:12	CFV	I	W
	16:13	CFV	O	E
	16:35	CFV	O	E
	16:52	CFV	O	E
	16:54	CFV	O	E
	16:56	CFV	O	E
	16:59	CFV	O	E
	16:59	CFV	O	E
	17:01	CFV	O	E
	17:04	CFV	O	E
	17:04	CFV	O	E
	17:05	CFV	O	W
	17:05	CCV	O	E
	17:06	CFV	O	E
	17:08	CFV	O	E
	17:10	CFV	O	W
	17:11	CFV	O	W
	17:29	CCV	O	W
	17:36	CCV	O	W
	17:54	TUG	O	W
	18:04	TUG	O	W
	18:19	CFV	I	E
	18:26	CFV	O	W
	18:54	CCV	O	W
	19:23	CFV	O	W
	19:27	CFV	O	E
	19:37	CFV	O	E

## Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	19:38	CFV	O	E
	19:40	CFV	O	E
30-Jul	8:25	CFV	O	E
	8:35	RPVb	O	E
	8:40	RPVs	O	W
	8:41	CFV	I	E
	8:58	COL	O	W
	9:03	RPVb	I	W
	9:07	RPVb	O	W
	9:07	TUG	O	W
	9:15	RPVb	I	W
	9:16	RPVb	O	W
	9:23	CAR	O	E
	9:30	RSV	O	W
	9:44	TUG	I	E
	9:47	CFV	O	W
	9:50	COL	O	W
	9:50	RPVb	O	E
	9:51	CFV	I	W
	9:53	CFV	O	E
	9:56	CFV	O	E
	9:58	CFV	O	E
	10:17	RPVs	O	W
	10:25	CFV	O	E
	10:29	RPVb	O	W
	10:38	RPVs	O	E
	10:51	CFV	O	E
	10:53	RPVb	O	W
	10:55	RPVb	O	W
	10:56	RPVb	O	W
	10:57	TUG	I	E
	11:18	CFV	O	E
	11:29	CFV	O	E
	11:35	RSV	O	W
	11:35	CCV	O	W
	11:44	RPVb	O	W
	11:44	RPVb	O	W
	11:50	RPVb	O	W
	11:50	RPVb	O	W
	11:51	RPVs	I	W
	11:54	CFV	O	E
	11:59	CFV	O	E
	12:01	RPVb	O	W
	12:18	RPVs	O	E
	12:14	RKG	O	E
	12:20	RSV	O	E
	12:25	CAR	O	W
	12:27	RKG	O	E
	12:28	RKG	O	W
	12:28	RPVb	O	W
	12:31	RSV	O	E
	12:35	RPVb	O	W
	12:36	CFV	O	E
	12:36	CFV	O	E
	12:37	RPVs	O	W
	12:41	CFV	O	E
	12:54	RPVb	O	W
	13:00	RPVb	O	E
	13:00	RPVs	O	W
	13:10	CFV	O	E
	13:11	TUG	O	W
	13:21	RPVb	O	W
	13:25	CFV	O	E
	13:28	RPVs	O	E
	14:01	RPVs	O	W
	14:07	RPVb	O	E
	14:15	RPVb	O	E
	14:16	CFV	O	W
	14:20	CFV	O	W
	14:23	CFV	O	W
	14:28	RPVb	O	E
	14:41	RPVb	O	W
	14:49	RPVb	O	W
	14:52	RPVs	O	W
	14:53	RPVb	O	E
	14:55	RPVs	O	W
	14:56	RPVs	O	E
	15:16	RPVb	O	E
	15:37	CAR	O	E
	15:50	CFV	O	W
	16:03	CFV	O	W
	16:06	RSV	O	E
	16:11	CFV	O	E
	16:32	GPV	I	W
	16:34	COL	O	E
	16:48	RSV	O	E
	17:11	COL	O	E
	17:15	CCV	O	E
	17:20	RSV	O	W
	17:22	CFV	O	E
	17:41	CFV	O	E
	17:43	RPVb	O	W
	17:53	TUG	O	E
	18:15	CCV	O	W
	18:50	COL	O	W
	19:00	CFV	O	E

Date	Time	Vessel	In/Out	Direction
	19:00	CFV	O	E
	19:00	CFV	O	E
	19:08	CFV	O	W
	19:15	CFV	O	E
	19:38	CFV	O	E
	19:49	TUG	O	E
31-Jul	8:06	TUG	O	W
	8:25	RPVb	O	E
	8:31	CAR	O	W
	8:45	CFV	O	E
	9:13	RPVs	O	W
	9:14	RPVs	O	W
	9:15	RPVs	O	W
	9:22	CCL	O	W
	9:26	RPVb	O	W
	9:26	RPVs	O	W
	9:26	RPVs	O	W
	9:46	RPVb	I	E
	9:47	CCV	O	W
	9:48 - 10:20	line obscured by fog		
	10:25	RPVs	O	W
	10:27	TUG	O	W
	10:29	TUG	O	W
	10:29	RKG	O	W
	10:37	RSV	O	W
	10:45	CFV	O	W
	10:45	RSV	O	W
	10:45	RPVb	O	W
	10:50	RSV	O	E
	10:51	CFV	I	E
	10:58	CFV	O	E
	11:10	RPVb	O	W
	11:13	CFV	I	E
	11:16	CFV	I	E
	11:16	CFV	O	E
	11:27	CFV	O	E
	11:32	CFV	O	E
	11:40	RSV	O	W
	11:27	RPVb	O	W
	11:31	CFV	O	E
	11:32	RPVs	I	E
	11:34	CFV	O	E
	12:32	RPVs	O	E
	12:33	RPVs	O	E
	12:38	RPVs	O	E
	12:39	RPVs	O	E
	13:03	CFV	O	E
	13:04	CFV	O	E
	13:04	RPVs	O	E
	13:06	RPVb	O	W
	13:30	CAR	O	W
	13:31	RSV	O	W
	13:31	RPVs	O	W
	13:36	RPVb	O	W
	13:37	CFV	O	E
	13:38	RPVs	O	W
	13:38	RPVs	O	W
	13:39	RPVs	O	W
	13:39	RPVs	O	W
	13:39	RPVs	O	W
	13:40	CFV	O	E
	13:42	CFV	O	E
	14:04	CFV	O	E
	14:05	CFV	O	E
	14:05	CFV	O	E
	14:05	CFV	O	E
	14:06	CFV	O	E
	14:14	RPVs	O	E
	14:17	RPVs	O	E
	14:20	RPVs	O	E
	14:23	CFV	O	E
	14:25	RPVs	O	E
	14:26	RSV	O	E
	14:26	RPVs	O	E
	14:28	CFV	O	E
	14:32	RSV	O	E
	14:32	RPVb	O	E
	14:35	CFV	O	W
	14:35	CFV	O	W
	14:36	CFV	O	E
	14:44	CFV	O	W
	14:49	CFV	O	W
	15:04	RPVb	O	E
	15:10	RSV	O	E
	15:20	RPVb	O	E
	15:28	TUG	O	E
	15:35	CFV	O	E
	15:46	RPVb	O	E
	15:50	RPVb	O	E
	15:48	CFV	O	E
	15:58	CFV	O	E
	16:00	CFV	O	E
	16:01	RPVs	O	E
	16:04	CAR	O	E
	16:08	CFV	O	E
	16:08	CFV	O	E

Date	Time	Vessel	In/Out	Direction
	16:10	CFV	O	E
	16:10	CFV	O	E
	16:10	CFV	O	E
	16:11	CFV	O	E
	16:27	CFV	O	E
	16:57	CFV	O	E
	16:59	CFV	O	E
	17:16	CFV	O	E
	17:16	COL	O	E
	17:25	RSV	O	E
	17:27	TUG	O	E
	17:32	RPVs	O	E
	17:36	RSV	O	E
	17:50	TUG	O	W
	17:55	CFV	O	E
	17:56	CFV	O	E
	17:58	RPVb	O	E
	17:59	CFV	O	E
	18:05	CFV	O	E
	18:30	CFV	O	E
	18:30	CFV	O	E
	18:31	CFV	O	E
	18:31	CFV	O	E
	18:31	CFV	O	E
	18:32	CFV	O	E
	18:35	CFV	O	E
	18:47	CFV	O	E
	18:50	CFV	O	E
	18:50 - 20:00 line obscured by fog			
1-Aug	8:00- 8:55 line obscured by fog			
	8:58	TUG	O	W
	9:03	CFV	O	E
	9:03	CFV	O	E
	9:17	CFV	O	E
	9:19	CFV	O	E
	9:21	CFV	O	E
	9:22	CFV	O	E
	9:24	CFV	O	E
	9:30	CFV	O	E
	9:32	CFV	O	E
	9:34	CFV	O	E
	9:35	CFV	O	E
	9:35	CFV	O	E
	9:38	CFV	O	E
	9:42	CFV	O	E
	9:55	CFV	I	E
	9:57	CFV	O	E
	9:59	RSV	O	E
	10:00	CFV	O	E
	10:02	TUG	O	W
	10:04	CFV	O	E
	10:14	CFV	I	W
	10:17	RSV	O	E
	10:17	CAR	O	E
	10:19	CFV	O	E
	10:20	RSV	O	E
	10:22	CFV	O	E
	10:32	CFV	O	E
	10:32	CFV	O	E
	10:32	CFV	I	E
	10:37	TUG	O	W
	10:40	CFV	O	E
	10:42	CFV	O	E
	10:43	CFV	O	E
	10:44	CFV	O	E
	10:45	CFV	O	E
	10:53	CFV	O	E
	10:55	CFV	I	E
	10:56	CFV	O	E
	11:04	RPVs	O	W
	11:05	CFV	O	E
	11:10	CFV	O	E
	11:11	CFV	O	E
	11:12	CFV	I	E
	11:13	CFV	O	E
	11:13	CFV	O	E
	11:14	CFV	O	E
	11:15	CFV	I	E
	11:18	CFV	O	E
	11:21	CFV	I	E
	11:22	RPVs	O	W
	11:32	CFV	I	E
	11:36	CFV	O	E
	11:39	CFV	O	E
	11:40	CFV	O	E
	11:47	RPVb	O	W
	11:53	CFV	O	E
	11:53	CFV	O	E
	12:00	RPVs	O	E
	12:10	CFV	O	E
	12:11	CFV	I	E
	12:11	CFV	O	E
	12:13	RPVb	O	E
	12:14	CFV	O	E

Date	Time	Vessel	In/Out	Direction
	12:20	CFV	O	E
	12:20	CFV	O	E
	12:20	CFV	O	E
	12:23	CFV	O	E
	12:25	CFV	I	E
	12:28	CFV	O	E
	12:37	RPVb	O	W
	13:06	CFV	O	E
	13:12	RPVb	O	E
	13:18	CFV	O	E
	13:22	CFV	O	E
	13:23	CFV	I	W
	13:25	CCV	O	W
	13:25	CFV	O	E
	13:27	CFV	I	E
	13:42	CFV	O	E
	13:51	CFV	I	E
	13:51	CFV	O	E
	13:52	CFV	O	E
	13:53	CFV	O	E
	13:53	CFV	O	E
	13:53	RPVb	O	E
	14:00	RPVb	O	W
	14:02	RPVb	O	E
	14:08	CFV	I	E
	14:10	RSV	O	E
	14:10	RSV	O	E
	14:24	CFV	I	E
	14:25	CFV	O	E
	14:31	RSV	O	E
	14:33	RPVb	O	E
	14:37	CFV	O	E
	14:38	CFV	O	E
	14:40	CFV	I	E
	14:45	CFV	O	E
	14:46	CFV	O	E
	14:49	GPV	O	E
	14:50	CFV	O	E
	14:51	CFV	O	E
	14:56	CFV	O	E
	14:56	CFV	O	E
	14:59	CFV	O	E
	14:59	CFV	O	E
	15:00	CFV	O	E
	15:01	CFV	O	E
	15:01	CCV	O	E
	15:02	CFV	O	E
	15:03	CFV	O	E
	15:03	CFV	O	E
	15:05	TUG	O	W
	15:08	CFV	O	E
	15:18	CFV	O	E
	15:18	CFV	O	E
	15:20	CFV	O	W
	15:20	CFV	O	E
	15:28	CFV	O	E
	15:40	RPVs	O	W
	15:42	TUG	O	W
	15:58	CFV	O	W
	16:05	CFV	O	W
	16:14	CFV	O	E
	16:16	CFV	O	E
	16:16	CFV	O	E
	16:25	TUG	O	E
	16:25	CFV	I	E
	16:27	CFV	O	E
	16:27	CFV	O	W
	16:28	CFV	O	E
	16:31	CFV	O	W
	16:31	CFV	O	E
	16:50	CFV	O	E
	16:57	CCV	O	E
	16:57	RSV	O	E
	17:00	RSV	O	E
	17:04	CFV	O	E
	17:09	CCV	O	W
	17:11	CFV	O	E
	17:14	CCV	O	E
	17:18	COL	O	E
	17:19	RSV	O	E
	17:19	CFV	O	E
	17:20	CFV	O	E
	17:21	CFV	O	E
	17:22	CFV	O	E
	17:26	CFV	O	E
	17:26	CFV	O	E
	17:26	RPVb	O	W
	17:27	CFV	O	W
	17:36	CCV	O	W
	17:37	CFV	O	W
	17:44	RPVs	O	E
	17:45	CFV	O	W
	18:00	CFV	O	W
	18:06	CFV	O	E
	18:06	CFV	O	E
	18:26	TUG	O	E

Date	Time	Vessel	In/Out	Direction
	18:28	CFV	I	E
	18:35	RPVs	O	E
	18:49	CFV	O	E
	18:55	CFV	O	E
	19:25	CFV	I	E
	19:31	CFV	O	E
	19:48	CFV	O	E
2-Aug	8:15	CFV	I	E
	8:28	RSV	O	E
	8:33	RPVb	O	E
	8:51	CFV	O	E
	8:55	CFV	O	E
	9:19	CFV	O	E
	9:20	RSV	O	W
	9:39	TUG	I	E
	9:42	CFV	O	E
	9:43	CAR	O	E
	9:43	CFV	O	E
	9:50	RPVs	O	W
	9:53	CAR	O	E
	10:11	CFV	O	E
	10:18	CFV	I	W
	10:28	TUG	O	E
	10:28	CFV	O	E
	10:31	CFV	O	E
	10:34	CFV	O	W
	10:37	CFV	O	W
	10:48	CFV	O	E
	10:50	CFV	O	E
	10:51	CFV	O	E
	10:51	CFV	O	E
	10:54	RSV	O	E
	11:09	RSV	O	E
	11:18	TUG	O	W
	11:20	RPVb	O	W
	11:34	RPVb	O	E
	11:35	RPVs	O	E
	11:38	CFV	O	E
	11:45	RPVb	O	W
	11:58	RPVb	O	E
	12:08	RSV	O	W
	12:21	CFV	I	E
	12:21	CFV	I	E
	12:28	RPVb	I	W
	12:32	CFV	I	E
	12:35	RPVb	O	W
	12:38	CFV	I	E
	12:55	RSV	O	E
	12:57	RPVs	I	E
	12:58	RSV	O	W
	12:58	CFV	O	W
	12:59	CFV	I	E
	13:02	CFV	I	E
	13:22	CCV	O	W
	13:25	RSV	O	E
	13:29	CFV	O	W
	13:32	CFV	O	W
	13:35	RPVb	O	W
	13:47	CFV	O	E
	13:49	CFV	O	E
	13:50	RPVs	O	W
	13:51	CFV	I	E
	13:51	CFV	O	E
	13:52	CFV	I	E
	13:53	CFV	I	E
	13:54	CFV	I	E
	14:06	CFV	O	W
	14:06	RSV	O	E
	14:08	CFV	I	E
	14:12	RKG(2)	O	W
	14:18	CFV	I	E
	14:26	RPVb	O	W
	14:45	RPVb	O	W
	15:00	RPVb	O	W
	15:03	CFV	O	W
	15:12	CFV	I	E
	15:15	CFV	I	E
	15:18	RPVb	O	E
	15:20	RKG(2)	O	E
	15:22	CCV	O	E
	15:26	CFV	O	E
	15:33	RSV	O	E
	15:33	CFV	O	E
	15:38	CFV	O	E
	15:38	CFV	I	E
	15:45	CFV	O	W
	16:02	CFV	O	E
	16:03	CFV	O	E
	16:04	CFV	I	E
	16:09	CFV	I	E
	16:13	CFV	O	E
	16:28	CCV	O	E
	16:30	CCV	O	E
	16:32	CFV	O	E
	16:43	CCV	O	E

Date	Time	Vessel	In/Out	Direction
	16:45	CFV	O	E
	16:46	CFV	O	E
	16:49	RPVs	O	W
	16:55	RSV	O	E
	16:56	CCV	O	W
	17:00	CFV	I	E
	17:02	CFV	O	W
	17:03	RPVb	O	W
	17:07	CFV	I	W
	17:10	CCV	O	E
	17:15	CFV	O	W
	17:22	CFV	I	E
	17:27	CFV	I	E
	17:28	CFV	O	W
	17:30	CFV	I	W
	17:52	CFV	I	W
	17:52	CFV	I	W
	17:56	RSV	O	W
	18:03	TUG	O	W
	18:04	CFV	O	E
	18:23	COL	I	E
	18:28	RPVs	I	E
	18:49	CFV	O	E
	18:49	CFV	O	E
	18:55	CCV	O	W
	18:56	CFV	I	W
	19:08	TUG	O	E
	19:11	GPV	O	E
	19:12	CFV	O	W
	19:14	RPVs	O	E
	19:15	RPVb	O	W
	19:31	CFV	O	W
	19:39	CFV	O	E
	19:45	CCV	O	W
3-Aug	8:00 - 8:21 line obscured by fog			
	9:26	TUG	O	W
	9:27	CFV	O	E
	9:43	GPV	O	E
	9:50	CFV	O	W
	9:55	RPVb	O	W
	9:56	RPVs	O	E
	9:58	CFV	O	E
	10:01	RPVb	O	E
	10:04	CFV	O	E
	10:05	CFV	O	E
	10:10	RPVs	O	E
	10:11	RPVs	O	E
	10:13	CFV	O	W
	10:16	CFV	O	W
	10:20	CFV	O	E
	10:21	CFV	O	W
	10:51	CFV	O	W
	11:03	RPVb	O	E
	11:07	RPVs	O	E
	11:14	CFV	O	E
	11:25	CFV	O	E
	11:35	RPVs	O	W
	11:43	RPVs	O	E
	12:07	CFV	I	W
	12:07	RPVs	O	W
	12:08	RSV	O	E
	12:08	CFV	O	W
	12:08	RSV	O	W
	12:20	CCV	O	E
	12:24	RPVb	O	W
	12:37	CCV	O	E
	12:38	RSV	O	W
	12:40	RPVb	O	E
	12:42	CFV	I	W
	13:06	RPVb	I	E
	13:06	RSV	O	E
	13:12	CCV	O	W
	13:15	CCV	O	W
	13:20	RPVb	O	E
	13:29	CFV	O	E
	13:29	CFV	O	E
	13:29	RPVs	O	W
	13:37	CFV	O	E
	13:38	RPVb	O	W
	13:40	RSV	O	E
	15:08	CFV	I	E
	15:08	RSV	O	W
	15:18	CFV	O	E
	15:19	CFV	O	E
	15:23	RPVb	O	E
	15:29	RPVs	O	E
	15:35	RSV	I	E
	15:45	GPV	O	W
	15:51	RPVb	O	E
	15:57	RPVb	I	E
	16:04	CFV	I	E
	16:27	CFV	O	W
	16:42	CFV	O	E
	17:31	CFV	O	E
	17:38	CFV	I	E
	18:08	CCV	O	E

## Index B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	18:08	CCV	O	E
	18:23	CFV	O	E
	18:27	CFV	O	E
	18:31	CFV	O	E
	18:33	COL	O	E
	18:41	CFV	O	E
	18:44	CFV	O	E
	18:54	CCV	O	W
	18:55	CFV	I	E
	19:00	TUG	O	W
	19:06	CFV	O	W
	19:07	CFV	I	E
	19:07	CCV	O	W
	19:08	CFV	O	E
	19:34	CFV	O	W
	19:38	COL	O	E
	19:48	CFV	O	E
	19:57	CFV	O	E
4-Aug	8:00	RPV	O	E
	8:09	RSV	O	W
	8:16	RSV	O	W
	8:56	CCV	O	E
	9:05	CFV	O	E
	9:10	CFV	O	W
	9:11	CFV	O	W
	9:20	RPVs	O	W
	9:29	RPVb	O	W
	9:29	RPVs	O	W
	9:39	CFV	O	E
	9:40	RSV	O	W
	10:00	CFV	O	E
	10:05	CFV	O	E
	10:10	RPVs	O	E
	10:11	RPVb	O	E
	10:15	CFV	O	E
	10:16	CFV	O	E
	10:17	CFV	O	E
	10:19	RPVb	O	W
	10:35	CFV	O	E
	10:40	RPVs	O	E
	10:46	CFV	O	W
	10:50	CCV	O	W
	10:55	CFV	O	W
	10:56	CFV	O	W
	10:57	CFV	O	W
	10:59	RPVb	O	W
	10:59	RPVs	O	W
	11:00	RPVb	O	E
	11:10	RSV	O	W
	11:12	CFV	O	E
	11:13	RPVb	O	E
	11:15	CFV	O	W
	11:25	RPVb	O	W
	11:26	CFV	O	W
	11:40	RPV	O	W
	12:01	CAR	O	E
	12:10	RPV	O	W
	12:16	RPVb	O	E
	12:20	CCV	O	E
	12:21	CCV	O	E
	12:25	CCV	O	E
	12:26	RSV	O	E
	12:26	RSV	O	W
	12:40	RPV	O	E
	12:40	RPV	O	E
	12:48	RSV	O	E
	12:52	RPVb	O	E
	12:56	RPVb	O	E
	13:05	CCV	O	W
	13:10	CCV	O	W
	13:10	CFV	O	E
	13:12	CFV	O	W
	13:13	RSV	O	W
	13:20	CCV	O	W
	13:21	RPVs	O	E
	13:26	CFV	O	E
	13:26	CCV	O	W
	13:27	CFV	O	E
	13:28	CFV	O	E
	13:40	CFV	O	E
	13:44	RSV	O	E
	13:48	CFV	O	E
	13:59	CFV	O	W
	14:01	COL	O	E
	14:01	CFV	O	W
	14:29	CFV	O	E
	14:30	CFV	O	W
	14:32	CCV	O	E
	14:33	RPV	O	E
	14:40	CFV	O	E
	14:41	RSV	O	W
	15:10	CFV	O	W
	15:15	RPVs	O	W
	15:53	CFV	I	E

Date	Time	Vessel	In/Out	Direction
	16:09	TUG	O	E
	16:23	RKG(3)	O	W
	16:47	CAR	O	E
	16:48	CFV	O	E
	16:48	CFV	I	W
	17:04	RPVb	O	W
	17:13	CAR	O	W
	reserve logged in 17:40-19:28			
	19:39	COL	O	E
	19:44	CAR	O	E
	reserve logged in 19:47			
5-Aug	9:06	RPVs	O	W
	9:10	RSV	O	E
	9:18	RPVb	O	E
	9:22	RPVs	O	E
	9:22	RPVb	O	E
	9:39	TUG	O	W
	8:43	CFV	O	W
	8:51	CFV	O	E
	8:59	CFV	O	E
	9:02	RPVb	O	E
	9:09	CFV	O	W
	9:13	CFV	O	W
	9:15	CFV	O	W
	9:19	CFV	O	W
	9:21	RPVs	O	W
	9:33	CFV	O	W
	9:38	CFV	O	E
	9:40	CFV	O	E
	9:46	RPVs	O	E
	9:49	CFV	O	E
	9:58	RPVb	O	E
	9:58	TUG	O	E
	9:59	RPVb	O	E
	10:01	CAR	O	W
	10:01	CFV	O	W
	10:03	CFV	O	W
	10:30	CFV	I	W
	10:51	RPVb	O	W
	10:52	RPVs	O	W
	11:03	TUG	O	W
	11:10	RSV	O	E
	11:34	TUG	O	E
	11:34	CCV	O	E
	11:35	RPVb	I	W
	12:09	RPVs	O	E
	12:21	CFV	I	W
	12:22	CFV	O	E
	12:28	CFV	I	E
	12:37	RPVs	O	W
	12:47	CFV	I	E
	12:50	RPV	O	E
	12:58	RPV	O	W
	13:07	CFV	I	W
	13:08	CFV	I	E
	13:32	CFV	I	E
	13:32	TUG	O	E
	13:45	RKG	O	W
	13:45	RKG	O	W
	13:51	RPVs	O	E
	14:01	CFV	O	E
	14:05	CFV	O	E
	14:10	RPVs	O	W
	14:11	CFV	O	W
	14:16	RPV	O	E
	14:17	CFV	O	E
	14:18	RPVs	O	W
	14:33	RSV	O	E
	14:35	CFV	O	E
	14:40	CFV	O	E
	14:41	CCV	O	E
	14:43	RSV	O	E
	14:44	CFV	O	W
	14:45	RPV	O	W
	14:46	CFV	O	W
	14:50	RPV	O	W
	14:50	CCV	O	E
	14:52	CAR	O	E
	14:55	RSV	O	E
	14:56	CCV	O	W
	14:56	RSV	O	E
	14:57	CFV	O	W
	14:58	RSV	O	E
	15:16	RSV	O	W
	15:16	RSV	O	W
	15:34	PRV	O	W
	15:35	GPV	O	W
	15:42	CFV	O	E
	16:04	CCV	O	E
	16:07	CFV	I	E
	16:09	RPVs	O	E
	16:11	RSV	O	E
	16:22	COL	O	E
	16:28	CFV	O	W
	16:29	RPVs	O	E
	16:42	CFV	I	W

## Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	16:43	COL	O	E
	16:43	CFV	I	W
	16:44	CCV	O	E
	16:44	CFV	O	W
	16:49	CFV	I	W
	16:54	CFV	I	W
	17:04	CAR	O	W
	17:06	RSV	O	W
	17:06	CFV	I	E
	17:08	CCV	O	E
	17:09	RPVs	O	W
	17:17	CCV	O	E
	17:22	CAR	O	W
	17:32	CFV	I	E
	17:35	CFV	I	E
	17:40	CFV	I	E
	17:45	CFV	I	W
	17:46	CCV	O	W
	17:53	TUG	O	E
	17:54	CCV	O	W
	17:54	CCV	O	W
	17:55	CCV	O	W
	17:55	RPVs	O	W
	17:59	TUG	O	E
	18:10	RSV	O	W
	18:14	CFV	O	E
	18:17	CFV	I	W
	19:38	CFV	O	E
	19:42	COL	O	E
	19:46	TUG	O	W
	19:53	CFV	O	W
	19:56	RPVs	O	E
6-Aug	8:06	CFV	O	W
	8:10	RPVb	O	E
	8:15	CFV	O	W
	8:20	TUG	O	W
	8:32	TUG	O	W
	8:40	RPVs	O	W
	8:45	RPVb	O	E
	8:45	RPV	O	W
	8:50	CFV	O	W
	8:54	CFV	O	E
	8:55	TUG	O	E
	8:56	RPVb	O	E
	9:04	CFV	O	W
	9:05	RSV	O	E
	9:11	RPVb	O	E
	9:23	CFV	I	W
	9:27	CFV	I	W
	9:28	RPVs	O	E
	9:33	CFV	I	W
	9:45	CFV	I	W
	9:52	RPVb	O	E
	9:55	CFV	O	E
	9:56	CFV	O	E
	9:59	CFV	O	W
	10:00	CFV	O	W
	10:09	CFV	I	E
	10:15	CFV	I	W
	10:17	CFV	O	W
	10:20	CFV	O	E
	10:21	CFV	O	E
	10:23	CFV	O	E
	10:24	CFV	O	E
	10:33	RSV	I	W
	10:35	CFV	O	E
	10:35	CFV	O	W
	10:36	CCV	O	E
	10:36	CCV	O	E
	10:40	CCV	O	E
	10:40	CFV	O	E
	10:41	CFV	O	E
	10:41	CFV	O	E
	10:44	CFV	I	W
	10:46	CFV	I	E
	10:46	CFV	I	E
	10:47	CFV	I	E
	10:48	CFV	O	W
	10:50	CFV	O	W
	10:52	CFV	O	E
	10:52	CFV	O	E
	10:53	CFV	O	W
	10:54	RSV	O	E
	10:54	CFV	O	E
	10:54	CFV	O	E
	10:55	RPVb	O	E
	10:55	CFV	I	W
	10:55	CFV	I	E
	10:56	CFV	O	W
	11:00	CFV	O	E
	11:01	CFV	O	E
	11:01	CFV	O	E
	11:03	CFV	I	E
	11:03	RPVb	O	W
	11:04	RPVs	O	E
	11:04	RPVs	O	E

Date	Time	Vessel	In/Out	Direction
	11:04	RPVs	O	E
	11:07	RPVs	O	W
	11:07	RPVs	I	E
	11:11	RSV	O	W
	11:11	RPVb	O	E
	11:11	CFV	O	W
	11:13	CFV	O	E
	11:15	RSV	O	E
	11:18	CFV	O	W
	11:18	RPVb	O	W
	11:21	CFV	O	W
	11:22	CFV	I	W
	11:24	CFV	O	W
	11:29	CFV	O	E
	11:30	CFV	I	W
	11:32	CFV	O	W
	11:32	CFV	O	W
	11:33	CFV	O	W
	11:36	RSV	O	W
	11:36	CCV	O	E
	11:37	CFV	O	W
	11:38	CAR	O	E
	11:39	CFV	I	E
	11:42	CFV	O	E
	11:43	CFV	O	W
	11:44	CFV	I	E
	11:46	CFV	O	W
	11:50	CFV	O	W
	11:50	CFV	I	E
	11:52	CFV	O	E
	11:53	RPVs	O	W
	11:53	CFV	O	W
	11:55	CFV	I	W
	12:03	CCV	O	W
	12:05	CFV	O	E
	12:06	RSV	O	E
	12:09	CFV	O	E
	12:09	CFV	O	W
	12:09	CFV	O	W
	12:16	CCV	O	W
	12:19	RSV	O	E
	12:23	CFV	O	W
	12:26	CFV	O	W
	12:26	RPVs	O	W
	12:28	RSV	I	E
	12:28	RPVs	O	W
	12:28	RPVb	O	E
	12:31	RSV	O	W
	12:32	RSV	O	W
	12:34	CFV	O	E
	12:36	RSV	O	E
	12:42	CAR	O	W
	12:46	CFV	O	E
	12:51	CFV	O	W
	12:52	CAR	O	W
	12:58	CCV	O	W
	12:58	RPVs	O	W
	12:59	RPVb	O	E
	13:00	CFV	I	W
	13:01	CCV	O	W
	13:05	CFV	O	E
	13:05	CFV	I	E
	13:07	RSV	O	E
	13:07	TUG	O	W
	13:07	CFV	I	E
	13:08	RPVs	O	E
	13:09	CFV	O	E
	13:09	CFV	I	E
	13:10	RPVb	O	W
	13:13	RSV	O	W
	13:15	CFV	I	E
	13:21	CFV	I	E
	13:23	RPVs	O	E
	13:27	RPVb	O	E
	13:30	RSV	O	W
	13:34	CFV	I	E
	13:37	CCV	O	E
	13:38	CFV	I	W
	13:38	RPVb	O	E
	13:40	CFV	O	E
	13:41	CFV	O	E
	13:45	CFV	O	W
	13:46	RPVs	O	W
	13:48	CFV	O	E
	13:48	CCV	O	W
	13:49	RSV	O	W
	13:50	RSV	O	W
	13:52	CCV	O	W
	14:00	CFV	O	E
	14:03	CFV	O	E
	14:04	RSV	O	E
	14:05	CFV	O	E
	14:06	RPVs	O	W
	14:08	CFV	O	E
	14:08	CFV	O	W

## Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	14:09	CFV	I	E
	14:10	CFV	O	
	14:10	CFV	O	
	14:12	CFV	O	E
	14:14	CFV	O	E
	14:14	CFV	O	
	14:15	CFV	O	W
	14:16	CFV	I	E
	14:16	RPVs	I	
	14:23	CFV	I	
	14:23	CFV	I	
	14:25	CFV	I	E
	14:25	CFV	O	
	14:26	CFV	O	E
	14:31	RPVb	O	
	14:38	CFV	I	
	14:47	CCV	O	E
	14:47	CFV	I	
	14:47	CFV	I	
	14:50	CFV	I	
	14:52	CFV	O	
	14:54	CFV	I	
	14:54	CFV	I	
	14:56	RPVb	O	
	14:59	CFV	I	
	14:59	CFV	I	
	14:59	CFV	O	
	15:00	RPVs	O	
	15:12	CFV	I	E
	15:14	RPVs	O	
	15:15	CFV	O	
	15:16	CFV	O	E
	15:16	CFV	O	
	15:26	CFV	O	
	15:28	CFV	O	E
	15:28	CFV	I	E
	15:35	CFV	I	W
	15:35	CFV	O	E
	15:36	CFV	O	E
	15:37	CFV	O	E
	15:37	CFV	O	E
	15:39	CFV	O	E
	15:43	CFV	I	E
	15:45	CFV	I	W
	15:50	CFV	O	E
	15:51	CFV	O	E
	15:52	CFV	I	E
	15:53	CFV	I	E
	15:56	CFV	I	E
	15:57	CFV	I	
	16:02	CFV	O	E
	16:04	CFV	O	E
	16:05	CFV	O	E
	16:07	CFV	I	W
	16:09	CFV	O	E
	16:15	CFV	I	E
	16:18	CFV	I	W
	16:19	CFV	I	W
	16:23	CFV	I	E
	16:23	CFV	O	E
	16:23	RPVs	O	W
	16:24	CFV	I	E
	16:26	CFV	O	E
	16:34	CFV	I	E
	16:41	CFV	O	E
	16:42	CFV	O	W
	16:42	CFV	I	E
	16:44	CFV	I	E
	16:44	CFV	O	W
	16:49	CFV	O	W
	16:49	CFV	O	W
	16:51	CFV	I	E
	16:52	CFV	O	W
	16:52	CFV	I	E
	16:54	CFV	I	W
	17:04	GPV	O	W
	17:09	CFV	I	E
	17:10	CFV	O	E
	17:11	CFV	O	E
	17:16	COL	O	E
	17:17	CAR	O	E
	17:17	CFV	O	E
	17:19	CFV	O	
	17:24	CFV	I	
	17:27	CFV	O	
	17:28	CFV	O	
	17:29	CFV	O	
	17:31	CFV	I	E
	17:40	CFV	I	E
	17:41	CFV	I	E
	17:48	CFV	O	E
	18:12	CFV	O	W
	18:17	COL	O	E
	18:18	RPV	O	W
	18:20	CFV	O	E
	18:28	CFV	O	E

Date	Time	Vessel	In/Out	Direction
	18:32	CFVg	O	E
	18:34	CFVg	I	E
	18:35	CFVg	I	E
	18:36	CFV	I	E
	18:37	RPVb	O	W
	18:38	CFV	I	W
	18:39	CFV	I	E
	18:40	COL	O	W
	18:43	CFV	I	W
	18:44	CFV	O	W
	18:45	RPVb	O	E
	18:46	CFV	O	W
	18:50	CFVg	O	E
	18:53	CFV	O	E
	18:55	RPVs	O	W
	18:56	RPVb	O	E
	19:05	CFV	O	E
	19:07	CFV	O	W
	19:11	CFV	O	W
	19:19	CFV	I	E
	19:28	CFV	I	E
	19:32	CFV	I	E
	19:33	CFV	O	E
	19:35	CFV	O	W
	19:40	CFV	I	E
7-Aug	8:10	CFV	O	E
	8:13	CFV	O	E
	8:20	CFV	O	W
	8:26	CFV	O	W
	8:27	CFV	O	W
	8:36	CFV	I	E
	8:50	CAR	O	E
	9:00	CFV	O	E
	9:01	CFV	O	E
	9:04	CFV	O	E
	9:06	CFV	O	E
	9:07	GPV	O	E
	9:09	RPVb	O	E
	9:09	CFV	O	W
	9:16	CFV	O	E
	9:17	CFVs	I	W
	9:18	CFV	O	W
	9:21	RSV	O	E
	9:24	CFV	O	E
	9:25	CFV	O	W
	9:26	CFV	I	E
	9:29	CFV	O	W
	9:30	CFV	I	E
	9:31	CFV	O	W
	9:35	CFV	O	W
	9:37	RPVb	O	E
	9:43	CFV	O	W
	9:45	CFV	I	W
	9:47	CFV	O	W
	9:52	CFV	O	W
	10:02	CFV	I	W
	10:09	CFV	I	E
	10:10	CFV	O	W
	10:15	CFV	I	W
	10:18	TUG	O	W
	10:21	CFV	I	E
	10:23	RPVs	O	W
	10:28	CFV	I	E
	10:31	CFV	I	W
	10:31	CFV	I	W
	10:32	CAR	O	W
	10:42	CFV	O	W
	10:46	CFV	O	W
	10:48	CFV	O	W
	10:49	CF	O	E
	10:50	CFV	I	E
	10:50	RPVs	I	E
	10:58	CFV	O	W
	10:58	CFV	I	W
	10:58	CFV	I	W
	10:59	CFV	O	E
	11:00	CFV	I	W
	11:01	CFV	O	E
	11:01	CFV	O	E
	11:02	CFV	O	E
	11:05	CFV	O	W
	11:09	CFV	O	W
	11:10	CFV	O	W
	11:11	CFV	O	W
	11:12	CFV	O	E
	11:12	CFV	O	E
	11:13	CFV	O	E
	11:13	RKG(2)	O	E
	11:13	CFV	O	E
	11:15	CFV	O	E
	11:16	CFV	I	E
	11:18	CFV	O	E
	11:19	CFV	O	E
	11:21	CFV	O	E
	11:23	CFV	O	E
	11:28	CFV	O	E

Date	Time	Vessel	In/Out	Direction
	11:32	CFV	O	E
	11:33	CFV	O	W
	11:33	CFV	I	E
	11:33	CFV	O	W
	11:35	CFV	O	E
	11:35	CFV	O	W
	11:36	CFV	O	W
	11:40	CFV	O	W
	11:40	CFV	O	E
	11:41	CFV	O	E
	11:42	CFV	O	W
	11:42	CFV	O	W
	11:46	CFVg	O	E
	11:46	CFV	O	W
	11:48	CFV	O	W
	11:54	CFV	O	W
	11:55	CFV	O	W
	11:59	CFV	O	E
	11:59	CFV	O	E
	11:59	CFV	O	W
	11:59	CFV	O	E
	11:59	CFV	O	W
	11:59	CFV	O	E
	11:59	CFV	O	W
	12:00	CFV	O	E
	12:06	CFVg	O	W
	12:07	CFVg	O	W
	12:08	CFVg	O	E
	12:09	CFVg	O	E
	12:11	CFV	O	E
	12:14	GPV	O	E
	12:14	RPV	O	W
	12:14	CFVg	O	W
	12:16	CFV	O	W
	12:17	CFV	O	E
	12:20	CFV	O	E
	12:25	CFV	O	W
	12:26	CFV	O	W
	12:26	CFV	O	W
	12:27	CAR	O	W
	12:28	RSV	O	E
	12:28	CFV	O	W
	12:28	TUG	O	E
	12:30	CFV	O	E
	12:30	CRV	O	E
	12:31	CFV	O	W
	12:32	CFV	O	W
	12:33	CFV	O	W
	12:36	CFV	O	W
	12:36	CFV	O	W
	12:36	CFV	O	W
	12:37	CFV	O	W
	12:38	CFVg	O	W
	12:39	CFV	O	W
	12:39	CFV	O	W
	12:40	CFV	O	W
	12:45	RPVs	O	W
	12:45	GPV	O	E
	12:50	CFV	O	W
	12:50	CFV	O	W
	12:50	CFV	O	E
	12:54	RSV	O	E
	12:55	CFV	O	W
	12:57	CFV	O	W
	12:57	CFV	O	W
	13:05	CFV	O	W
	13:05	CFV	O	W
	13:05	CFV	O	W
	13:05	CFV	O	W
	13:05	CFVg	O	W
could not keep up missed some crossings				
	13:17	CFV	O	E
	13:18	CFV	O	W
	13:20	CFV	O	E
	13:20	CFV	O	W
	13:20	CFV	O	W
	13:21	CFV	O	W
	13:02	CFV	O	W
	13:26	CFV	O	W
	13:27	CFV	O	W
	13:27	CFV	O	W
	13:31	CFV	O	W
	13:34	CFV	O	W
	13:34	CFV	O	E
	13:36	CFV	O	W
	13:38	CFV	O	E
	13:42	CFV	O	W
	13:49	CFV	O	W
	13:49	CFV	O	W
	13:50	RPVb	O	E
	13:51	RPV	O	W
	13:54	CFV	O	W
	13:58	CFV	O	W
	13:59	RPVb	O	W

Date	Time	Vessel	In/Out	Direction
	14:02	CFV	I	E
	14:02	CFV	I	E
	14:07	CFV	I	E
	14:08	CFV	O	E
	14:10	RPVb	O	E
	14:11	CFV	I	W
	14:12	RSV	O	W
	14:12	CFV	O	W
	14:17	CFV	I	W
	14:18	CFV	O	W
	14:22	CFV	O	W
	14:23	CFV	O	W
	14:23	TUG	O	E
	14:24	CFV	I	E
	14:25	CCV	O	W
	14:25	CFV	O	W
	14:26	RPVb	O	W
	14:29	CFV	I	W
	14:29	CFV	I	E
	14:30	CFV	I	W
	14:32	CFV	O	W
	14:35	CCV	I	E
	14:36	RPVs	O	W
	14:36	RSV	O	E
	14:37	CFV	O	E
	14:37	CFV	O	W
	14:40	CFV	O	W
	14:40	RPVb	O	W
	14:41	RPVs	O	W
	14:42	CFV	O	W
	14:42	CFV	O	W
	14:43	CFV	O	W
	14:43	CFV	I	W
	14:45	CFV	I	W
	14:46	CFV	O	W
	14:52	CFV	O	W
	14:56	CFV	O	W
	14:57	CFVs	O	E
	15:00	CFV	O	E
	15:01	CFVs	O	W
	15:04	CFV	I	E
	15:10	CFVg	O	W
	15:14	CFV	O	W
	15:16	CFV	I	E
	15:16	CFVg	O	E
	15:16	CFVg	O	W
	15:17	CFV	O	W
	15:17	CFV	O	W
	15:20	CFV	O	W
	15:25	RSV	O	W
	15:28	CFV	O	E
	15:31	CFV	O	W
	15:32	CFV	I	E
	15:33	CFV	O	W
	15:39	CFV	O	E
	15:41	CFV	O	E
	15:44	CFV	O	W
	15:48	CFV	O	E
	15:51	CFV	O	E
	16:05	CFV	O	W
	16:09	CFV	O	W
	16:11	CFV	O	W
	16:14	CFV	O	W
	16:14	CFV	I	W
	16:19	CFV	O	W
	16:21	CFV	O	E
	16:27	CFV	O	E
	16:27	CFV	O	W
	16:33	CFV	O	E
	16:33	CFV	O	E
	16:38	CFV	O	E
	16:38	CFV	O	W
	16:39	CFV	O	W
	16:41	CFV	O	W
	16:42	CFV	O	W
	16:44	TUG	I	E
	16:45	CFV	O	E
	16:46	CFV	O	W
	16:48	CFV	O	E
	16:49	CFV	O	E
	16:50	RSV	O	E
	16:51	CFV	O	E
	16:52	CFV	O	W
	16:55	CFV	O	E
	16:58	CFV	O	E
	16:58	CFV	O	W
	17:03	CFV	I	W
	17:07	CFV	O	E
	17:07	CFV	O	E
	17:12	CFV	O	W
	17:14	CFVs	O	W
	17:15	CFV	I	E
	17:17	CFV	I	E
	17:21	CFV	I	E
	17:22	CFV	I	E

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	17:23	CFV	O	W
	17:26	RV	O	W
	17:31	CFV	O	W
	17:41	CFV	I	W
	17:41	CFV	I	E
	17:42	CFV	O	W
	17:43	CFV	O	W
	17:43	CFV	I	W
	17:48	CFV	O	W
	17:48	CFV	I	W
	17:49	CFV	O	W
	17:51	CFV	O	E
	17:51	CFV	O	W
	17:51	CFV	O	E
	17:51	CFV	I	E
	17:51	CFV	I	W
	17:51	CFV	O	W
	17:56	CFVg	O	W
	17:56	CFVg	O	W
	17:58	CFV	O	E
	17:58	CFV	O	W
	18:03	CFV	O	E
	18:03	CFVg	O	E
	18:10	CFV	O	W
	18:10	CV	O	E
	18:11	CFV	O	E
	18:14	CFV	O	E
	18:15	CFVg	O	W
	18:18	CFV	O	W
	18:20	CFV	O	E
	18:25	CFV	O	E
	18:25	CFV	O	E
	18:25	CFVg	O	E
	18:26	CFV	O	E
	18:27	CFV	I	W
	18:27	CFV	O	E
	18:28	CFV	O	E
	18:28	CFV	O	E
	18:30	CFVg	O	E
	18:31	CFV	O	W
	18:35	CFV	O	E
	18:40	CFV	O	E
	18:40	CFVg	O	E
	18:40	CFV	O	E
	18:42	CFV	O	E
	18:43	CFV	O	E
	18:45	COL	O	E
	18:45	CFVg	O	E
	18:46	CFV	I	E
	18:50	CFV	O	E
	18:50	CFV	O	E
	18:51	CFV	I	E
	18:56	CFV	O	E
	18:56	CFV	O	E
	18:58	CFVg	O	W
	18:58	CFVg	O	W
	19:00	CFVg	O	W
	19:00	CFVg	O	W
	19:05	CFV	O	E
	19:05	CFV	O	E
	19:10	CFV	O	E
	19:12	CFV	O	E
	19:13	CFV	O	E
	19:15	CFV	O	E
	19:22	CFV	O	E
	19:22	CFV	O	E
	19:35	CFV	O	E
	19:40	CFV	O	E
	19:45	CFV	O	W
	19:50	CFV	O	W
	19:52	CFVg	O	E
	19:55	CFV	O	E
	19:57	CFV	O	E
	20:00	CFV	O	W
8-Aug	8:03	CFVI	I	W
	8:04	CFVI	I	W
	8:05	CFVI	I	E
	8:06	CFV	O	E
	8:10	CFV	O	W
	8:11	CFVI	I	W
	8:12	CFVI	I	E
	8:16	CFVI	I	E
	8:22	CFVI	I	W
	8:29	CFVI	I	E
	8:32	CFVI	I	W
	8:35	CFV	O	E
	8:41	CFVI	I	W
	8:47	RPVs	O	E
	8:50	TUG	O	E
	8:51	RPVb	O	W
	8:55	RSV	O	E

Date	Time	Vessel	In/Out	Direction
	8:58	CFV	O	W
	8:57	CPV	O	W
	8:57	CFVt	I	W
	9:06	RPVb	O	E
	9:10	RPVb	I	E
	9:11	CFV	O	E
	9:11	CFV	O	E
	9:12	CFV	O	E
	9:14	CFVt	I	W
	9:18	CFV	I	W
	9:25	CFV	O	EE
	9:30	RPVs	I	E
	9:32	CFVt	I	E
	9:39	CFVt	I	E
	9:46	RPVs	O	W
	9:46	CFVt	I	W
	9:49	CFVt	I	E
	9:51	CFVt	I	W
	9:53	GPV	I	W
	9:53	TUG	O	E
	9:53	CFV	O	E
	9:54	CFV	O	EE
	9:57	CFV	O	EE
	10:02	CFV	O	EE
	10:08	CFV	O	E
	10:10	RSV	O	E
	10:10	CFV	O	E
	10:11	RKG(2)	I	E
	10:14	CFV	O	W
	10:18	CFV	O	EE
	10:20	CFVt	I	EE
	10:21	CFV	O	EE
	10:28	CFV	O	EE
	10:28	CFV	O	EE
	10:31	RPVb	O	W
	10:33	RPVs	O	EE
	10:38	RPVs	O	EE
	10:40	CFVt	I	W
	10:42	TUG	O	E
	10:44	CFVt	I	E
	10:44	CFVt	I	W
	10:47	CFVt	I	EE
	10:50	CFV	O	EE
	10:58	RSV	O	W
	10:58	CFV	O	EE
	11:04	RPVs	O	EE
	11:09	CFV	O	EE
	11:10	CFV	I	EE
	11:15	RPVb	O	EE
	11:15	CFV	O	EE
	11:19	RPVb	O	EE
	11:20	CFV	O	W
	11:20	CFV	O	W
	11:22	CFVt	I	EE
	11:22	CFV	O	EE
	11:23	CFV	O	EE
	11:24	CFV	O	EE
	11:25	CFV	O	EE
	11:36	RSV	O	W
	11:38	CFV	O	EE
	11:38	RPVs	O	EE
	11:39	CFV	O	EE
	11:43	CFV	O	EE
	11:44	CFVt	I	W
	11:45	CFVt	I	EE
	11:53	CFV	I	EE
	11:54	CFV	O	W
	11:57	GPV	O	E
	11:57	RPVs	O	EE
	11:57	CFVt	I	EE
	11:59	CFVt	I	E
	11:59	CFVt	I	E
	12:01	RKG(1)	I	W
	12:10	RSV	I	W
	12:15	CFV	O	E
	12:22	CFV	I	W
	12:24	CFV	I	E
	12:25	CFV	O	W
	12:29	CAR	I	W
	12:30	CFV	O	E
	12:30	RPV	O	W
	12:30	CFV	O	E
	12:35	CFV	I	W
	12:39	CFV	O	E
	12:41	CFV	O	EE
	12:42	CFV	O	EE
	12:45	CFVt	I	EE
	12:59	CFV	I	EE
	13:02	CFVt	I	E
	13:07	CFVt	I	W
	13:07	CFVt	I	W
	13:09	CFV	I	W
	13:09	RSV	O	E
	13:09	CFV	O	E
	13:20	CCV	O	W
	13:33	CFV	O	E

Date	Time	Vessel	In/Out	Direction
	13:37	GPV	O	W
	13:38	CFV	I	W
	13:39	GPV	O	W
	13:44	CFVI	I	E
	13:45	RPVs	O	W
	13:45	RPVs	O	W
	13:47	CFVI	O	E
	13:49	CFV	O	E
	13:57	COL	O	W
	14:07	CFV	O	E
	14:08	CFV	I	E
	14:08	RPVs	O	W
	14:12	CFV	O	E
	14:13	CCV	O	E
	14:13	CAR	O	E
	14:19	CCV	O	E
	14:20	CFVs	O	E
	14:21	CFVI	O	E
	14:21	RPVs	O	W
	14:24	RPVs	O	W
	14:33	RPVb	O	E
	14:33	CFV	O	E
	14:38	CFVI	I	E
	14:39	CFVI	I	E
	14:40	CFVI	I	E
	14:42	CFVI	I	E
	14:44	CFVI	I	W
	14:45	CFVI	I	E
	14:56	CFV	O	E
	14:57	CCV	O	W
	15:02	CFVI	I	E
	15:05	CFVI	I	E
	15:05	CFVI	I	E
	15:09	CFVI	I	E
	15:20	CFVI	I	E
	15:26	CFV	I	W
	15:27	CFVI	I	W
	15:28	CFVI	I	E
	15:28	RPVb	O	W
	15:31	CFVI	I	E
	15:33	CFVI	I	W
	15:40	CFVI	I	W
	15:40	CFVI	I	W
	15:41	CFVI	I	E
	15:42	CFVI	I	E
	15:43	CFVI	I	E
	15:44	CFVI	I	W
	15:45	CFVI	O	E
	15:52	CFV	I	E
	15:53	CFV	O	E
	15:54	CFVI	O	E
	15:06	CCV	O	E
	15:57	CFVI	I	E
	15:57	CFVI	I	W
	15:58	CFVI	I	W
	15:59	CFVI	I	E
	16:02	RSV	O	E
	16:02	CFVI	I	W
	16:03	CFVI	I	W
	16:04	CFVI	I	W
	16:05	CFVI	I	W
	16:05	CCV	O	E
	16:06	CCV	O	E
	16:08	CFV	O	E
	16:08	CFV	O	E
	16:09	CFV	O	E
	16:10	CFV	I	E
	16:10	CFVI	I	E
	16:11	CFV	I	W
	16:11	CFVI	I	W
	16:16	CFV	O	E
	16:18	TUG	O	E
	16:24	CFVI	I	E
	16:25	CFVI	I	W
	16:29	CFVI	I	W
	16:30	CFVI	I	W
	16:31	CFVI	I	W
	16:34	CFVI	O	E
	16:36	CFVI	I	E
	16:37	CFVI	O	W
	16:44	CFVI	I	W
	16:44	CFVI	I	W
	16:48	CFVI	I	E
	16:51	CFVI	I	W
	16:55	CCV	O	E
	16:58	RSV	O	E
	17:02	CFV	O	W
	17:06	RPVb	O	W
	17:06	RPVb	O	W
	17:10	CFVI	I	E
	17:14	CFVI	I	E
	17:15	CFVI	I	E
	17:19	CFV	O	E
	17:24	RSV	O	E
	17:30	CFVI	I	E
	17:31	RPVb	O	W

Data	Time	Vessel	In/Out	Direction
	17:33	CCV	O	W
	17:37	CFVI	I	E
	17:38	CFVI	I	E
	17:38	CFVI	O	E
	17:48	CFVI	I	E
	17:58	CFV	O	E
	17:59	CFV	O	W
	18:02	CFVI	I	E
	18:03	CFVI	I	E
	18:04	RSV	O	E
	18:06	RPVb	O	E
	18:13	RPVb	O	W
	18:14	CFVI	I	W
	18:35	CFVI	I	W
	18:40	GPV	O	E
	18:43	CCV	O	W
	18:46	CFVI	I	E
	18:50	CCV	O	W
	18:50	CCV	O	W
	18:53	CFVI	I	W
	18:59	CFVI	I	E
	19:00	CFV	O	E
	19:02	RPVb	O	E
	19:15	RPV	O	W
	19:22	CFV	O	E
	19:25	CCV	O	W
	19:25	CFVI	O	E
	19:30	RSV	O	W
	19:40	CFV	O	E
	19:41	CFV	O	W
	20:00	RSV	O	E
9-Aug	8:00	CFVI	I	E
	8:10	CFV	O	E
	8:11	CFVI	O	E
	8:13	RPVs	O	W
	8:13	CFV	O	E
	8:15	CFVI	I	E
	8:17	CFVI	I	E
	8:17	CFVI	I	E
	8:18	CFVI	I	E
	8:21	CFVI	I	E
	8:25	CFVI	I	E
	8:33	CFV	I	W
	8:34	CFVI	I	E
	8:48	CFVI	I	W
	8:50	CFVI	I	W
	8:55	CFVI	I	W
	8:56	CFV	O	E
	9:14	CFVI	I	E
	9:17	CFVI	I	E
	9:20	RPVb	O	E
	9:20	CAR	O	W
	9:25	CFV	O	E
	9:26	CFV	O	E
	9:27	CFVI	I	E
	9:28	CFV	O	W
	9:30	CFV	O	E
	9:31	TUG	O	E
	9:40	RPVb	O	E
	9:40	CFVI	I	W
	9:48	CFV	O	E
	9:49	CFV	O	E
	9:49	CFV	O	E
	9:50	CFV	O	E
	9:50	CFV	O	E
	9:50	RPVb	O	E
	9:51	CFV	O	E
	9:52	CFVI	I	E
	10:04	CFV	O	E
	10:06	CFV	O	E
	10:06	CFVI	I	W
	10:10	CFV	O	E
	10:11	CFVI	I	E
	10:16	CFVI	O	W
	10:20	CFVI	I	W
	10:24	CFVI	I	E
	10:30	CFVI	I	E
	10:31	RPVb	I	E
	10:31	CFVI	I	E
	10:45	CFVI	I	W
	10:45	CFV	O	E
	10:50	CFV	O	E
	10:55	CFVI	I	W
	11:10	RPVb	O	E
	11:14	CFVI	O	W
	11:20	CFVI	O	E
	11:24	RPVb	O	E
	11:24	RPVs	O	E
	11:24	RSV	O	W
	11:30	RPV	O	W
	11:40	RSV	O	E
	11:41	RSV	O	E
	11:45	CFV	I	E
	11:45	CFVI	I	E
	11:45	CFVI	I	W

Date	Time	Vessel	In/Out	Direction
	11:51	CFVI	I	E
	12:00	CFVI	O	E
	12:01	CFVI	I	E
	12:03	CFV	O	W
	12:05	RPVb	O	W
	12:06	CFVI	I	E
	12:08	CFVI	I	E
	12:10	RPVb	O	E
	12:14	CFV	O	W
	12:20	CFVI	I	W
	12:25	CFVI	I	E
	12:26	CFV	I	E
	12:26	RPVb	O	W
	12:27	CFV	O	W
	12:28	CFV	I	W
	12:29	CFV	I	E
	12:33	CFV	I	W
	12:37	CFVI	I	E
	12:40	CFVI	I	W
	12:42	CFVI	I	W
	12:44	GPV	I	E
	12:48	CFVI	I	W
	12:53	CFVI	I	E
	12:56	GPV	O	W
	13:17	RSV	O	E
	13:21	CFVI	O	E
	13:27	CFVI	I	W
	13:28	CFVI	I	W
	13:29	RSV	O	W
	13:32	CFVI	I	E
	13:27	CFVI	I	W
	13:52	RSV	O	E
	13:54	CFVI	I	E
	13:55	RPVb	O	E
	13:58	CFVI	I	W
	14:07	CFV	O	E
	14:10	CFVI	I	E
	14:11	CFVI	I	E
	14:20	CFVI	I	E
	14:21	CFV	I	E
	14:29	CCV	O	E
	14:30	RPVb	O	E
	14:31	RPVb	O	W
	14:31	CFVI	O	E
	14:31	CFVI	O	E
	14:32	CFVI	O	W
	14:35	RPVb	O	W
	14:40	RPVb	O	E
	14:40	RPVs	O	W
	14:41	RSV	O	W
	14:41	CFV	O	E
	14:50	CFV	O	W
	14:55	CFVI	O	E
	14:59	RPV	O	E
	15:00	CFV	O	E
	15:00	CFV	O	E
	15:02	RSV	O	E
	15:09	RPVb	O	E
	15:10	RPVb	O	E
	15:20	RSV	O	E
	15:21	RSV	O	E
	15:22	TUG	O	E
	15:25	RPV	O	E
	15:32	CFV	O	E
	15:35	CCV	O	W
	15:35	CFV	O	W
	15:36	CFVI	O	W
	15:36	CFVI	O	W
	15:36	CFVI	O	E
	15:40	CFVI	O	E
	15:43	CFVI	O	E
	15:44	CFVI	O	E
	15:45	RPVb	O	W
	15:50	CFV	O	E
	15:51	CFV	O	E
	15:53	CFV	O	E
	15:55	CFV	I	W
	16:00	CFVI	O	E
	16:05	CFV	O	E
	16:10	RPVb	O	W
	16:10	CFV	I	E
	16:11	CFVI	I	E
	16:11	CFVI	O	E
	16:18	CFV	I	W
	16:21	CFVI	I	E
	16:21	CFVI	O	E
	16:25	CFVI	O	E
	16:29	CFV	I	E
	16:32	CFVI	I	E
	16:32	CFVI	O	E
	16:35	CFVI	O	E
	16:50	CFVI	O	W
	16:51	CFV	O	E
	16:51	CFVI	O	W
	16:52	CFVI	O	E
	16:52	CFV	O	W

Date	Time	Vessel	In/Out	Direction
	16:55	CFVt	I	W
	16:58	CFV	O	E
	17:00	CFV	O	E
	17:05	CFV	I	E
	17:06	CFV	O	E
	17:07	CFV	O	E
	17:08	CFVt	I	E
	17:09	CFV	O	E
	17:11	CFVt	I	E
	17:12	GPV	O	E
	17:12	CFV	O	E
	17:13	CFVt	I	E
	17:15	CFVt	I	E
	17:18	CFV	O	W
	17:20	CFV	O	E
	17:23	CFVt	I	E
	17:26	CFV	O	E
	17:39	CFV	O	E
	17:43	CFV	O	E
	17:45	CFV	O	E
	17:46	CFV	O	E
	17:47	CFV	O	W
	17:48	CFVt	I	E
	18:00	CFV	O	E
	18:01	RPVd	O	E
	18:04	CFV	O	E
	18:08	CFV	O	W
	18:09	CFV	O	E
	18:09	CFV	I	E
	18:13	RSV	O	E
	18:22	CFV	O	W
	18:24	TUG	O	W
	18:25	CFV	O	E
	18:25	CFV	O	E
	18:28	RPVb	O	E
	18:39	RPVs	O	W
	18:43	COL	O	E
	19:03	CFV	O	E
	19:11	CFV	O	W
	19:23	CFV	O	E
	19:40	CFVt	I	E
	19:54	CFV	I	E
	19:56	CFV	I	E
10-Aug	8:14	CFV	O	E
	8:20	CFV	O	E
	8:20	RPVb	O	E
	8:20	RPVb	O	E
	8:23	CFV	O	E
	8:26	CFV	O	E
	8:31	TUG	O	E
	8:41	CFV	O	E
	8:41	COL	O	W
	8:42	CFV	O	E
	8:42	CFV	O	E
	9:08	RPVb	O	W
	9:10	CFV	I	E
	9:27	RSV	O	W
	9:31	GPV	O	W
	9:53	CFV	O	E
	9:53	CFV	O	E
	10:03	CFV	O	E
	10:04	RSV	O	E
	10:10	CFV	O	E
	10:12	RSV	O	E
	10:16	CFV	I	W
	10:21	CV	O	E
	10:24	CFV	O	E
	10:36	CFV	O	E
	10:38	CFV	I	W
	10:44	RSV	O	W
	10:50	CCV	O	E
	10:50	RPVs	O	E
	10:59	CFV	I	E
	10:59	CCV	O	E
	11:01	RPVb	O	E
	11:04	TUG	O	W
	11:14	RPVb	O	E
	11:20	RPVs	I	W
	11:21	CCV	O	E
	11:22	CCV	O	E
	11:28	RSV	O	E
	11:30	RSV	O	E
	11:30	CFV	O	E
	11:34	CFV	O	E
	11:36	RPVb	O	E
	11:38	CFV	O	E
	11:40	RSV	O	W
	11:42	CCV	O	E
	11:42	CCV	O	W
	11:46	RPVb	I	E
	11:49	RSV	O	E
	11:51	CAR	O	E
	11:55	RPVs	O	E
	11:57	CFV	O	E
	11:57	RPVs	O	E
	12:03	CFV	O	E

Date	Time	Vessel	In/Out	Direction
	12:07	CFV	O	E
	12:09	CFV	O	E
	12:13	RKG(2)	O	W
	12:42	RPVs	O	E
	12:52	CCV	O	W
	12:52	TUG	O	W
	13:01	CFV	I	W
	13:01	RSV	O	E
	13:05	CCV	O	W
	13:07	CFV	O	E
	13:11	CCV	O	W
	13:19	CCV	O	W
	13:24	CCV	O	W
	13:25	RSV	O	E
	13:28	RPVb	O	E
	13:49	RSV	O	E
	13:52	CAR	O	E
	14:15	CFV	I	W
	14:15	RPVb	O	E
	14:26	RPVb	O	E
	14:28	CCV	O	E
	14:32	RPVb	O	E
	14:32	CFV	I	E
	14:33	CFV	I	E
	14:34	CFV	O	E
	14:35	CFV	O	E
	14:38	RPVb	O	E
	14:40	RKG(2)	O	E
	14:45	RSV	O	W
	14:48	RPVs	I	E
	14:48	CFV	I	E
	15:00	CFV	O	W
	15:01	RPVs	O	W
	15:08	CFV	O	W
	15:27	CFV	O	E
	15:28	TUG	O	W
	15:29	CFV	O	W
	15:38	RPVs	I	E
	15:47	RSV	O	E
	16:01	RPVb	O	E
	16:03	CFV	I	W
	16:08	CFV	O	E
	16:12	CFV	O	W
	16:26	CFV	I	W
	16:32	CFV	O	E
	16:42	CFV	O	W
	16:43	CFV	O	W
	16:46	CFV	O	E
	16:46	RPVb	O	W
	16:49	CFV	I	W
	16:50	RPVb	O	W
	17:05	TUG	O	E
	17:16	CFV	O	W
	17:19	RPVs	O	W
	17:19	CFV	I	W
study area obscured by rain 17:30-18:25				
	18:25	CFV	O	E
	18:40	RSV	O	E
	19:00	RPVb	O	E
	19:25	CFV	O	E
	19:30	CFV	O	E
	20:00	CFV	O	E
11-Aug	8:17	CFV	O	W
	9:01	CFV	O	E
	9:21	RPVs	O	E
	9:21	RPVs	O	E
	9:27	RPVs	O	W
	9:28	CFV	O	E
	9:35	CFV	O	E
	9:36	CFV	O	E
	9:36	CFV	O	E
	9:47	RPVs	O	E
	10:10	RSV	O	W
	10:19	RPVb	O	E
	10:44	RPVb	O	W
	10:45	CFV	O	E
	10:48	CFV	O	E
	10:49	CFV	O	E
	10:54	RPVb	I	W
	10:54	CFV	O	E
	10:58	RPVb	O	E
	10:59	CFV	O	E
	11:04	RPVs	O	E
	11:05	CFV	O	E
	11:20	CFV	O	E
	11:24	RPVb	O	E
	11:32	RPVb	O	E
	11:33	RSV	O	E
	11:35	CFV	O	E
	11:42	RPVb	O	E
	11:44	RPVb	O	E
	11:46	CFV	I	W
	11:50	RPVs	O	W
	11:58	RPVs	I	E
	12:03	GPV	O	W

Date	Time	Vessel	In/Out	Direction
	12:04	RPVs	O	W
	12:26	CFV	O	E
	12:39	CFV	O	W
	12:45	CFV	O	E
	12:46	CFV	O	E
	13:07	CCV	O	W
	13:15	RPVb	O	W
	13:42	CFV	O	W
	13:45	RSV	O	E
	13:53	RPVb	O	W
	14:00	RPVs	O	E
	14:21	TUG	O	E
	14:29	CFV	O	W
	14:32	RSV	O	W
	14:33	CFV	O	E
	14:37	CFV	O	E
	14:38	CFV	O	E
	14:45	COL	O	E
	15:12	CFV	O	E
	15:37	RPVb	I	E
	15:05	RPVs	O	E
	15:57	TUG	O	E
	17:28	RPVb	O	W
	17:35	CFV	O	W
	17:36	CFV	O	W
	17:56	TUG	O	E
	study area obscured by fog 18:00-18:47			
	18:47	CCV	O	E
	18:50	CCV	O	E
	18:54	CFV	O	W
	19:05	CFV	O	W
	19:25	CFV	O	W
	19:33	CFV	O	E
	19:36	CFV	O	E
	19:40	TUG	O	E
	19:42	CFV	O	W
	20:00	CFV	O	W
12-Aug	8:07	CFV	O	W
	8:25	CCV	O	W
	8:30	RSV	O	E
	8:30	CFV	O	E
	8:31	RPV	O	E
	8:34	CFV	O	E
	8:40	RPV	O	E
	8:55	COL	O	W
	9:01	CFV	O	E
	9:10	CFV	I	E
	9:16	RSV	O	E
	9:40	CFV	O	E
	9:42	RPVs	O	E
	9:45	CFV	O	E
	9:46	CFV	O	E
	9:46	CFV	O	E
	9:50	CFV	O	E
	9:51	CFV	O	E
	9:55	CFV	O	E
	9:57	CFV	O	E
	10:00	RPVs	O	W
	10:01	CFV	O	E
	10:19	CFV	O	E
	10:40	RSV	O	E
	10:41	CFV	O	E
	10:50	CFV	O	E
	10:55	CFV	O	E
	10:58	CFV	O	E
	11:06	CFV	O	E
	11:10	CFV	O	E
	11:11	RPVs	O	E
	11:13	CFV	O	W
	11:15	TUG	O	W
	11:20	RPV	O	E
	11:21	CFV	O	W
	11:25	CFV	O	E
	11:25	RPVs	O	E
	11:34	RPVb	O	E
	11:43	RPVb	O	E
	11:43	CFV	O	E
	11:59	RPVb	O	E
	12:07	CFV	O	W
	12:07	RSV	O	W
	12:09	RPVs	O	E
	12:12	CFV	O	E
	12:19	RSV	O	E
	12:27	RPVs	O	W
	12:31	CFV	O	E
	12:35	CFV	O	E
	12:35	CFV	I	E
	12:36	CFV	O	E
	12:38	CFV	O	W
	12:39	CFV	O	E
	12:42	CFV	O	E
	12:43	TUG	O	E
	12:49	CFV	O	W
	12:56	RPVs	O	W
	13:03	RPVb	O	E
	13:07	CCV	O	W

Date	Time	Vessel	In/Out	Direction
	13:17	CFV	O	E
	13:20	CFV	O	W
	13:22	CFV	O	W
	13:25	CFV	O	E
	13:30	CFV	O	W
	13:49	CFV	O	W
	13:51	RPVs	O	E
	13:55	RPVb	O	E
	14:05	CFV	O	E
	14:23	RPVb	O	E
	14:27	CFV	O	E
	14:27	CFV	O	E
	14:30	RPVb	O	E
	14:39	CFV	O	E
	14:39	CFV	O	E
	14:42	CFV	O	W
	14:50	CFV	O	W
	15:00	CFV	-	W
	15:01	CFV	-	W
	15:06	CFV	-	W
	15:19	CCV	O	W
	15:26	CFV	O	W
	15:27	RPVb	O	E
	15:38	CFV	O	E
	15:42	COL	O	E
	15:48	CFV	O	E
	15:51	CFV	O	W
	15:59	COL	O	E
	16:35	CFV	O	E
	16:40	RPVs	O	E
	16:42	RPVs	O	E
	16:49	RPVs	O	E
	16:55	CCV	O	E
	17:00	CCV	O	E
	17:10	RPV	O	E
	17:30	CFV	O	W
	17:31	CFV	O	W
	17:31	RPVb	O	W
	17:52	CFV	O	E
	18:06	RPVs	O	W
	18:09	RPVs	O	W
	18:20	CFV	O	W
	18:50	CFV	O	W
	18:51	RSV	O	E
	19:05	CCV	O	W
	19:11	CFV	O	E
	19:30	RPVb	O	W
	19:30	RPVb	O	W
	19:32	RPVb	O	E
	20:00	CCV	O	W
13-Aug	8:03	CFV	O	W
	8:30	CFV	O	E
	8:34	CFV	O	W
	8:52	CFV	O	E
	9:15	CFV	O	E
	9:20	CFV	O	W
	9:29	CFV	O	W
	9:34	CFV	O	E
	9:37	CFV	O	W
	9:42	CFV	O	W
	9:43	RSV	O	E
	9:52	RSV	O	E
	9:53	CFV	O	W
	9:53	CFV	O	W
	9:55	CFV	O	W
	9:57	RPVb	O	E
	10:07	CFV	O	E
	10:07	CFV	O	E
	10:45	RPVs	O	W
	10:52	RSV	O	E
	11:02	RSV	O	W
	11:03	CFV	O	E
	11:03	CFV	O	E
	11:08	RPVb	O	E
	11:40	RSV	O	W
	11:41	CFV	O	W
	11:43	RPVs	O	W
	11:53	RSV	O	W
	12:01	CFV	O	E
	12:02	RPVs	O	W
	12:02	RPVs	O	W
	12:06	CFV	O	E
	12:06	CFV	O	W
	12:13	RSV	O	W
	12:16	CFV	O	W
	12:21	RPVb	O	W
	12:22	CFV	O	W
	12:23	CFV	O	E
	12:24	CFV	O	W
	12:25	RPVs	O	E
	12:28	RPVb	O	W
	12:31	CFV	O	W
	12:32	CFV	O	W
	12:32	CFV	O	W
	12:33	CFV	O	W
	12:33	CFV	O	W

Date	Time	Vessel	In/Out	Direction
	12:34	CFV	O	E
	12:37	RPVs	O	W
	12:38	RPVb	O	W
	12:46	CFV	O	W
	12:49	CFV	O	W
	12:58	CFV	O	W
	12:58	CFV	O	W
	12:59	CFV	O	W
	13:07	CFV	O	W
	13:14	CFV	O	W
	13:16	CFV	O	W
	13:18	CFV	O	W
	13:21	CFV	O	W
	13:23	CFV	O	E
	13:25	CFV	O	W
	13:29	RPVb	O	W
	13:31	RPVb	O	E
	13:31	RPVs	O	E
	13:31	RPVs	O	E
	13:43	CFV	O	W
	13:44	CFV	O	W
	13:48	RPVb	O	W
	13:48	RSV	O	W
	13:48	CFV	O	W
	13:55	CV	O	W
	13:59	GPV	O	E
	14:01	CFV	O	W
	14:05	CFV	O	W
	14:05	CFV	O	W
	14:06	CFV	O	W
	14:06	TUG	O	W
	14:15	CFV	O	E
	14:18	CFV	O	W
	14:29	CFV	O	W
	14:30	CFV	O	E
	14:34	CFV	O	W
	14:37	CFV	O	W
	14:40	CFV	O	E
	14:41	CFV	O	E
	14:45	CFV	O	W
	14:45	CFV	O	W
	14:46	CFV	O	W
	14:46	CFV	O	W
	14:52	CFV	O	E
	14:55	RPVs	O	E
	14:56	CFV	O	W
	14:58	CFV	O	W
	15:06	CFV	O	E
	15:07	RSV	O	E
	15:15	RPVs	O	W
	15:15	CFV	O	W
	15:24	CCV	O	E
	15:24	CCV	O	E
	15:31	RPVb	O	E
	15:32	RPVb	O	W
	15:40	RPVs	O	W
	15:46	CFV	O	E
	15:53	RPVs	I	W
	15:56	CCV	O	E
	16:00	CFV	O	E
	16:01	CCV	O	W
	16:01	CCV	O	W
	16:05	CFV	O	E
	16:05	RSV	O	E
	16:08	CFV	O	W
	16:20	CFV	O	W
	16:22	CFV	O	E
	16:24	COL	O	E
	16:25	RSV	O	E
	16:25	RPVs	O	E
	16:26	RSV	O	E
	16:27	CFV	O	W
	16:36	COL	O	E
	16:38	CFV	O	W
	16:38	RPVs	O	E
	16:52	RPVb	O	E
	16:54	CCV	O	E
	16:55	RSV	O	W
	17:05	COL	O	E
	17:08	CFV	O	W
	17:09	CFV	O	W
	17:13	RPVs	O	E
	17:22	CFV	O	W
	17:58	CFV	O	W
	18:06	CFV	O	W
	18:11	RPVs	O	W
	18:42	CFV	O	W
	18:46	COL	O	W
	18:59	CFV	O	E
	18:59	CFV	O	E
	19:00	CCV	O	W
	19:05	CFV	O	W
	19:06	CCV	O	W
	19:10	CFV	O	E
	19:11	CFV	O	E
	19:22	CFV	O	E

Date	Time	Vessel	In/Out	Direction
	19:24	RPVs	O	E
14-Aug	9:49	RPVb	O	E
	9:53	RPVb	O	E
	10:02	TUG	O	W
	10:24	RPVb	O	W
	10:25	RSV	O	E
	10:29	RSV	O	E
	10:46	CFV	O	E
	10:55	CFV	O	E
	11:14	CFV	O	E
	11:24	CFV	O	E
	11:25	RPV	O	W
	11:39	CFV	O	E
	11:40	CFV	O	E
	11:41	CFV	O	E
	11:44	CFV	O	E
	11:46	GPV	O	W
	all zones obscured 12:00-16:15 rain			
	16:43	RPVb	O	E
	16:43	CFV	I	E
	16:45	CFV	I	E
	16:49	RPVb	O	E
	16:59	CFV	O	E
	17:36	COL	O	E
	18:08	CAR	O	E
	19:03	RSV	O	E
	19:50	CFV	O	E
15-Aug	8:11	CAR	O	E
	8:28	CFV	I	W
	8:47	CFV	O	E
	9:10	CAR	O	E
	9:41	CFV	O	E
	9:46	RPVs	O	E
	9:58	RPVs	O	W
	10:02	RPVs	O	W
	10:03	GPV	I	W
	10:08	CFV	I	E
	10:09	CCV	O	E
	10:24	RPVb	O	E
	10:25	PRV	O	E
	10:24	RPVs	O	E
	10:36	RPVb	O	W
	10:39	PRV	O	E
	10:40	CFV	O	E
	10:43	RPVb	O	W
	10:46	RPVs	O	E
	10:48	CFV	O	E
	10:50	RPVb	O	E
	10:50	RPVb	O	W
	10:50	RSV	O	W
	10:52	PRV	O	W
	10:52	CCV	O	W
	11:00	CCV	O	W
	11:00	CCV	O	W
	11:01	RPVs	O	W
	11:02	CFV	O	W
	11:25	TUG	I	E
	11:28	RPVb	I	E
	11:34	RPVs	O	E
	12:17	CFV	O	W
	12:22	RPVb	I	W
	12:42	RPVb	O	E
	12:49	RPVs	O	E
	12:55	CFV	I	W
	12:59	RPVs	O	W
	13:07	CCV	O	W
	13:09	RSV	O	E
	13:18	RPVs	O	W
	13:19	RPVb	O	E
	13:21	RPVb	O	W
	13:30	RSV	O	W
	13:38	RPVb	O	E
	13:39	RSV	O	E
	13:43	RPVb	O	W
	13:47	CFV	O	W
	13:57	RPVs	O	W
	14:13	RSV	O	E
	14:16	CFV	O	E
	14:17	CFV	O	E
	14:18	RPVs	O	E
	14:20	CFV	O	E
	14:26	CFV	O	E
	14:30	GPV	O	W
	14:31	CFV	O	W
	14:41	RPVb	O	E
	14:42	CFV	O	W
	14:42	RPVb	O	E
	14:53	RPVb	O	E
	14:52	CFV	O	E
	15:02	CFV	O	W
	15:02	RPVb	O	W
	15:06	RPVb	O	W
	15:16	CFV	O	E
	15:17	CFV	O	E
	15:19	CFV	O	E
	15:19	RPVb	O	E

Date	Time	Vessel	In/Out	Direction
	15:21	CFV	I	E
	15:38	TUG	O	E
	15:44	CCV	I	E
	15:45	RPVb	O	E
	15:46	CAR	O	W
	15:49	RPVs	O	W
	15:59	CFV	O	E
	16:11	CFV	O	E
	16:12	CFV	O	E
	16:15	RSV	O	E
	16:16	RPVb	O	E
	16:19	RPVs	O	W
	16:23	RPVs	O	W
	16:23	RSV	O	E
	16:36	COL	O	E
	16:42	CFV	O	E
	16:42	RPVb	O	E
	16:45	RPVb	O	E
	16:55	RSV	O	E
	16:55	TUG	O	W
	16:56	CFV	O	E
	16:57	CFV	O	E
	17:00	RSV	O	E
	17:13	RPVs	O	E
	17:17	TUG	O	E
	17:21	COL	O	E
	17:21	CFV	O	E
	17:25	CFV	O	E
	17:34	CCV	O	E
	17:35	CFV	O	E
	17:35	RSV	O	E
	17:35	RSV	O	E
	17:38	CFV	O	E
	19:20	CFV	O	W
	19:24	CFV	O	E
	19:32	CFV	O	E
	19:34	CFV	O	E
	19:35	CFV	O	E
	19:42	CAR	O	W
16-Aug	9:10	RPVs	I	E
	9:21	CFV	O	E
	9:22	CFV	O	E
	9:23	CFV	O	E
	9:24	CFV	O	E
	9:26	CFV	O	E
	9:28	CFV	O	E
	9:29	CFV	O	E
	9:30	CFV	O	E
	9:31	CFV	O	E
	9:32	CFV	O	E
	9:46	CAR	O	E
	9:53	CFV	O	E
	9:53	CFV	O	E
	10:02	CFV	I	E
	10:06	RSV	O	E
	10:07	CFV	O	E
	10:31	CFV	O	E
	10:36	CFV	O	E
	10:38	CFV	O	E
	10:40	CFV	O	E
	10:45	CFV	O	E
	10:47	CFV	O	E
	10:53	CFV	O	E
	10:54	CFV	O	E
	10:55	CFV	O	E
	10:59	CFV	O	E
	11:03	CFV	I	E
	11:12	CFV	O	E
	11:13	CFV	O	E
	11:14	RSV	O	W
	11:18	TUG	O	E
	11:21	CFV	O	E
	11:42	CFV	O	E
	11:43	CFV	O	E
	11:47	RSV	I	E
	11:50	CFV	O	E
	11:51	CFV	I	E
	12:00	CFV	O	E
	12:00	CFV	O	E
	12:05	CFV	O	E
	12:05	CFV	O	E
	12:13	CFV	O	E
	12:13	CFV	O	E
	12:23	CFV	O	E
	12:23	CFV	O	E
	12:25	CFV	O	E
	12:27	CFV	O	E
	12:28	RPVb	O	E
	12:35	CFV	I	E
	12:37	CFV	O	E
	12:39	CFV	O	E
	12:39	CFV	O	E
	12:40	CFV	O	E
	12:40	CFV	O	E
	12:46	CFV	I	W
	12:49	CFV	O	E

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	12:50	CFV	O	E
	12:56	RPVs	O	W
	13:00	CFV	O	E
	13:03	CFV	O	E
	13:05	CFV	O	E
	13:07	CCV	O	W
	13:08	CFV	O	E
	13:14	CFV	O	E
	13:19	CFV	O	E
	13:24	CFV	O	E
	13:25	CFV	O	E
	13:34	CCV	O	E
	13:37	CFV	O	E
	13:38	RPVs	O	E
	13:38	CFV	O	E
	13:43	RPVs	O	W
	13:45	CFV	I	E
	13:45	CFV	O	E
	13:49	CFV	O	E
	13:50	CFV	O	E
	13:50	CFV	O	E
	13:51	CFV	O	E
	13:51	CFV	O	E
	13:52	CFV	O	E
	13:53	CFV	O	E
	13:53	CFV	O	E
	13:55	RPVs	O	W
	13:56	CFV	O	W
	13:57	CFV	O	E
	13:59	CFV	O	E
	14:00	PRV	O	E
	14:07	CFV	I	E
	14:09	PRV	I	W
	14:13	CFV	O	E
	14:16	CFV	O	E
	14:16	CFV	O	E
	14:19	CFV	I	E
	14:21	CCV	O	E
	14:24	CFV	O	E
	14:25	RSV	O	E
	14:27	CFV	O	E
	14:31	CFV	O	E
	14:40	CFV	O	E
	14:41	CFV	O	E
	14:45	CFV	O	E
	14:48	CFV	O	E
	14:48	CFV	O	E
	14:47	CFV	O	E
	14:50	RPVs	O	W
	14:50	CFV	I	E
	14:51	RSV	O	W
	14:53	CFV	O	E
	14:58	CFV	O	E
	15:09	CCV	O	W
	15:15	CFV	O	W
	15:16	RPVs	O	W
	15:19	CFV	O	E
	15:21	CFV	O	E
	15:27	CFV	O	W
	15:29	CFV	O	W
	15:29	CFV	O	E
	15:30	RPVs	O	E
	15:31	CFV	O	E
	15:33	CFV	O	E
	15:33	CFV	O	E
	15:34	CFV	O	E
	15:35	CFV	O	E
	15:39	CFV	O	W
	15:39	CFV	O	W
	15:41	CFV	O	E
	15:44	CFV	O	E
	15:45	CFV	O	E
	15:47	CFV	O	W
	15:51	CFV	O	E
	15:57	CFV	O	E
	16:05	CFV	O	E
	16:13	RSV	O	E
	16:14	CFV	O	E
	16:15	CFV	I	E
	16:18	CFV	O	E
	16:19	RSV	O	W
	16:20	RSV	O	E
	16:23	RPVs	O	E
	16:24	CFV	O	E
	16:25	CFV	O	E
	16:27	CCV	O	E
	16:28	CFV	O	E
	16:29	RPVs	O	E
	16:29	RPVs	O	E
	16:30	CFV	O	E
	16:30	CFV	O	E
	16:30	RPVs	O	E
	16:36	CCV	O	W
	16:36	CFV	O	E
	16:37	CFV	O	E

Date	Time	Vessel	In/Out	Direction
	16:37	RPVb	O	E
	16:37	RPVb	O	E
	16:38	RPVs	O	W
	16:38	RPVs	O	W
	16:39	CFV	O	E
	16:39	CFV	O	E
	16:41	RPV <sub>3</sub>	O	W
	16:41	CFV	O	W
	16:44	CFV	O	W
	16:47	CFV	O	W
	16:48	CFV	O	W
	16:50	CFV	O	W
	16:51	CFV	O	W
	16:56	GPV	I	W
	16:59	CFV	O	E
	17:05	RPV	O	W
	17:11	CFV	O	E
	17:14	CFV	O	E
	17:14	CFV	O	W
	17:15	CFV	O	W
	17:18	RSV	O	W
	17:20	CFV	O	W
	17:28	CFV	O	W
	17:29	CFV	O	W
	17:40	CFV	O	W
	17:40	CFV	O	W
	17:46	CFV	O	W
	17:49	CFV	O	W
	17:49	CFV	O	W
	17:53	CFV	O	W
	17:56	CFV	O	E
	18:13	COL	O	E
	18:24	COL	O	E
	18:26	CV	O	E
	18:39	CFV	O	E
	18:40	CFV	O	E
	18:58	CFV	O	E
	18:59	CFV	O	E
	18:59	CFV	O	E
	19:00	CFV	O	E
	19:03	CFV	O	E
	19:29	CAR	O	E
	19:33	CFV	O	E
	19:36	CFV	O	E
	19:46	CFV	O	E
	19:55	CFV	O	E
	20:00	CAR	O	E
	20:01	CFV	O	E
17-Aug	8:31	CFV	I	E
	9:01	CFV	O	E
	9:06	RPVb	O	E
	9:06	PSV	O	E
	9:09	CFV	O	E
	9:10	RSV	O	E
	9:11	CFV	O	E
	9:13	CFV	O	E
	9:14	CFV	O	E
	9:57	RSV	O	W
	10:04	CCV	O	E
	10:10	CCV	O	E
	10:20	CFV	O	E
	10:21	CFV	O	E
	10:22	RPVs	O	E
	10:22	RPVb	O	W
	10:25	CFV	O	E
	10:32	RSV	O	E
	10:34	CFV	I	W
	10:42	CFV	O	W
	10:48	RPVb	O	E
	10:48	CFV	O	E
	10:51	CFV	O	E
	10:56	CFV	I	W
	11:06	RPVs	I	E
	11:08	TUG	O	E
	11:17	RPVs	O	E
	11:19	CFV	I	W
	11:23	RKG(3)	O	E
	11:27	CFV	O	E
	11:28	CFV	I	E
	11:30	RSV	O	E
	11:31	RSV	O	E
	11:36	TUG	O	W
	11:36	CFV	O	E
	11:37	CFV	O	E
	11:44	TUG	O	W
	11:47	RPVs	O	E
	11:48	TUG	O	W
	11:52	RSV	O	E
	11:55	CFV	I	E
	11:57	RPVs	I	E
	12:11	CFV	O	W
	12:15	CCV	O	W
	12:19	PRV	O	E
	12:23	RPVs	O	E
	12:24	RPVs	O	E
	12:35	RPVb	O	E
	12:35	RKG	O	E

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	12:36	CFV	O	E
	12:37	RSV	O	W
	12:42	CFV	I	E
	12:48	RPVs	O	W
	12:50	RPVb	O	W
	12:53	RPVb	O	E
	13:02	CFV	O	E
	13:07	CCV	O	W
	13:08	CCV	O	W
	13:08	RPVb	O	E
	13:10	RPVb	O	E
	13:17	PRV	O	W
	13:23	CFV	O	W
	13:25	RSV	O	W
	13:40	RPVb	O	E
	12:40	RKG(2)	O	W
	13:49	CFV	I	E
	13:49	RPVb	O	E
	13:53	RSV	O	E
	14:16	RPVb	O	E
	14:16	RPVb	O	E
	14:27	CCV	O	E
	14:41	CFV	I	E
	14:43	RSV	O	E
	14:43	RPVb	O	W
	14:47	RSV	O	E
	14:50	RKG(1)	O	E
	14:50	RSV	O	E
	15:15	RSV	O	E
	15:17	CFV	O	E
	15:17	RPVs	O	W
	15:18	CFV	O	E
	15:22	RSV	O	W
	15:23	CFV	O	E
	15:23	CFV	O	E
	15:26	CFV	O	E
	15:27	CFV	I	E
	15:30	CFV	O	E
	15:31	RPVb	O	W
	16:14	RPVb	I	E
	16:31	CFV	I	E
	16:35	CFV	I	E
	16:36	CAR	O	W
	16:44	CFV	O	W
	16:44	CFV	O	E
	16:45	RPVs	O	E
	16:45	RPVs	O	E
	16:46	RPVs	O	E
	16:49	RPVs	O	E
	16:51	RPVs	O	E
	17:09	RPVb	O	E
	17:56	RKG(1)	O	E
	18:03	RKG(1)	O	W
	18:07	RPVs	O	W
	18:08	CFV	O	E
	18:13	RSV	O	E
	18:15	TUG	O	E
	18:18	CFV	O	E
	18:22	COL	O	E
	18:29	CAR	O	W
	18:31	CCV	O	E
	18:41	TUG	O	E
	18:42	CFV	O	E
	18:51	TUG	O	W
	18:56	COL	O	E
	19:07	CFV	I	E
	19:10	CFV	I	E
	19:17	RPVs	O	W
	19:21	RPVs	O	E
	19:41	CFV	O	E
	19:44	CFV	O	E
	19:45	RPVs	O	W
18-Aug	8:11	CFV	O	E
	8:11	CFV	O	W
	8:28	CFV	O	W
	8:32	CFV	O	W
	8:35	COL	O	E
	8:44	RKG(1)	I	E
	8:44	RKG(1)	I	E
	8:44	RKG(1)	I	E
	8:45	CFV	O	W
	8:50	CFV	I	W
	9:45	CFV	O	W
	10:10	RPVb	O	E
	10:11	CFV	I	W
	10:15	CFV	O	W
	10:15	CFV	O	W
	10:21	CFV	O	W
	10:30	RPVs	O	E
	10:30	CFV	I	W
	10:41	CFV	O	E
	10:45	CFV	O	W
	10:45	CFV	O	W
	11:20	CFV	O	E
	11:25	RSV	O	W

Date	Time	Vessel	In/Out	Direction
	11:35	CFV	O	W
	11:42	RSV	O	W
	11:50	RSV	O	W
	11:55	CFV	O	E
	12:10	CFV	O	W
	12:15	CFV	O	W
	12:42	CFV	O	W
	12:52	TUG	O	E
	12:58	CFV	O	W
	13:09	CFV	I	W
	13:09	CV	O	W
	13:14	RPVb	O	W
	13:16	CFV	I	E
	13:20	RPVs	O	W
	13:21	CFV	O	W
	13:21	CFV	O	W
	13:22	CFV	O	W
	13:44	CFV	O	W
	13:47	CFV	I	W
	14:01	CFV	O	E
	14:36	RSV	O	W
	15:02	CFV	I	W
	15:05	TUG	O	E
	15:06	CFV	I	W
	15:08	CFV	O	E
	15:28	CFV	O	W
	15:28	CFV	O	W
	16:00	CAR	O	W
	16:09	PRV	O	W
	16:19	CFV	O	W
	16:25	CFV	O	W
	16:28	CFV	O	W
	16:37	CFV	O	W
	16:49	TUG	O	E
	17:13	CFV	O	W
	17:30	COL	O	W
	17:41	CFV	O	E
	17:47	CFV	O	E
	17:53	CFV	O	E
	18:04	CFV	O	E
	18:12	COL	O	E
	18:28	CFV	O	W
	18:59	CFV	O	W
	18:59	CFV	O	W
	18:59	CFV	O	W
	19:04	CFV	O	W
	19:08	CFV	O	W
	19:08	CFV	O	W
	19:12	CFV	O	W
	19:12	CFV	O	W
	19:13	CFV	O	W
	19:16	CFV	O	W
	19:20	CFV	O	W
	19:21	CFV	O	W
	19:22	CFV	O	W
	19:22	CFV	O	W
	19:22	CFV	I	W
	19:23	CFV	O	W
	19:23	CFV	O	W
	19:25	CFV	O	W
	19:30	CFV	O	W
	19:30	CFV	O	W
	19:31	COL	O	E
	19:44	CFV	O	W
	19:44	CFV	O	W
	19:50	CFV	O	W
	19:56	CFV	O	W
19-Aug	8:05	CAR	O	E
	8:06	CFV	O	E
	8:07	CFV	O	W
	8:10	TUG	O	E
	8:15	RPVb	O	E
	8:16	CFV	I	W
	8:18	CFV	I	E
	8:18	CFV	I	E
	8:20	CFV	O	E
	8:22	CFV	O	E
	8:22	CFV	O	E
	8:26	CFV	O	E
	8:29	RPVb	O	E
	8:29	CFV	I	W
	8:30	RPVb	O	E
	8:33	CFV	O	W
	8:47	CFV	O	W
	8:49	CFV	O	W
	9:09	CFV	O	W
	9:16	CFV	O	E
	9:20	CFV	O	W
	9:20	CFV	O	W
	9:38	RPVs	O	E
	9:41	RPVb	O	E
	9:43	RSV	O	E
	9:46	RSV	O	E
	9:50	CFV	I	W
	10:07	CFV	O	E
	10:17	RPVb	O	E

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	10:17	RPVb	O	W
	10:17	CFV	O	W
	10:18	CFV	O	E
	10:19	CFV	O	E
	10:29	CFV	O	W
	10:33	CFV	O	E
	10:38	CFV	O	E
	10:38	CFV	I	E
	10:39	CFV	O	E
	10:45	CFV	O	W
	10:48	CFV	I	E
	10:53	RPVs	O	E
	10:54	CFV	I	E
	10:56	CFV	I	E
	11:00	CFV	I	W
	11:05	CFV	I	W
	11:08	CFV	O	W
	11:08	RPVb	I	W
	11:08	CFV	O	W
	11:13	CFV	O	E
	11:14	TUG	O	E
	11:14	CFV	O	E
	11:16	RPVb	O	E
	11:17	CFV	I	E
	11:17	CFV	I	E
	11:18	CFV	O	W
	11:22	RPVb	O	E
	11:30	CFV	I	W
	11:36	RPVs	O	E
	11:36	RPVs	O	E
	11:39	TUG	O	E
	11:43	CCV	O	W
	11:48	RKG(1)	O	W
	11:52	CAR	O	E
	11:53	CFV	I	E
	11:54	CFV	O	E
	12:01	CFV	O	W
	12:03	CFV	O	E
	12:04	RPVb	O	E
	12:12	RPVs	O	W
	12:22	RSV	O	E
	12:25	RPVs	O	E
	12:26	TUG	O	W
	12:28	CFV	O	E
	12:28	RSV	O	W
	12:29	CFV	I	W
	12:30	CFV	O	E
	12:30	CFV	O	E
	12:47	CFV	O	W
	12:54	RPVs	I	E
	12:55	RPVb	O	E
	13:00	CFV	O	E
	13:00	CFV	O	E
	13:08	CFV	I	E
	13:12	CFV	O	W
	13:25	CFV	O	E
	13:30	CFV	O	E
	13:31	CFV	O	E
	13:37	RPVb	O	E
	13:46	RSV	O	E
	13:47	CAR	O	E
	13:49	CFV	I	E
	13:50	RPVs	O	W
	13:56	TUG	O	W
	14:08	CFV	O	E
	14:26	RPVs	O	W
	14:48	RPVs	O	E
	14:49	RSV	O	E
	14:58	CFV	O	W
	15:02	CFV	O	E
	15:05	CFV	O	E
	15:12	CFV	I	E
	15:25	CFV	I	E
	15:30	CFV	I	E
	15:36	RPVb	O	W
	15:47	RPVs	O	W
	15:58	CFV	I	E
	15:59	CFV	I	E
	16:05	RSV	O	W
	16:06	CFV	O	E
	16:06	CFV	O	W
	16:09	CFV	O	W
	16:10	CFV	O	W
	16:20	RPVs	O	E
	16:27	RPVb	O	E
	16:30	CFV	O	E
	16:34	CFV	O	E
	16:43	TUG	O	E
	16:44	COL	O	E
	16:50	TUG	O	E
	16:51	TUG	O	W
	16:52	RPVs	O	W
	16:57	RPVs	O	W
	17:01	RPVb	O	W
	17:30	CFV	O	E
	17:47	CFV	I	E

Date	Time	Vessel	In/Out	Direction
	17:51	CFV	O	W
	18:00	RPVs	I	E
	18:10	RPVs	O	E
	18:14	CFV	O	W
	18:15	CFV	O	E
	18:17	CFV	O	E
	18:17	CFV	O	E
	18:18	CFV	O	E
	18:20	CFV	O	E
	18:25	CFV	O	E
	18:30	CFV	O	W
	18:30	CFV	I	E
	18:31	CFV	I	W
	18:40	CFV	O	E
	18:44	CFV	O	E
	18:45	CFV	O	E
	18:45	CFV	O	E
	18:46	CFV	O	W
	18:46	RPVs	O	E
	18:50	CFV	O	W
	18:51	CFV	O	E
	18:52	CFV	O	E
	18:52	CFV	O	E
	19:00	CFV	I	E
	19:01	CFV	I	E
	19:03	CFV	O	W
	19:10	CFV	O	E
	19:12	RPVb	O	E
	19:20	CFV	O	E
	19:21	CFV	O	E
	19:21	COL	O	E
	19:22	RPV	O	E
	19:30	CFV	O	E
	19:40	CFV	O	E
	19:41	CFV	O	W
	19:41	CFV	O	E
	19:50	CFV	O	E
	19:57	CFV	I	E
	19:59	RPV	O	E
20-Aug	8:00	CFV	I	E
	8:03	RPVb	O	E
	8:05	CFV	O	E
	8:06	CFV	I	E
	8:10	CFV	O	E
	8:12	CFV	O	E
	8:14	CFV	O	E
	8:26	CFV	O	E
	8:29	RSV	O	W
	8:31	CFV	O	E
	8:58	CFV	I	E
	8:59	RPVb	O	E
	9:05	CFV	I	E
	9:10	CFV	I	E
	9:18	CFV	I	E
	9:20	CFV	I	E
	9:31	CFV	I	E
	9:45	RPVb	O	E
	9:58	CFV	I	E
	9:59	CFV	I	E
	9:59	RPVb	O	E
	10:02	CFV	O	W
	10:08	COL	O	W
	10:08	CFV	O	E
	10:26	RSV	O	W
	10:30	TUG	O	W
	10:41	CFV	I	E
	10:44	CFV	O	W
	10:51	CFV	I	E
	10:55	CAR	O	W
	10:57	CFV	I	E
	10:59	CFV	O	E
	10:59	CFV	O	E
	11:00	RPVs	O	E
	11:01	CFV	O	E
	11:10	CFV	O	E
	11:14	CFV	O	W
	11:26	RSV	O	E
	11:28	GPV	O	E
	11:50	CFV	I	W
	11:55	CFV	I	W
	12:01	CFV	I	E
	12:10	CFV	O	E
	12:11	CFV	O	E
	12:12	CFV	O	E
	12:18	CFV	I	E
	12:20	CFV	O	E
	12:31	CFV	I	E
	12:32	CFV	O	E
	12:35	CFV	O	E
	12:41	RPVb	O	W
	12:42	RPVb	O	W
	12:42	RPVb	O	E
	12:44	RSV	O	E
	12:45	CFV	O	W
	12:50	TUG	O	W
	12:50	CFV	I	E

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	13:06	TUG	O	E
	13:10	CFV	O	W
	13:11	RPVs	I	E
	13:14	RPVb	O	W
	13:15	TUG	O	W
	13:19	CCV	O	W
	13:20	CFV	I	E
	13:27	CFV	O	W
	13:32	CFV	O	E
	13:46	CFV	I	E
	13:55	RPVb	O	E
	13:57	CFV	I	E
	14:00	CFV	I	E
	14:02	CFV	O	E
	14:07	CFV	I	E
	14:11	CFV	O	E
	14:15	CFV	I	E
	14:17	CFV	O	E
	14:39	CFV	O	E
	14:40	CFV	O	E
	14:41	CFV	O	W
	14:42	CFV	O	E
	14:42	CFV	I	E
	15:01	CFV	I	E
	15:02	CFV	O	W
	15:13	CFV	O	E
	15:15	RSV	I	E
	15:32	CCV	O	E
	15:36	CFV	O	W
	15:41	CFV	O	E
	15:56	RPVs	O	E
	16:27	CFV	I	E
	16:27	CFV	O	E
	16:32	CFV	O	E
	16:33	CFV	I	W
	16:36	CFV	I	E
	16:37	CFV	O	W
	16:40	RPVs	I	E
	16:41	RPVs	I	E
	16:42	CFV	O	W
	16:43	CFV	O	E
	16:46	COL	O	E
	16:46	CFV	O	E
	16:56	RPVb	O	W
	16:56	CFV	O	E
	16:57	CFV	O	E
	16:57	CFV	O	E
	16:59	CFV	I	E
	17:02	CCV	O	E
	17:06	CFV	I	E
	17:10	CCV	O	W
	17:12	RPVb	O	W
	17:25	CFV	O	E
	17:32	CFV	O	E
	17:34	CFV	O	E
	17:48	RPVb	O	W
	17:55	CFV	O	E
	18:08	CCV	O	W
	18:14	CFV	I	E
	18:20	RPVs	I	E
	18:25	CAR	O	W
	18:27	CFV	O	E
	18:31	RPVs	O	W
	18:34	CFV	I	W
	18:46	COL	O	W
	18:49	CCV	O	W
	19:01	CFV	O	E
	19:10	CFV	I	W
	19:10	CFV	O	E
	19:11	RPVs	O	E
	19:12	CFV	O	E
	19:13	CFV	O	E
	19:16	CFV	O	E
	19:17	COL	O	E
	19:20	CFV	O	W
	19:21	CFV	I	E
	19:23	TUG	O	E
	19:25	CFV	I	E
	19:38	TUG	O	E
	19:42	CFV	O	E
	19:50	CFV	O	W
	19:50	CFV	O	E
	19:51	CFV	O	E
	19:53	CFV	O	E
	19:57	CFV	O	E
21-Aug	08:00 - 09:33 Foc			
	9:39	CFV	O	E
	9:47	CFV	O	E
	9:48	CFV	O	E
	9:51	RPVb	O	E
	9:52	RPVs	O	E
	9:53	CFV	I	W
	9:55	RPVb	O	E
	10:00	CFV	I	E
	10:07	RPVb	O	W

## APPENDIX D4 - VESSEL TRAFFIC DATA

Date	Time	Vessel	In/Out	Direction
	10:16	RPVb	O	E
	10:23	CFV	O	E
	10:25	CCV	O	E
	10:31	RPV <sub>3</sub>	O	E
	10:35	CFV	I	E
	10:39	CFV	O	E
	10:40	CCV	O	E
	10:50	CFV	I	E
	10:51	RPVs	O	W
	10:52	CFV	I	E
	10:55	CCV	O	E
	10:56	RPVs	O	E
	11:05	RPVb	O	E
	11:05	RSV	O	E
	11:10	RPVb	O	E
	11:11	CCV	O	W
	11:14	CFV	O	E
	11:22	CFV	O	E
	11:30	RPVb	O	E
	11:30	RPVs	O	W
	11:31	CCV	O	W
	11:36	CFV	I	E
	11:38	CFV	O	E
	11:55	CFV	O	E
	11:56	CFV	I	W
	11:59	RSV	O	E
	12:02	CFV	I	W
	12:10	CFV	I	E
	12:11	CFV	O	E
	12:20	RPVb	O	E
	12:37	CFV	O	E
	12:39	CFV	O	E
	12:40	CFV	O	E
	12:40	RPVb	O	E
	12:50	TUG	O	E
	12:51	CFV	I	E
	12:57	RKG	O	E
	12:57	RPVb	O	E
	13:06	RPVs	O	E
	13:09	CFV	I	E
	13:10	TUG	O	E
	13:13	CFV	O	E
	13:16	CFV	O	E
	13:19	CFV	O	E
	13:29	RPVs	I	W
	13:37	CFV	O	W
	13:38	CFV	O	W
	13:40	CFV	O	W
	13:58	RPVb	O	E
	14:06	RPVb	O	E
	14:09	CFV	I	E
	14:12	TUG	O	E
	14:26	CFV	O	E
	14:38	CFV	O	W
	14:39	CFV	I	W
	14:44	CFV	O	W
	14:45	CFV	I	E
	14:50	CFV	I	E
	14:50	CFV	I	E
	15:00	CFV	I	W
	15:01	CFV	O	E
	15:03	CV	O	E
	15:04	CFV	I	E
	15:05	CFV	O	E
	15:15	CFV	O	W
	15:16	CFV	I	W
	15:24	RPVb	O	E
	15:34	CFV	O	E
	15:35	PRV	I	E
	15:39	CFV	O	E
	15:42	CFV	I	E
	15:42	CFV	O	E
	15:43	CFV	I	E
	15:51	CFV	O	W
	15:54	CFV	I	W
	16:04	CFV	I	E
	16:04	CFV	I	E
	16:14	CFV	I	E
	16:14	CFV	O	E
	16:15	RSV	O	E
	16:26	CFV	I	E
	16:27	CCV	O	E
	16:45	CFV	O	E
	16:50	CFV	O	E
	16:58	CFV	I	E
	17:03	CFV	I	E
	17:05	CCV	O	W
	17:07	CFV	I	W
	17:09	RSV	O	W
	17:26	RPVb	O	E
	18:40	RPVb	O	E
	18:40	TUG	O	W
22-Aug	8:00-10:10 study area not visible due to fog			
	10:10	CFV	O	W
	10:11	TUG	O	E
	10:11	RPVb	O	W

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
10:12-10:50 study area not visible due to fog				
	10:50	CFV	O	E
	10:56	CFV	I	W
	11:01	CFV	I	W
	11:05	CFV	O	E
	11:10	CFV	I	W
	11:13	CFV	O	E
	11:16	CFV	O	W
	11:21	RPVb	O	E
	11:25	CFV	O	W
	11:30	RSV	O	E
	11:30	RSV	O	E
	11:35	GPV	O	W
	11:44	CFV	I	W
	11:50	GPV	O	W
	11:57	CFV	I	E
	12:07	CFV	O	E
	12:08	RSV	O	W
	12:09	CFV	O	E
	12:10	GPV	I	W
	12:14	RPVs	O	E
	12:15	CFV	I	W
	12:21	CFV	O	W
	12:23	RSV	O	E
	12:25	TUG	O	W
	12:30	CFV	I	E
	12:30	CFV	O	W
	12:41	CFV	O	E
	12:43	CFV	O	W
	12:50	CFV	O	E
	12:51	GPV	O	E
	12:51	CFV	I	W
	13:05	RPVs	O	E
	13:06	RPVs	I	W
	13:07	GPV	O	E
	13:07	RPVs	O	E
	13:08	RPVs	O	E
	13:16	RPVs	O	W
	13:22	CFV	I	E
	13:27	CFV	I	W
	13:34	RSV	O	E
	13:35	RPVb	O	E
	13:35	RPVs	I	E
	13:39	CFV	I	W
	13:46	RPVs	O	E
	13:54	CFV	I	W
	13:55	CFV	I	W
	13:56	CFV	I	W
	14:04	CFV	I	W
	14:11	RPVb	O	E
	14:12	CFV	I	W
	14:13	RPVs	O	E
	14:14	CFV	I	W
	14:21	CFV	I	W
	14:27	CFV	I	E
	14:29	TUG	O	E
	14:30	CFV	I	W
	14:30	CFV	I	E
	14:32	CFV	I	W
	14:35	CFV	I	E
	14:35	CFV	I	W
	14:36	CFV	I	W
	14:44	RSV	O	E
	14:46	CFV	I	W
	14:47	RPVb	O	E
	14:48	RPVs	O	E
	14:50	CFV	I	W
	15:04	CFV	I	E
	15:11	CFV	I	E
	15:20	RKG	O	W
	15:29	CFV	I	E
	15:37	CFV	I	W
	15:39	CFV	I	W
	15:41	RPVb	O	E
	15:43	CFV	O	W
	15:45	RPVs	O	E
	15:46	RPVb	O	W
	15:50	CFV	I	E
	15:51	CFV	I	W
	15:57	CFV	I	E
	16:00	CFV	I	W
	16:02	CFV	I	E
	16:05	RPVs	O	W
	16:07	GPV	O	E
	16:10	CFV	I	W
	16:11	CFV	I	W
	16:14	CFV	I	W
	16:17	CFV	I	W
	16:30	CFV	I	W
	16:32	CFV	I	W
	16:33	RSV	O	E
	16:38	CFV	O	E
	16:39	CFV	O	E
	16:52	CFV	O	E
	16:57	CFV	I	E
	16:58	CFV	I	E

Date	Time	Vessel	In/Out	Direction
	17:00	CFV	I	W
	17:13	CFV	O	E
	17:24	RPVs	O	W
23-Aug	8:05	CFV	O	E
	8:06	TUG	O	W
	8:10	RPVs	I	E
	8:15	CFV	O	E
	8:18	CFV	O	E
	8:32	RPVb	O	E
	8:51	RPVb	O	E
	9:04	RPVb	O	E
	9:15	RPVs	O	E
	9:32	CFV	O	E
	9:41	RSV	O	W
	9:52	CFV	I	E
	10:03	TUG	O	E
	10:15	CFV	O	W
	10:17	CFV	O	E
	10:32	RPVs	I	E
	10:38	RPVb	O	E
	10:45	RSV	O	E
	10:52	CFV	O	E
	11:05	RPVb	O	E
	11:15	RSV	I	E
	11:17	RPVb	O	E
	11:25	RPVb	O	W
	11:26	RPVb	O	E
	11:34	TUG	O	W
	11:35	CFV	O	E
	11:42	RPVb	O	W
	11:46	RPVb	O	E
	11:48	TUG	O	E
	11:51	RPVb	O	E
	12:11	CFV	O	W
	12:20	RSV	O	W
	12:21	RSV	O	E
	12:21	RPVb	O	E
	12:22	RPVs	O	E
	12:25	CFV	O	E
	12:25	CFV	O	E
	12:25	CFV	O	E
	12:27	CFV	I	E
	12:56	RSV	O	E
	13:10	RSV	O	E
	13:16	CFV	O	W
	13:35	CFV	O	W
	13:41	CFV	I	E
	13:47	RSV	O	W
	13:51	RPVb	O	E
	13:51	RPVb	O	E
	13:56	CFV	O	W
	13:59	RPV	O	E
	14:15	CCV	O	E
	14:22	CCV	O	E
	14:28	CCV	O	E
	14:29	RSV	O	E
	14:32	RSV	O	E
	14:36	CCV	O	W
	14:43	RSV	O	E
	14:47	CFV	I	E
	14:51	CFV	O	W
	14:56	RPVs	O	W
	15:02	CFV	O	E
	15:06	CFV	O	W
	15:20	CFV	I	E
	15:30	CCV	O	E
	15:32	CFV	I	E
	15:38	RPVb	O	E
	15:38	CFV	I	E
	15:44	RPVs	I	W
	15:44	CFV	O	E
	15:47	RSV	I	E
	15:56	CFV	O	W
	15:59	CCV	O	E
	16:05	CFV	O	W
	16:09	CFV	O	E
	16:15	RPVb	O	E
	16:18	RPVs	O	E
	16:47	CFV	O	E
	16:47	CFV	O	W
	16:48	CFV	O	W
	16:50	CFV	O	E
	16:51	RPVs	O	E
	16:55	RSV	O	E
	16:58	RPVs	O	W
	17:05	RSV	O	W
	17:10	CFV	I	E
	17:20	CFV	O	E
	17:20	TUG	O	E
	17:24	CFV	O	E
	17:31	RPVs	O	W
	17:41	CFV	I	E
	17:45	CCV	O	W
	17:50	CFV	I	E
	17:50	CFV	I	E
	17:51	CFV	I	E

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	17:54	CFV	I	E
	18:05	CFV	I	E
	18:07	CCV	O	W
	18:11	RSV	O	W
	18:11	CCV	I	W
	18:20	CFV	O	W
	18:46	CFV	O	W
	18:50	CFV	O	E
	19:02	COL	O	E
	19:20	CAR	O	E
	19:50	CFV	O	E
	19:59	CFV	I	E
24-Aug	8:05	CFVI	I	W
	8:10	CFVI	I	W
	8:12	CFVI	I	W
	8:14	CFVI	I	E
	8:15	CFVI	I	W
	8:16	CFVI	I	E
	8:16	CFVI	I	W
	8:16	CFVI	I	E
	8:20	CFVI	I	E
	8:30	CFVI	I	W
	8:32	CFVI	I	E
	8:32	CFVI	I	W
	8:35	CFV	O	E
	8:37	CFV	O	E
	8:37	CFVI	I	W
	8:45	CFVI	I	W
	8:46	CFV	O	E
	8:50	CFV	I	E
	8:55	CFVI	I	E
	9:00	CFV	O	W
	9:00	CFVI	I	E
	9:10	CFVI	I	W
	9:11	RPVb	O	W
	9:12	CCV	O	E
	9:12	RSV	I	W
	9:15	RPVb	O	E
	9:16	CFVI	I	W
	9:16	CFVI	I	W
	9:17	CFV	O	W
	9:18	CFVI	I	E
	9:18	CFVI	I	W
	9:20	RPVb	O	E
	9:21	CFVI	I	W
	9:30	CFVI	I	E
	9:31	CFVI	I	E
	9:35	CFVI	I	E
	9:40	CFVI	O	E
	9:55	RPVb	O	E
	9:56	CFV	I	W
	9:59	CFVI	O	E
	10:10	TUG	O	E
	10:15	CFVI	I	W
	10:23	CFVI	I	W
	10:28	CFVI	I	W
	10:28	CFV	O	E
	10:29	CFVI	I	E
	10:30	CFVI	I	E
	10:31	CFVI	I	W
	10:36	RPVb	O	E
	10:40	CFVI	O	W
	10:44	CFV	I	E
	10:47	RPV	O	E
	10:53	RPV	O	E
	10:54	RPV	O	E
	10:56	GPV	I	E
	10:59	CFV	O	E
	11:00	CPV	O	E
	11:04	CFV	O	E
	11:05	CFV	I	W
	11:08	CFV	O	E
	11:09	RPVb	O	E
	11:13	RPVs	O	E
	11:16	RPVb	O	E
	11:18	CFV	I	W
	11:19	CFV	O	E
	11:19	CFV	O	E
	11:21	RPV	O	E
	11:23	RSV	O	W
	11:23	CFV	I	E
	11:25	CFVI	I	E
	11:34	CFV	O	W
	11:38	CFVI	I	E
	11:43	CFVI	I	E
	11:45	CFV	O	W
	11:51	CAR	O	W
	11:52	RPVs	O	W
	11:59	RPVs	O	E
	12:10	CFVI	I	W
	12:12	RPVb	O	W
	12:18	RPVs	O	W
	12:23	CFVI	I	W
	12:28	CFVI	I	E
	12:34	CFV	I	W
	12:50	CFV	O	E

Date	Time	Vessel	In/Out	Direction
	13:02	RPVb	O	E
	13:02	CFV	O	E
	13:03	CFV	O	E
	13:04	RPVb	O	E
	13:15	CFV	O	E
	13:15	CFV	O	E
	13:15	CCV	O	W
	13:16	CFV	O	E
	13:17	CFV	O	E
	13:25	CFV	I	E
	13:29	CFV	I	E
	13:29	CFV	I	E
	13:40	CFVI	I	E
	13:44	CFV	I	E
	13:45	RPVs	O	E
	13:51	CFV	I	E
	13:54	CFV	I	E
	13:54	CFV	I	W
	13:56	CAR	O	E
	14:12	RSV	O	E
	14:27	CFV	O	W
	14:35	CFV	I	E
	14:39	CFV	I	E
	14:40	CPV	I	E
	14:45	TUG	O	W
	14:50	CFV	O	E
	14:53	CFV	O	E
	14:55	RSV	O	W
	15:09	CFV	O	E
	15:11	CFV	O	E
	15:14	CFV	O	E
	15:22	RSV	O	E
	15:23	RPVb	O	E
	15:34	CFVI	I	E
	15:36	RPVb	O	E
	16:11	CFVI	I	E
	16:14	CFVI	I	W
	16:27	CFV	I	W
	16:36	CFVI	I	W
	16:38	CFVI	I	W
	16:47	CFVI	I	W
	16:55	CFVI	I	E
	17:03	RPVb	O	E
	17:05	CFV	O	E
	17:16	CFV	O	W
	17:16	CFV	I	E
	17:22	CCV	O	E
	17:26	CFVI	I	W
	17:28	CFV	O	E
	17:30	CFV	O	W
	17:34	CAR	O	W
	17:35	CFVI	I	E
	17:36	PRV	O	E
	17:36	CCV	O	E
	17:57	CCV	O	E
	18:15	RSV	O	E
	18:16	CFVI	I	W
	18:19	CFVI	I	W
	18:21	CFVI	I	W
	18:30	CFV	I	W
	18:48	CFVI	I	W
	18:48	CCV	O	W
	19:01	CFVI	O	W
	19:03	CFVI	I	W
	19:05	CFVI	I	W
	19:19	CFVI	I	W
	19:22	CCV	O	W
	19:50	CFVI	I	W
	19:59	CFVI	I	W
25-Aug	8:05	CFVI	I	E
	8:19	CFVI	I	E
	8:30	CFVI	I	E
	8:40	CFVI	I	W
	8:41	CFVI	O	E
	8:43	RSV	O	E
	8:57	CFVI	O	E
	9:13	CFVI	I	E
	9:19	CFVI	I	W
	9:20	CFVI	I	E
	9:21	RPVs	O	E
	9:25	CFVI	I	W
	9:37	TUG	O	W
	9:39	RPV	O	E
	9:56	CFVI	I	E
	10:01	CFV	O	E
	10:06	RPVb	O	E
	10:11	RPVs	I	W
	10:12	RSV	O	E
	10:12	RSV	O	E
	10:31	CCV	O	E
	10:33	CFVI	I	W
	10:38	CFVI	O	E
	10:40	CFV	O	E
	10:40	CFVI	I	W
	10:43	CCV	O	E
	10:45	CFV	O	E

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	10:46	CFV	O	W
	10:47	RSV	O	W
	10:48	CFV	O	E
	11:05	RPVb	O	W
	11:09	RSV	O	E
	11:11	CFVI	I	W
	11:19	CFVI	I	E
	11:20	RPVs	O	W
	11:28	RPVb	O	E
	11:32	TUG	O	E
	11:34	RPVs	O	W
	11:39	RPVb	O	W
	11:46	CFV	O	E
	11:47	RPVs	O	W
	11:48	CFV	O	W
	11:53	RPVb	O	E
	11:59	CCV	O	E
	12:01	RSV	I	E
	12:05	RSV	O	W
	12:06	CFVI	I	E
	12:07	RSV	O	E
	12:10	RSV	O	E
	12:17	CFVI	I	E
	12:36	RSV	O	E
	12:40	CFVI	I	W
	12:41	CFVI	I	W
	12:50	RPVb	O	W
	12:59	CCV	O	W
	13:00	RPV	O	E
	13:02	RPV	O	W
	13:05	CCV	O	W
	13:10	RKG	O	W
	13:10	RKG	O	W
	13:11	CFVI	I	W
	13:12	CFVI	I	W
	13:13	RPVb	O	E
	13:31	CFV	O	W
	13:35	RPVb	O	E
	13:37	RPVb	O	E
	13:37	CCV	O	W
	13:40	RPVs	O	W
	13:49	RPVs	O	W
	13:49	CFVI	I	E
	13:50	CFVI	I	E
	14:09	CFV	I	E
	14:09	CFV	O	E
	14:09	CFVI	I	W
	14:13	RSV	O	E
	14:27	RSV	O	E
	14:27	COL	O	E
	14:52	RPV	O	E
	15:12	RSV	O	E
	15:15	RSV	O	E
	15:17	CFV	O	E
	15:20	RSV	O	E
	15:20	CFVI	I	W
	15:29	CFVI	I	E
	15:39	CFVI	I	W
	15:47	RPVs	O	W
	15:50	RSV	O	E
	16:05	CFVI	I	W
	16:13	CFV	O	E
	16:13	CFV	O	E
	16:15	CFVI	I	E
	16:15	RPVb	O	W
	16:17	CFV	I	E
	16:18	RPVb	O	W
	16:25	CFV	O	W
	16:30	RSV	I	W
	16:40	CFVI	I	E
	16:44	GPV	O	E
	16:59	CFV	O	E
	16:59	CFV	O	E
	17:30	CFVI	I	E
	17:32	CFVI	I	W
	17:40	TUG	O	E
	17:48	CFVI	I	E
	17:50	CFVI	I	E
	17:58	CFVI	I	E
	18:01	RPVs	I	W
	18:10	CFVI	I	E
	18:25	RPVb	O	E
	18:26	RPVs	O	E
	18:26	RPVs	O	E
	18:27	CFVI	I	E
	18:55	CFV	O	E
	18:56	RPVs	O	E
	18:58	CFV	O	E
	19:01	RPVs	O	E
	19:10	CFVI	I	W
	19:11	COL	O	E
	19:15	CFVI	I	W
	19:40	CFVI	I	W
	19:50	CFV	O	E
	19:52	TUG	O	E
	19:57	CFVI	O	E

Date	Time	Vessel	In/Out	Direction
26-Aug	8:01	CFV1	I	E
	8:07	CFV1	I	E
	8:21	RPVb	O	E
	8:28	COL	O	W
	8:32	RPVs	O	E
	8:33	CFV1	I	W
	8:42	CFV	O	E
	8:45	CFV	I	E
	8:46	CFV	O	E
	8:49	CFV1	I	W
	8:54	RPVs	O	E
	8:55	CFV1	I	W
	8:58	CFV1	I	E
	9:01	GPV	O	E
	9:02	CFV1	I	E
	9:03	RPVb	O	E
	9:06	TUG	O	E
	9:06	CFV1	I	W
	9:09	CFV1	I	E
	9:10	RPVb	O	W
	9:17	CFV1	I	W
	9:24	CFV1	I	E
	9:25	RPVs	O	W
	9:28	CFV1	I	E
	9:35	CCV	O	E
	9:49	GPV	O	W
	9:51	RPVb	O	E
	9:53	RPVb	O	W
	9:53	CFV1	I	W
	10:05	CFV	O	W
	10:06	CCV	O	E
	10:08	CFV1	I	W
	10:10	RPVs	O	E
	10:30	CFV1	I	W
	10:30	CFV1	I	W
	10:33	RSV	O	E
	10:34	CFV	O	E
	10:36	CFV	O	E
	10:47	CFV1	I	E
	10:57	CFV1	I	W
	10:58	RPVs	O	W
	11:08	CFV	O	E
	11:10	CFV1	I	E
	11:20	RPVs	I	E
	11:22	CFV1	I	W
	11:28	RPVs	O	W
	11:35	CCV	O	W
	11:40	TUG	O	W
	11:44	CFV1	I	W
	11:45	CFV1	I	W
	11:47	RPVs	O	E
	11:58	CFV	O	W
	11:59	RSV	O	E
	12:07	CFV1	I	W
	12:10	CFV	O	E
	12:15	CFV1	I	E
	12:18	CFV1	I	E
	12:24	TUG	O	E
	12:24	CFV	I	W
	12:33	CFV1	I	E
	12:43	TUG	O	E
	12:57	RPVb	O	E
	12:58	CFV1	I	W
	13:00	TUG	O	W
	13:02	CFV	I	W
	13:12	CCV	O	W
	13:13	CFV1	O	W
	13:13	GPV	I	E
	13:22	CAR	O	W
	13:24	CFV1	I	W
	13:30	RPVb	O	E
	13:32	RPVs	O	W
	13:37	RPVs	O	W
	13:39	CFV	I	E
	13:42	RSV	O	W
	13:52	CFV1	I	W
	14:06	CFV	O	W
	14:07	CFV1	I	E
	14:14	CFV	O	W
	14:26	CFV	I	W
	14:30	COL	O	E
	14:58	CFV1	O	E
	14:59	CFV	O	E
	15:06	CFV1	I	W
	15:21	COL	O	E
	15:23	CFV	O	W
	15:25	RSV	O	E
	15:28	GPV	O	W
	15:47	CFV	I	E
	15:54	CFV	I	E
	15:59	CFV	I	E
	16:09	CFV	O	W
	16:12	RSV	O	E
	16:19	CFV	O	W
	16:22	CFV	I	E
	16:43	CAR	O	W

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	17:10	CFV1	I	W
	17:11	CFV	O	E
	17:12	CFV	O	E
	17:13	CFV	O	E
	17:18	RPVb	O	W
	17:19	CFV1	I	W
	17:20	TUG	O	W
	17:28	CFV	O	W
	17:35	CFV	O	W
	17:35	CFV	O	W
	17:46	TUG	O	E
	17:48	CFV1	I	E
	18:24	RSV	O	E
	19:04	CFV1	I	W
	19:36	CFV	O	W
27-Aug	8:02	CFV	I	W
	8:17	CFV1	I	W
	8:20	CFV	O	E
	8:31	CFV	O	E
	8:32	CFV	O	E
	8:38	CFV	O	W
	8:40	CFV	I	W
	8:45	CFV	O	W
	8:58	CCV	O	E
	8:58	CFV	O	W
	9:01	CFV	O	E
	9:34	COL	O	W
	9:45	GPV	I	E
	9:56	RPVs	O	E
	10:01	CCV	O	E
	10:03	CCV	O	E
	10:05	CFV	I	E
	10:06	RSV	O	E
	10:09	CFV1	I	E
	10:11	RPVb	O	E
	10:11	CFV	I	W
	10:12	GPV	I	W
	10:17	CFV	I	E
	10:17	CCV	O	W
	10:18	CFV	I	W
	10:19	CCV	O	W
	10:19	CCV	O	W
	10:21	RSV	O	W
	10:23	RPVb	O	E
	10:29	CFV	O	W
	10:30	CFV	O	E
	10:33	CFV	I	E
	10:40	CFV1	I	E
	10:40	CFV1	I	W
	10:43	CFV	O	E
	10:43	CFV	O	E
	10:44	CCV	O	E
	10:44	RSV	O	E
	10:46	CFV1	I	W
	10:56	RPVb	O	W
	11:01	CFV1	I	W
	11:04	CCV	O	W
	11:14	CFV	I	W
	11:14	CFV	I	W
	11:18	CFV	O	E
	11:24	CFV	O	E
	11:26	RSV	O	E
	11:33	CFV1	I	W
	11:55	CFV	O	E
	12:01	RPVb	O	E
	12:01	CFV	I	W
	12:02	CFV	O	W
	12:04	CFV	I	W
	12:05	RSV	O	E
	12:06	CFV	O	W
	12:09	CFV	O	E
	12:09	CFV1	I	E
	12:14	RSV	O	E
	12:20	CFV	I	W
	12:23	CFV	O	E
	12:24	CFV	O	W
	12:24	CFV	I	E
	12:28	CFV	I	W
	12:29	CFV	I	W
	12:29	CFV	O	W
	12:35	CFV	O	W
	12:40	CFV	O	E
	12:42	CFV	O	E
	12:42	CFV1	I	E
	12:53	CFV	O	E
	12:58	CFV	I	E
	12:58	CFV	I	W
	13:01	RPVs	O	E
	13:02	CFV	I	E
	13:03	CFV	O	W
	13:06	CFV1	I	E
	13:06	CFV	O	E
	13:07	CCV	O	W
	13:11	CFV	I	E
	13:23	CFV	I	W

Date	Time	Vessel	In/Out	Direction
	13:23	CFV	I	W
	13:23	CFV	I	W
	13:25	CFVI	I	W
	13:27	CFVI	I	W
	13:28	CFV	I	E
	13:34	CFV	O	E
	13:34	CFV	O	W
	13:34	CFV	I	E
	13:42	CFV	O	E
	13:42	RPVb	O	E
	13:43	CFV	I	E
	13:53	CFV	I	W
	13:53	RSV	O	E
	13:55	CFV	O	W
	14:03	CFV	O	W
	14:05	RPVb	O	E
	14:08	CFV	O	EW
	14:08	CFV	O	W
	14:09	CFV	O	E
	14:12	CFV	O	E
	14:12	CFV	O	W
	14:19	CFV	I	E
	14:22	CFV	O	W
	14:28	CV	O	E
	14:29	CFV	O	E
	14:30	CFV	O	W
	14:37	CFV	O	E
	14:47	CFV	O	EE
	14:47	CFV	O	E
	14:51	CFV	I	W
	14:52	CFV	I	W
	14:52	CFV	I	W
	14:52	CFV	O	E
	15:02	CFV	I	E
	15:05	CFV	I	W
	15:06	CFV	I	W
	15:11	COL	O	E
	15:17	RSV	O	E
	15:22	CFV	I	E
	15:23	RPVb	O	E
	15:24	CCV	O	EE
	15:26	CFV	O	EE
	15:28	CFV	I	E
	15:33	COL	O	E
	15:34	CFV	I	WE
	15:35	CFV	I	WE
	15:37	CFV	I	W
	15:39	RSV	O	E
	15:40	CFV	I	E
	15:42	COL	O	E
	15:51	CFV	I	W
	15:52	RPVs	O	EE
	15:55	CFV	O	E
	15:55	CFV	I	E
	15:56	CFV	I	E
	15:56	CFV	O	E
	15:56	RSV	O	W
	16:09	CFV	O	EE
	16:09	CFV	O	E
	16:11	CFV	I	EE
	16:18	CFV	O	EE
	16:24	CFV	O	EE
	16:28	RPVb	O	EE
	16:31	CFV	O	EE
	16:35	CFV	O	EE
	16:39	CFV	O	W
	16:42	CFV	O	E
	16:42	CFV	I	E
	16:47	RPVb	O	W
	16:56	CFV	O	E
	16:59	CFV	O	E
	17:00	RPVs	O	W
	17:11	CFV	I	E
	17:13	CFV	O	W
	17:20	CFV	I	W
	17:20	CFV	I	EE
	17:24	CFV	O	W
	17:27	CFV	O	E
	17:30	CFV	I	E
	17:33	CFV	I	W
	17:40	RPVs	I	E
	17:48	CFV	I	EE
	17:49	CFV	O	E
	17:49	CFV	I	W
	17:52	CFV	I	E
	17:53	CFV	O	W
	17:53	CFV	I	E
	17:55	CFV	O	E
	17:57	CFV	I	E
	17:57	CFV	O	W
	18:12	CFV	I	W
	18:15	CFV	O	E
	18:20	CFVI	I	W
	18:20	CFV	I	W
	18:21	CFV	O	E

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	18:25	CFV	O	E
	18:25	CFV	I	W
	18:30	CFV	I	E
	18:34	CFV	I	E
	18:35	CFV	O	W
	18:50	RPVs	O	E
	18:57	CFV	O	E
	18:57	CFV	O	E
	19:09	CFV	O	W
	19:11	CFV	O	W
	19:12	CFV	O	W
	19:17	CFV	I	W
	19:26	CFV	O	E
	19:28	CFV	O	W
	19:29	CFV	O	E
	19:31	CFV	O	E
	19:31	CFV	O	E
	19:31	CFV	O	W
	19:48	CFV	O	E
	19:49	CFV	I	E
	19:49	CFV	I	E
	19:51	CFVi	O	E
28-Aug	8:00 - 10:29 FOG			
	10:30	CFV	O	W
	10:31	TUG	O	W
	10:35	CFV	I	W
	10:37	CFV	O	E
	10:38	CFV	O	E
	10:50	CFV	O	W
	10:51	CFV	O	W
	10:51	CFV	O	W
	10:54	CFV	I	E
	11:00	CFV	I	E
	11:02	CFV	O	E
	11:07	CV	O	W
	11:09	CFV	O	W
	11:10	CFV	O	E
	11:11	RSV	O	E
	11:11	CFV	O	E
	11:11	CFV	O	W
	11:20	CFV	O	W
	11:20	CAR	O	W
	11:22	RPVb	O	E
	11:23	CFV	O	E
	11:26	RPVb	O	E
	11:28	CFV	O	W
	11:44	CFV	O	E
	11:44	TUG	O	W
	11:48	CFV	O	E
	12:07	RPVs	O	E
	12:07	RPVb	O	W
	12:09	RPVb	O	E
	12:10	CFV	I	E
	12:13	CFV	O	E
	12:15	RPVb	O	E
	12:17	RPVb	O	E
	12:18	CFV	I	E
	12:23	RPVb	I	E
	12:25	TUG	O	E
	12:38	CFV	I	E
	12:42	CFV	O	E
	12:42	GPV	O	W
	12:43	CFV	O	E
	12:43	CFV	O	E
	12:45	RPVb	O	E
	12:45	CFV	O	E
	12:48	CFV	O	E
	12:49	RPVb	O	W
	12:54	RPVb	O	E
	12:55	CFV	I	E
	13:05	CFVs	O	E
	13:06	CCV	O	E
	13:08	CFV	I	E
	13:09	CFVs	O	W
	13:10	CFV	O	E
	13:21	CFV	I	W
	13:24	CFV	I	E
	13:26	CFVs	O	W
	13:26	CFV	O	W
	13:35	RPVb	O	W
	13:40	CFV	I	E
	13:41	CFVs	O	E
	13:42	CFV	O	E
	13:42	CFV	I	E
	13:47	CFV	O	E
	13:54	CFV	O	E
	14:08	RPV	O	E
	14:13	GPV	I	E
	14:23	CFV	O	E
	14:30	CFV	O	E
	15:05	CFV	O	W
	15:12	CCV	I	E
	15:20	CFV	O	E
	15:22	CFV	O	E
	15:26	CFV	I	E
	15:32	CCV	O	W

Date	Time	Vessel	In/Out	Direction
	15:35	CFV	O	E
	15:36	CRV	O	W
	15:41	CFV	O	E
	15:43	CFV	O	W
	15:47	RPVb	I	W
	15:54	RPVb	O	E
	16:00	CCV	O	E
	16:01	RPVb	O	E
	16:01	CRV	I	W
	16:04	RPVs	I	E
	16:05	CFV	I	E
	16:06	CFV	I	W
	16:06	CCV	O	W
	16:16	CFV	O	E
	16:17	CRV	O	W
	16:17	RPVs	O	E
	16:20	CFV	O	E
	16:25	CFV	I	E
	16:26	RPVs	O	W
	16:32	CFV	O	E
	16:40	CFV	O	E
	16:40	CFV	O	E
	16:43	CFV	O	E
	16:50	CFV	O	E
	16:55	CFV	O	E
	16:57	CFV	O	W
	16:58	CFV	O	E
	17:00	CFV	O	E
	17:05	TUG	O	W
	17:10	CFV	I	W
	17:14	CFV	I	W
	17:20	CCV	O	E
	17:21	CFV	O	E
	17:25	CAR	O	W
	17:26	RSV	O	E
	17:28	CFV	I	W
	17:30	CFV	O	W
	17:31	CFV	I	W
	17:31	CFV	I	W
	17:40	CFV	I	E
	17:41	CFV	I	E
	17:46	CFV	O	W
	17:47	CFV	I	W
	17:51	CCV	O	W
	17:51	CFV	I	E
	17:52	CFV	I	W
	18:00	CFV	I	W
	18:08	RPVb	O	W
	18:10	CFV	I	W
	18:11	CFV	I	W
	18:12	TUG	O	E
	18:14	CFV	I	E
	18:15	GPV	O	W
	18:15	CFV	O	W
	18:16	CFV	I	E
	18:16	CFV	I	W
	18:17	CFV	I	W
	18:17	CFV	I	W
	18:20	CFV	I	E
	18:21	CFV	I	E
	18:22	CFV	O	E
	18:25	CFV	I	E
	18:26	CFV	O	E
	18:26	CFV	O	E
	18:29	RSV	O	E
	18:30	CFV	O	E
	18:43	CFV	I	W
	18:45	RPVs	O	E
	18:45	CFV	I	E
	18:50	CFV	O	E
	19:10	CCV	O	W
	19:12	CFV	I	W
	19:16	CFV	I	W
	19:17	CFV	O	W
	19:18	CFV	O	E
	19:20	CFV	O	E
	19:21	TUG	O	W
	19:35	CFV	O	E
	19:40	CCV	O	W
	19:40	CFV	O	E
	19:50	CFV	I	E
	19:51	CFV	I	E
	19:55	CFV	I	E
29-Aug	8:00	CFV	O	E
	8:05	CFV	I	W
	8:10	CFV	I	E
	8:10	CFV	O	E
	8:12	CFV	O	E
	8:15	CFV	O	W
	8:16	CFV	I	E
	8:17	CFV	I	W
	8:17	TUG	O	W
	8:37	GPV	O	E
	8:44	RPVs	I	E
	8:44	CFV	O	E
	8:46	CFV	O	W

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	9:50	RPV	O	E
	8:56	CFV	I	E
	8:59	RSV	O	E
	8:59	CFV	I	W
	9:07	CFV	I	W
	9:11	CFV	O	W
	9:11	CFV	O	W
	9:12	CFV	I	E
	9:13	CFV	O	W
	9:15	CFV	I	W
	9:25	GPV	O	W
	9:26	CFV	I	W
	9:28	CCV	O	E
	9:40	CFV	O	E
	10:05	CFV	O	W
	10:10	CFV	O	W
	10:11	CFV	O	E
	10:12	CFV	O	E
	10:15	CFV	O	E
	10:20	CFV	O	E
	10:21	CFV	O	E
	10:34	CCV	O	E
	10:50	CFV	I	W
	10:55	CCV	O	W
	10:58	CFV	O	E
	10:58	CCV	O	E
	11:35	RSV	O	W
	11:36	CFV	I	E
	11:40	CCV	O	W
	11:45	CCV	O	W
	11:45	RPVb	O	W
	11:45	RPVs	O	W
	11:46	CFV	O	E
	11:46	CFV	I	E
	11:50	CFV	O	W
	11:05	CFV	I	E
	11:51	CFV	O	W
	11:52	CFV	O	E
	12:02	CFV	I	E
	12:05	RPVb	O	W
	12:07	CFV	O	E
	12:09	CFV	O	E
	12:10	CFV	O	E
	12:12	CFV	O	E
	12:15	CFV	O	E
	12:15	CFV	O	E
	12:22	RSV	O	E
	12:25	CFV	O	W
	12:35	CFV	O	E
	12:38	CFV	O	E
	12:38	CFV	O	W
	12:40	RPVb	O	E
	12:42	RSV	O	E
	12:44	CFV	O	E
	12:45	CFV	O	E
	12:50	RPVb	I	W
	12:51	CFV	I	E
	13:00	CCV	I	W
	13:01	CAR	O	E
	13:01	CFV	I	E
	13:02	COL	O	E
	13:05	CFV	O	E
	13:10	RPVb	O	E
	13:20	CFV	O	E
	13:20	CFV	O	E
	13:21	CFV	O	E
	13:22	RPVs	O	E
	13:30	CFV	O	E
	13:31	CFV	O	W
	13:32	CFV	O	E
	13:32	CFV	O	E
	13:33	CFV	O	E
	13:35	CFV	O	W
	13:39	CFV	I	W
	13:41	RPVb	O	E
	13:42	CFV	I	E
	13:44	RPV	O	W
	13:50	CFV	O	W
	13:51	RPV	O	E
	13:52	CFV	O	E
	13:53	CFV	I	W
	13:56	CFV	O	W
	14:00	TUG	O	W
	14:05	CFV	O	W
	14:05	CFV	I	E
	14:06	CFV	O	E
	14:12	CFV	O	E
	14:30	CFV	O	E
	14:36	RPVs	O	W
	14:41	CFV	I	W
	14:41	CFV	I	E
	14:42	RPVb	O	E
	14:43	CFV	I	W
	14:44	RPVs	O	W

Date	Time	Vessel	In/Out	Direction
	14:30	TUG	O	E
	14:50	CFV	I	W
	14:54	CFV	O	W
	14:56	CFV	O	E
	15:07	CAR	O	W
	15:10	CCV	O	E
	15:13	COL	O	E
	15:15	CFV	O	E
	15:26	CFV	I	E
	16:00	CFV	O	E
	16:01	RSV	I	E
	16:02	CFV	O	E
	16:15	CFV	O	W
	16:35	CFV	O	E
	16:36	CFV	O	W
	16:44	CFV	O	E
	16:50	CFV	I	E
	16:50	CFV	I	E
	16:51	CFV	O	E
	16:56	RKG(1)	O	E
	17:08	CFV	I	E
	17:09	CFV	I	W
	17:18	CFV	I	E
	17:25	RKG(1)	O	E
	17:26	CFV	O	E
	17:29	CFV	O	W
	17:37	CFV	I	E
	17:40	GPV	O	E
	17:50	CFV	I	W
	17:51	CFV	O	W
	17:53	CFV	I	E
	17:55	CFV	I	E
	18:05	CFV	O	W
	18:05	CFV	I	E
	18:05	CFV	I	E
	18:06	CFV	O	E
	18:10	CFV	I	W
	18:15	GPV	O	W
	18:16	CFV	O	E
	18:18	CFV	I	E
	18:19	CFV	I	E
	18:20	CFV	I	E
	18:22	CFV	I	W
	18:30	CFV	O	W
	18:35	CFV	I	W
	18:44	CFV	O	E
	18:59	CFV	O	E
	19:03	CFV	O	W
	19:05	CFV	O	W
	19:10	CFV	I	E
	19:14	CFV	I	E
	19:20	CFV	O	E
	19:28	CFV	O	E
	19:45	CFV	O	E
30-AUG	8:00	CFV	O	E
	8:05	CFV	I	E
	8:06	CFV	I	E
	8:14	CFV	O	E
	8:29	CFV	O	E
	8:31	CFV	O	E
	8:31	CFV	O	E
	8:34	CFV	I	E
	8:46	RKG(2)	O	E
	8:46	CFV	O	E
	9:10	CAR	O	E
	9:14	CFV	O	W
	9:16	CFV	I	E
	9:17	RSV	O	E
	9:31	CFV	O	W
	9:34	CFV	O	E
	9:44	CFV	I	W
	9:50	CFV	O	E
	10:02	CFV	I	E
	10:14	RPVs	O	E
	10:19	CFV	O	E
	10:23	CAR	O	E
	10:23	RKG(2)	O	W
	10:41	CFV	O	E
	10:43	CFV	O	E
	10:48	CCV	O	E
	10:56	CFV	I	W
	10:59	CFV	I	W
	10:59	CFV	O	E
	11:14	CFV	O	E
	11:15	RPVb	O	E
	11:16	CFV	O	E
	11:26	RPVb	O	E
	11:29	GPV	O	W
	11:30	RPVb	O	E
	11:31	RKG	O	W
	11:37	CFV	I	W
	11:42	RSV	O	E
	11:59	CFV	I	E
	12:02	RPVb	O	E
	12:05	CFV	O	E

Appendix B2 - Vessel Traffic Data

Date	Time	Vessel	In/Out	Direction
	12:05	CFV	O	W
	12:09	CAR	O	E
	12:10	RPVb	O	E
	12:12	CFV	O	E
	12:14	CFV	O	E
	12:15	CFV	O	E
	12:16	CFV	O	E
	12:19	CFV	O	E
	12:23	CFVI	I	W
	12:25	CAR	O	E
	12:28	RSV	O	E
	12:36	RSV	O	E
	12:37	CFVI	I	W
	12:55	CFV	O	E
	12:56	TUG	O	E
	13:04	CCV	O	E
	13:10	RSV	I	E
	13:11	CFV	O	E
	13:12	RPVb	O	E
	13:15	CFV	I	W
	13:20	CFV	I	E
	13:28	CFVI	I	E
	13:28	CCV	O	W
	13:29	RSV	O	E
	13:32	CFV	O	W
	13:35	RPVb	O	E
	13:40	RPVb	O	E
	13:40	RPVb	O	E
	13:50	CFV	O	E
	13:51	CFV	I	W
	13:59	RPVb	O	E
	14:06	RPVs	O	W
	14:20	RPVb	O	E
	14:26	RSV	O	E
	14:31	CFV	O	W
	14:35	CFV	O	E
	14:36	CCV	O	E
	14:40	CFV	O	E
	14:45	CFV	O	E
	14:50	CAR	O	E
	14:55	RPVs	I	E
	15:05	CCV	O	W
	15:06	RPVb	O	E
	15:11	RSV	O	E
	15:18	RPV	O	E
	15:35	CCV	O	E
	15:44	CFV	O	E
	15:45	RSV	O	E
	15:45	CFV	O	E
	15:48	RPVs	O	E
	15:50	RPVb	O	W
	15:52	RPVs	O	E
	15:52	RKG(1)	O	E
	15:55	CFV	O	E
	16:05	RPVs	O	E
	16:21	CCV	O	E
	16:49	GPV	I	W
	16:58	CFV	I	E
	17:00	CFV	O	E
	17:00	CFV	O	E
	17:01	CFV	I	W
	17:06	CCV	O	W
	17:08	CFV	O	W
	17:13	RSV	O	E
	17:23	COL	O	E
	17:29	CFVI	O	E
	17:30	CFV	O	W
	17:35	CFV	O	E
	17:36	TUG	O	W
	17:37	CFVI	O	E
	17:37	CCV	O	W
	17:39	RPVs	O	W
	17:40	RPVs	O	E
	17:41	CFV	O	E
	17:42	RPVs	O	E
	17:42	RPVs	O	W
	17:43	CCV	O	W
	17:43	CCV	O	W
	17:45	RSV	O	E
	17:49	RKG	O	W
	17:53	CFVI	I	E
	17:56	RPVb	O	W
	17:57	CFV	O	E
	17:57	RPVb	O	E
	17:59	CCV	O	E
	17:59	RSV	O	E
	18:02	RPVb	O	W
	18:03	CFVI	I	E
	18:05	CCV	O	W
	18:06	RPVs	O	W
	18:12	CCV	O	E
	18:19	CFV	O	E
	18:23	CFV	O	E
	18:25	GPV	O	W
	18:25	RPVs	O	W
	18:27	CAR	O	W

Date	Time	Vessel	In/Out	Direction
	18:29	CFV	O	W
	18:30	CFV	O	E
	18:35	CCV	O	W
	18:38	CFV	O	E
	18:40	CFV	I	W
	18:42	CFV	I	E
	18:50	CFV	O	E
	18:51	CFV	O	W
31-Aug	8:35	CFV	O	E
	9:28	CFV	O	E
	9:27	CFVI	I	E
	9:40	CFVI	I	E
	9:47	CFVI	I	EE
	9:50	CFV	I	EE
	9:56	CFVI	I	EE
	10:00	CFV	O	EE
	10:09	CFV	O	E
	10:14	CFV	O	E
	10:20	CFV	O	E
	10:20	CFV	O	E
	10:25	CFV	I	W
	10:28	CFV	I	E
	10:41	CFVI	I	E
	10:41	CFVI	I	W
	10:43	CFV	I	W
	10:55	CFV	O	E
	10:59	CFVI	I	EE
	11:01	CFVI	I	E
	11:05	CFVI	I	E
	11:06	CFVI	I	EE
	11:06	CFVI	I	EE
	11:07	CFVI	I	EE
	11:15	CFVI	I	E
	11:16	CFV	O	E
	11:18	CFV	O	E
	11:21	CFVI	I	EE
	11:23	CFVI	I	E
	11:29	TUG	O	W
	11:29	RPV	O	E
	11:41	CFVI	I	E
	11:49	CFVI	I	E
	11:51	CFVI	I	E
	11:52	CFV	O	E
	11:57	CFVI	I	EE
	11:59	CFV	O	EE
	12:10	CFV	O	E
	12:12	CFV	I	E
	12:13	CFV	I	E
	12:14	CFV	I	E
	12:17	CFV	O	E
	12:19	CFV	O	E
	12:21	CFV	O	E
	12:22	CFV	I	E
	12:31	CFV	O	E
	12:34	CFVI	I	W
	12:40	CFV	I	E
	12:47	CFV	O	E
	12:53	RPVb	O	W
	12:54	RSV	O	W
	12:54	CFV	O	E
	12:54	CFV	O	E
	12:58	CFV	O	E
	12:58	CFV	O	E
	13:02	CFV	O	E
	13:03	CFV	O	E
	13:08	CCV	O	W
	13:08	CFV	O	E
	13:09	CFV	I	E
	13:10	CFV	O	E
	13:13	RPVb	O	E
	13:13	CFV	O	E
	13:17	CFVI	O	E
	13:18	CFV	O	W
	13:25	CFVI	I	E
	13:25	CFV	O	E
	13:26	CFV	O	E
	13:28	CFV	O	E
	13:29	RPVb	O	E
	13:48	CFVI	I	E
	13:51	CFV	O	E
	13:52	GPV	O	E
	13:55	RPVb	O	E
	13:57	CFV	O	E
	14:00	CFV	O	E
	14:05	CFV	O	E
	14:08	GPV	O	E
	14:10	RPVs	O	E
	14:12	CFV	O	E
	14:12	CFV	O	E
	14:15	RPVb	O	E
	14:17	RPVb	O	W
	14:22	CFVI	I	E
	14:22	CFVI	I	E
	14:22	CFV	O	E
	14:34	CFV	O	E
	14:37	CFV	I	E

## APPENDIX C                    Warden Survey Data

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### Interpretive Notes:

#### A) Abbreviated Headings

WN = Warden number (vessel designation)  
 NP = Number of passengers contacted  
 Todays Dest. = Todays indicated destination  
 Trip Dest. = Planned ultimate destination  
 Accom. = Accommodations

Visitor Origin:	NI = North Island SI = South Island INT = International VA = Vancouver BC = B.C. (other) CN = Canada US = USA	Warden Survey:	IN = contact in Reserve PK = Prior knowledge of Reserve PV = Prior visits to area NE = Familiar with no entry policy KB = Knowledge of boundaries C = Compliance RO = Repeat Offender WI = Warning Issued

#### B) Day/Trip Destination & Launch Categories

TC: Telegraph Cove  
 AB: Alder Bay  
 KAIK: Kaikash Creek  
 PM: Port McNeill  
 PH: Port Hardy  
 KB: Kelsey Bay  
 GS: Georgia Strait  
 RB: Robson Bight  
 QCS: Queen Charlotte Strait  
 WJS: Western Johnstone Strait  
 EJS: Eastern Johnstone Strait  
 KI: Knight Inlet  
 BMP: Broughton Marine Park  
 NOTHER: Northern (north of Vancouver Island)  
 SOTHER: Southern (south of Chatham Point)  
 CIRCUM: Circumnavigating Vancouver Island  
 OTHER: self explanatory

#### C) Accommodation Codes

CAMP:	Camping
LOCAL:	Local Hotel/Motel
OB:	On Board Vessel
HOME:	self explanatory

#### D) NOTES

- 1) Locations were grouped in categories for summary purposes. More specific locations are often identified on the data sheets.
- 2) Survey information is not always complete due to reluctance of the contact to supply the information or the need for the warden to make another contact.

## 1995 Warden Survey Data

Alpena, Michigan Survey Data

Date	Time	Time Off	WN	CN	Contact	NP	Vessel Name	Vessel Type	Today's Dest	Trip Dst	Launch Point	Accom.	Vessel Origin						Comments	
													N	S	INT	VA	BC	CN	US	
26-Jun	8:00	18:00	W2	1	8:40	2	La Cigogne	RKG	RB	TC	EJS		FISH CR NT	Y	Y	N	N	N	N	camped on zone 3 beach
26-Jun	8:00	18:00	W2	2	14:30	25	Ecousseur	CCV	RB	EJS	WJS		WW CR NT	Y	Y	Y	Y	Y	N	contact made for info. purposes
26-Jun	8:00	18:00	W2	3	15:40	10	Saintons	RKG	RB	EJS	WJS		WW FISH CR NT	N	Y	Y	Y	Y	N	
27-Jun	8:00	19:00	W2	1	11:00	2	Wilderness	CCV	EJS	WJS	C		COM	N	Y	Y	Y	Y	N	supply trip. Sailcone Wilderness
27-Jun	8:00	19:00	W2	2	12:15	2	Fishing	/	RPV	WJS			WW FISH CR NT	Y	Y	Y	Y	Y	N	Fishing
27-Jun	8:00	19:00	W2	3	18:30	4	King Fisher	RKG	WJS	SOTHER	OB		WW FISH CR NT	Y	Y	Y	Y	Y	N	radio contact. Thought boundary 1 km from shore
27-Jun	10:00	15:30	W1	1	14:45	1		RKG	WJS	NOTHER	KB		WW FISH CR NT	Y	Y	Y	Y	Y	N	
28-Jun	8:00	19:30	W2	1	15:30	7	Skuia II	RPV	RB	NOTHER	OB		WW FISH CR NT	Y	Y	Y	Y	Y	N	
28-Jun	8:00	19:30	W2	2	16:00	3	Tiamma	RSV	BMP	NOTHER	TC		WW FISH CR NT	Y	Y	Y	Y	Y	N	
28-Jun	8:00	19:30	W2	3	17:30	5	Vanguard	RPV	RB	EJS	TC		WW FISH	N	Y	Y	Y	Y	N	
28-Jun	8:00	19:30	W2	4	17:35			RPV	WJS	*	OB		WW FISH	N	Y	Y	Y	Y	N	
29-Jun	8:00	15:00	W1	1	10:30	2	Invader	RPV	WJS	NOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
29-Jun	8:00	15:00	W1	2	11:30	2	Aldona	GPI	WJS	AB	OTW		WW FISH	Y	Y	Y	Y	Y	N	Aldonia fisheries guardian
29-Jun	8:00	15:00	W1	3	12:35	5		RPV	WJS	LH	2		WW FISH	Y	Y	Y	Y	Y	N	
29-Jun	8:00	15:00	W1	4	12:45	6	Spyshopper	CCV	WJS	AB			WW FISH	Y	Y	Y	Y	Y	N	
29-Jun	8:00	15:00	W1	5	12:55	1	Zia	RSV	WJS	NOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
29-Jun	8:00	15:00	W1	6	14:30	10	Northern Lights	RKG	PH	NOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
29-Jun	8:00	15:00	W1	7	15:30	2	Winnington	RPV	PH	SOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
30-Jun	8:00	17:00	W1	1	9:15	2	McReed	RPV	PM	CIRCUUM	OB		WW FISH	Y	Y	Y	Y	Y	N	
30-Jun	8:00	17:00	W1	2	10:05	4	Pat Dior	RSV	PH	EJS	TC		WW FISH	Y	Y	Y	Y	Y	N	
1-Jul	8:00	18:00	W2	1	8:45	2	Tatooch	RSV	PM	SOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
1-Jul	8:00	18:00	W2	2	9:30	4	The Beat Goes On	RSV	PM	NOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
1-Jul	8:00	18:00	W2	3	10:30	2	Sirocco II	RSV	PM	NOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
1-Jul	8:00	18:00	W2	4	10:35	2	Grady White	RPV	SOOTHER	TC	LH		WW FISH	Y	Y	Y	Y	Y	N	
1-Jul	8:00	18:00	W2	5	12:15	2		ALDER	OB				WW FISH	Y	Y	Y	Y	Y	N	staying close to shore due to high winds.
1-Jul	8:00	18:00	W2	6	14:30	3		RSV	PH	SOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
1-Jul	8:00	18:00	W2	7	15:30	3		RPV	PH	ALDER	C		WW FISH	Y	Y	Y	Y	Y	N	
1-Jul	8:00	18:00	W2	8	16:00	10		RPV	PH	TC	C		WW FISH	Y	Y	Y	Y	Y	N	
1-Jul	8:00	18:00	W2	9	16:45	3	Still Dreamin'	RSV	PH	SOOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
2-Jul	17:30	18:00	W1	1	17:45	3	Aquaria Mars	RPV	PH	SOOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
3-Jul	10:00	18:00	W1	1	10:45	3	Sharananda	RPV	PH	SOOTHER	LH		MOVING	Y	Y	Y	Y	Y	N	
3-Jul	10:00	18:00	W1	2	10:55	2	Simba	RPV	PH	SOOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
3-Jul	10:00	18:00	W1	3	11:30	2		QCS	WJS	WJS	C		WW FISH	Y	Y	Y	Y	Y	N	
3-Jul	10:00	18:00	W1	4	12:00	2		RPV	PH	TC	LH		WW FISH	Y	Y	Y	Y	Y	N	
3-Jul	10:00	18:00	W1	5	12:10	2		RKG	WJS	VAN	C		WW FISH	Y	Y	Y	Y	Y	N	
3-Jul	10:00	18:00	W1	6	12:25	3	Skuia II	RPV	KI	KI	LH		WW FISH	Y	Y	Y	Y	Y	N	
3-Jul	10:00	18:00	W1	7	14:30	7	Wild Heart	RKG	RPV	TC	C		WW FISH	Y	Y	Y	Y	Y	N	
3-Jul	10:00	18:00	W1	8	13:30	4	Calors	RPV	TC	PH	LH		WW FISH	Y	Y	Y	Y	Y	N	
3-Jul	10:00	18:00	W1	9	17:15	3	Silverwing	RPV	TC	TC	LH		WW FISH	Y	Y	Y	Y	Y	N	
4-Jul	9:00	17:30	W2	1	10:10	1	Costian	RSV	PH	NOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
4-Jul	9:00	17:30	W2	2	10:15	1	Monstree	RPV	PH	NOTHER	AB		WW FISH	Y	Y	Y	Y	Y	N	
4-Jul	9:00	17:30	W2	3	10:35	4	Argonauta	RPV	PH	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
4-Jul	9:00	17:30	W2	4	11:10	2		RPV	PH	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
4-Jul	9:00	17:30	W2	5	13:40	11	Northern Lights	RKG	TC	TC	C		WW FISH	Y	Y	Y	Y	Y	N	
4-Jul	9:00	17:30	W2	6	15:45	2	Yoho	RSV	PH	SOTHER	OB		WW FISH	Y	Y	Y	Y	Y	N	
4-Jul	9:00	17:30	W2	7	16:20	2		RPV	PH	SOTHER	PH		WW FISH	Y	Y	Y	Y	Y	N	
4-Jul	9:00	17:30	W2	8	17:00	2	Nikwax	RPV	PH	SOTHER	PM		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	1	10:45	2		RKG	WJS	WJS	C		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	2	12:30	6	Wild Heart	RKG	WJS	KAIK	C		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	3	13:45	3		RKG	PM	CIRCUUM	CR NT		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	4	13:55	3		RPV	KI	PH	OTW		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	5	16:00	2	Slimy	RSV	TC	TC	OB		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	6	16:20	3	Holter	RPV	TC	OB	CR		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	7	16:45	3	Gabriola	RKG	WJS	WJS	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	8	17:00	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	9	17:45	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	10	18:00	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	11	18:30	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	12	19:00	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	13	19:30	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	14	20:00	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	15	20:30	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	16	21:00	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	17	21:30	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	18	22:00	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	19	22:30	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	20	23:00	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	21	23:30	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	22	24:00	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	23	24:30	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	24	25:00	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	25	25:30	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y	Y	N	
5-Jul	8:00	18:00	W1	26	26:00	3		RPV	TC	TC	TC		WW FISH	Y	Y	Y	Y			

## 1995 Warden Survey Data

Date	Time	Time	WN	CN	Contact	NP	Vessel	Name	Type	Dest	Trip	Launch	Accom.	Vessel Origin	Reason for trip	Warden Survey						Comments									
																N	S	INT	V	BC	CN	US	IN	PK	PV	NE	KB	C	RO	W	
26-Jun	8:00	18:00	W2	1	8:40	2	Le Catoue	Ecousumer	CCV	RB	TC	OB	C	FISH CR NT	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
26-Jun					2:40	3	15:40	10	RKG	RB	OB	OB	C	WW FISH CR NT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
26-Jun														WW FISH CR NT																	
27-Jun	8:00	19:00	W2	1	11:00	2	Fishing	Wilderness	CCV	EJS	WJS	C	2	COM	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
27-Jun					12:15	3	CV-9	King Fisher	RPV	WJS	SOOTHER	PH	4	WW FISH CR NT	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
27-Jun	10:00	15:30	W1	1	14:45	1			RKG	WJS	SOOTHER	KB	2	CR	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	
27-Jun	15:00	W2	1	16:00	3	Tianna	Skua II	RPV	BMP	NOETHER	OB	1	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
28-Jun	8:00	19:00	W2	1	16:00	3	Vanguard	Whinington	RPV	WJS	SOOTHER	TC	3	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
28-Jun					17:30	4			RKG	WJS	SOOTHER	TC	2	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
29-Jun	8:00	15:00	W1	1	10:30	2	Invader	Alidona	GPV	WJS	AB	LH	2	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
29-Jun					11:30	2			RKG	WJS	AB	LH	5	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
29-Jun	12:35	5							RPV	WJS	AB	5	1	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
29-Jun	12:45	6							CCV	WJS	AB	5	1	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
29-Jun	12:55	7							RPV	WJS	AB	5	1	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
29-Jun	13:00	W2	1	14:30	10	Northern Lights	Zia	RSV	WJS	AB	5	1	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
29-Jun	13:30	2							RKG	WJS	AB	5	2	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
30-Jun	8:00	17:00	W1	1	9:15	2	McReed	McReed	RPV	WJS	AB	5	2	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
30-Jun	10:05	4							RSV	WJS	AB	5	4	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
1-Jul	8:00	18:00	W2	1	8:45	2	Taloch	The Seal Goss	RPV	WJS	AB	5	4	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
1-Jul					9:30	4			RSV	WJS	AB	5	4	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
1-Jul									RSV	WJS	AB	5	4	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
1-Jul									RSV	WJS	AB	5	4	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
1-Jul									RSV	WJS	AB	5	4	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
1-Jul									RSV	WJS	AB	5	4	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
1-Jul									RSV	WJS	AB	5	4	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
1-Jul									RSV	WJS	AB	5	4	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
2-Jul	17:30	18:00	W1	1	17:45	3	Aquila Mars	Silvwing	RPV	WJS	AB	5	4	WW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
3-Jul	10:00	18:00	W1	1	10:45	3	Lady Sharamonda	Sharamonda	RPV	WJS	AB	3	2	MOVING	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
3-Jul					10:55	2	Simba	Simba	RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul					11:30	2			QCS	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RKG	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul									RPV	WJS	AB	3	2	FISH CR	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
3-Jul																															

## Appendix C - warden survey data

11.VMF, 15-J5

Date	Time	Time Off	WN	CN	Contact	NP	Vessel Name	Vessel Type	Today's Dest	Trip Dest	Launch Point	Accom.	Vessel Origin				Reason for trip				Comments					
													N	SI	INT	VA	BC	CN	US	IN	PK	PW	NE	KB	C	RO
6-Jul			4	13:00	12	Wild Heart	RKG	RB	WJS	KAIK	C															
6-Jul			5	15:30	15	Northern Lights	RKG	RB	WJS	OB	C															
6-Jul			6	16:30	2	3rd Anniversary	RPV	RB	WJS	QCS	TC															
6-Jul			7	17:30	2	Mallot	RSV	AB	NOETHER	OTH	OB															
6-Jul			8	17:30	6	Mallo	RSV	AB	QCS	AB	OB															
6-Jul			9	17:35	3		OTH	WJS	NOETHER	EJS	OB														radio contact	
7-Jul	8:00		18:00	W2	1	11:00	3	RSV	PH	QCS	EJS	OB														
7-Jul			7	12:45	2	Calisto	RSV	AB	WJS	EJS	OB															
7-Jul			7	14:20	2	Marcus	RPV	RB	WJS	TC	OB															
7-Jul			7	14:30	1	Marcus	RSV	PM	PM	KB	OTH	1														
7-Jul			5	14:50	2	Palindrone	RPV	AB	JS	EJS	LH															
7-Jul			6	16:30	3		RSV	PM	CIRCUM	SOTHER	WJS	OB														
7-Jul			7	17:45	7	Sea Cat	RPV	WJS	OTH	WJS	OB															
8-Jul	8:00		18:00	W2	1	10:30	2	Annabella	RPV	PH	SOTHER	OB														
8-Jul			8	10:10	1	Comus	RSV	KB	OB	OB	OB															
8-Jul			3	12:10	1	Tsang	plane	RB	RB	PM	LH															
8-Jul			4	12:20	6	Fred & Lucy	RSV	TC	CIRCUM	EJS	OB															
8-Jul			5	14:15	4		RPV	WJS	OB	OB																
9-Jul	8:00		17:00	W1	1	9:30	2	Voljo	RPV	RB	AIDER	LH														
9-Jul			9	10:30	2	Wild Heart	RSV	RB	CIRCUM	TC	OB	C														
9-Jul			9	13:00	4	Illusion	RSV	PH	WJS	BMP	OB	OB														
9-Jul			9	15:05	2	Attala	RSV	WJS	OB	OB	OB															
9-Jul			10	15:15	2		RSV	OB	OB	OB	OB															
9-Jul			10	16:00	2	Takawala	RKG	EJS	SOTHER	WJS	OB	C														
10-Jul	8:00		20:00	W2	1	9:20	2	Seawind	RPV	RB	KAIK	C														
10-Jul			10	14:30	2		RSV	OB	OB	OB	OB															
11-Jul	8:00		20:00	W2	1	12:30	2	RKG	EJS	SOTHER	TC	C														
11-Jul			11	14:05	2	Airca	RSV	WJS	OB	OB	PH	OB														
11-Jul			11	14:25	2		RKG	KAIK	WJS	OB	TC	C														
11-Jul			11	14:30	4	Northern Lights	RKG	KAIK	WJS	OB	KAIK	C														
11-Jul			11	14:50	6		RKG	WJS	OB	OB	OB	OB														
11-Jul			11	15:15	4	Epinases	RPV	OB	OB	OB	OB															
11-Jul			11	15:25	8	Golden Eagle	RPVb	PH	WJS	OB	OB	OB														
11-Jul			9	18:00	2	Ayorama	RSV	EJS	WJS	OB	OB	OB														
11-Jul			10	18:45	2		RKG	WJS	OB	OB	KAIK	C														
12-Jul	12:30		20:30	WT	1	14:45	4	Marlin II	RPV	OB	CIRCUM	RB														
13-Jul	9:00		17:30	W1	1	10:30	2	Sunrise	RPV	WJS	OB	O														
13-Jul			13	11:38	2	Pacific Rim	RPV	WJS	OB	OB	KAIK	C														
13-Jul			13	12:30	3	Marques	RSV	PH	WJS	OB	OB	PH														
13-Jul			13	13:40	4	Anna Maria	RPV	WJS	OB	OB	OB	OB														
13-Jul			13	14:20	5		RKG	WJS	OB	OB	OB	OB														
13-Jul			13	14:35	6	Northern Lights	RKG	WJS	OB	OB	OB	OB														
14-Jul	9:00		18:30	W2	1	9:50	2	Konisberg	RPV	PH	NORTHER	OB														
14-Jul			14	9:55	2	Raven	RSV	PH	WJS	OB	NORTHER	ES														
14-Jul			14	12:30	3	Shandy II	RSV	AB	WJS	OB	NORTHER	EJS														
14-Jul			14	13:40	5	Falcon	CFV	EJS	SOTHER	WJS	OB	OB														
14-Jul			14	15:15	6	Orca	RPV	RB	WJS	OB	ALDER	C														
14-Jul			14	16:30	7	Marlin II	TUG	EJS	SOTHER	WJS	OB	OB														
15-Jul	8:00		19:00	W2	1	9:30	4	Marlin II	RPV	OB	WW COM	OB														
15-Jul			15	9:45	3	Gikumi	CCV	OB	WJS	OB	WW CR NT	Y														
15-Jul			15	12:45	4	Mandalay	RSV	OB	OB	OB	WW NT	Y														
15-Jul			15	13:15	4	Le Caique	CCV	OB	OB	OB	CR	Y														
15-Jul			15	13:45	5		OB	OB	OB	OB	OB	OB														

traveling with another boat which  
they informed  
sea choppy during contact  
seas choppy, brief contact.  
Campbell river DFO informed that  
fishing ok in reserve  
part of a group already contacted  
traveling with another boat which  
thought reserve was just the bright  
interior on board the Gikumi  
radio contact  
interior on board Le Caique  
between 15:00-15:30 in and out of  
the reserve 3 times took pictures

**Appendix C** Carderemo Survey

JM 15

Date	Time On	Time Off	CN	WN	Contact	NP Vessel Name	Vessel Type	Todays Dest	Trip Dest	Launch Point	Accom.	Vessel Origin					Warden Survey					Comments						
												NI	SI	INT	VA	BC	CN	US	IN	PK	PV	NE	KB	C	RO	WI		
15-Jul			6	14:30	4	Skookumchuck	RPV	RB	WJS	KI	OB							4	WW CR NT	N	Y	Y	Y	Y	N	N		
15-Jul			7	15:35	4		RPV	RB	WJS	SOTHER	OB							4	WW CR	N	Y	Y	Y	Y	N	N		
15-Jul			8	17:30	3	Racing Stallion	RPV	RB	WJS	ALDER	LH							3	WW FISH CR NT	N	Y	Y	Y	Y	N	N		
16-Jul	8:00		16:30	W2	1	Pipers Dream	RSV	RSV	RSV	CIRCUM	BMP	OB	2					CR	Y	N	Y	N	N	N	N			
16-Jul			2	9:30	2						OB							2	CR	Y	N	N	Y	N	N			
16-Jul			3	12:25	2	Orca	RKG	EJS	EJS	EJS	C	2						WW CR	Y	Y	Y	Y	N	N		passed through the reserve because of wind vessel did not stop or respond to radio		
16-Jul			4	15:00			RPV	TC	OB									WW CR NT	Y	Y	X	X	X	X	X			
17-Jul	8:00		17:30	W2	1	Flum Line	RSV	SOTHER	OB	OB								CR	Y	N	Y	N	N	N				
17-Jul			2	9:10	2		RPV	PM	SOTHER	OB							4	WW CR	Y	N	Y	N	N	N				
17-Jul			3	14:50	4	Hilmar	Rpvb	RKG	EJS	TC	LH	1						FISH	Y	N	Y	N	N	N				
18-Jul	8:00		20:00	W1	1	13:25	1	RPV	WJS	OB	TC	C	2					1	CR	Y	N	Y	N	N	N			
18-Jul			2	13:30	1		RKG	OB	OB	TC	C	2					WW CR	Y	N	Y	N	N	N					
18-Jul			3	14:05	2		RKG	WJS	WJS	TC	OB	2					CR	Y	N	Y	N	N	N					
18-Jul			4	16:00	18	Northern Lights	RKG	WJS	WJS	OB	OB	2					WW CR	Y	N	Y	N	N	N					
18-Jul			5	19:25	2	Columbia	Rpvb	RKG	WJS	WJS	OB	2					CR	Y	N	Y	N	N	N		radio contact			
19-Jul	8:00		19:30	W2	1	10:00	12	Ecosystem	RKG	OB	TC	C	2				9	WW CR	Y	Y	Y	Y	N	N		Interp on beach		
19-Jul			2	10:30	2		RKG	OB	OB	TC	C	2					WW CR FISH	Y	Y	Y	Y	N	N					
19-Jul			3	11:15	4		RPV	OB	OB	TC	C	2					WW CR FISH NT	N	Y	Y	Y	N	N					
19-Jul			4	12:30	2	Sea Quest	RPV	OB	OB	TC	C	2					CR	Y	N	Y	N	N	N		Initial radio contact then stopped			
19-Jul			5	13:30	3	Sea Sport	RPV	PH	PH	OB	OB	3					CR FISH	Y	N	Y	N	N	N					
19-Jul			6	13:45	5	Maorigal	RSV	WJS	WJS	OB	OB	5					WW CR	Y	N	Y	N	N	N					
19-Jul			7	14:00	2	ORYX	RSV	WJS	WJS	OB	OB	2					WW CR NT	N	Y	Y	N	N	N					
19-Jul			8	14:40	2	Top Dog	RPV	PM	SOTHER	OB	OB						CR	Y	N	Y	N	N	N					
19-Jul			9	15:00	3		RSV	OB	OB	TC	CLH	3					WW CR	Y	N	Y	N	N	N					
19-Jul			10	15:30	2	Lukwa	CCV	OB	OB	TC	CLH	2					WW FISH	N	Y	Y	N	N	N					
19-Jul			11	19:00	2		RPV	OB	OB	TC	OB	2																
20-Jul	10:00		20:00	W2	1	13:30	4	Skookumchuck	RPV	OB	OB						4	WW CR	Y	Y	Y	Y	N	N				
20-Jul			2	13:40	3		RPV	EJS	SOTHER	PM	OB						WW CR NT	Y	Y	Y	Y	N	N					
20-Jul			3	13:50	3		RPV	EJS	SOTHER	KI	CLH						WW FISH CR NT	Y	Y	Y	Y	N	N					
20-Jul			4	13:50	2		RPV	EJS	SOTHER	KI	CLH						WW FISH CR NT	Y	Y	Y	Y	N	N					
20-Jul			5	15:30	2		RPV	EJS	SOTHER	WJS	OB						WW FISH CR NT	Y	Y	Y	Y	N	N					
20-Jul			6	19:30	4		RPV	EJS	SOTHER	WJS	OB						WW CR NT	Y	Y	Y	Y	N	N					
21-Jul	13:00		15:30	W1	1	13:30	7	Sentinel II	RPV	OB	OB						7	OT	N	N	N	N	N	N				
21-Jul			8:00	20:00	W2	1	8:10	2	Valerosa	RPV	OB	WJS	C					WW CR NT	N	Y	Y	Y	N	N				
21-Jul			2	9:20	2		RPV	OB	OB	WJS	OB						WW CR	N	Y	Y	Y	N	N					
21-Jul			3	9:40	2	Reel Easy	RPV	OB	OB	WJS	OB						FISH CR	N	Y	Y	Y	N	N					
21-Jul			4	10:00	2		RPV	OB	OB	WJS	OB						QCS	N	Y	Y	Y	N	N					
21-Jul			5	11:10	2		RSV	EJS	SOTHER	WJS	OB						WJS	N	Y	Y	Y	N	N					
21-Jul			6	11:20	2		RPV	EJS	SOTHER	OB	OB						AB	N	Y	Y	Y	N	N					
21-Jul			7	13:30	2	Hot Reel	RPV	OB	OB	WJS	OB						WJS	N	Y	Y	Y	N	N					
21-Jul			8	14:35	4		RPV	OB	OB	WJS	OB						LH	4	2	FISH CR	N	N	N					
21-Jul			9	15:10	2		RSV	OB	OB	OB	OB						WW CR FISH NT	N	Y	Y	Y	N	N					
22-Jul	12:00		20:00	W1	1	12:20	5	Silas Crossby	RSV	OB	TC	C	5				CR	Y	Y	Y	Y	N	N					
22-Jul			2	12:30	2	Primrose	RSV	OB	OB	WJS	KI	C					WW CR NT	N	Y	Y	Y	N	N					
22-Jul			3	12:40	2		Primrose	RSV	OB	OB	WJS	KI	OB				WW CR NT	Y	Y	Y	Y	N	N					
22-Jul			4	13:10	2		RPV	OB	OB	WJS	EJS	OB					WW CR NT	Y	Y	Y	Y	N	N					
22-Jul			5	13:15	2		RPV	OB	OB	WJS	EJS	OB					CR	N	Y	Y	Y	N	N		they were unsure of boundaries			
22-Jul			6	13:20	2	C-Quinn	RPV	OB	OB	WJS	EJS	OB					WW CR NT	N	Y	Y	Y	N	N					
22-Jul			7	13:25	6		RPV	OB	OB	WJS	EJS	OB					WW CR NT	Y	Y	Y	Y	N	N					
22-Jul			8	13:30	4		RPV	OB	OB	WJS	EJS	OB					WW CR	N	Y	Y	Y	N	N					
22-Jul			9	14:00	9	Wayward Wind	CCV	OB	OB	WJS	KI	LH	2	4	3		WW CR NT	N	Y	Y	Y	N	N		Interp on board the Wayward Wind			
22-Jul			10	14:30	2		RKG	OB	OB	WJS	KI	C					WW CR NT	N	Y	Y	Y	N	N					
22-Jul			11	14:40	2		RKG	OB	OB	WJS	KI	C					WW CR NT	N	Y	Y	Y	N	N		with other kayaks whom they said they would inform			

**Appendix C - warden: survey data**

112VMF, 1395

Date	Time On	Time Off	WN	CN	Contact Time	NP Vessel Name	Vessel Type	Todays Dest	Trip Dest	Launch Point	Accom.	NI	SI	INT	VA	BC	CN	US	Reason for trip					Warden Survey					Comments
																			IN	PK	PV	NE	KB	C	RO	VI			
22-Jul			12	15:00	6	Sund's Malcolm Island Lodge	CCV	RB	WJS	LH									WW CR NT	Y	Y	N	Y	N	N	N	N		
22-Jul			13	15:30	4		RPV	RB											CR	N	N	Y	N	N	N	N	N		
22-Jul			14	17:00	12	Lukwa	RKG	WJS	WJS	TC	C	8	2	2				WW CR NT	N	Y	N	Y	N	N	N	N	Interp on Kakkash, grouse of eight and four interp on board the Lukwa		
22-Jul			15	19:00	16	19:15	1	RKG	WJS	TC	TC	C						WW CR NT	N	Y	N	Y	N	N	N	N			
23-Jul	8:00	18:00	W1	1	9:45	4	Paramour	RPV	WJS	EJS	OB							WW CR NT	Y	Y	N	Y	N	N	N	N			
23-Jul			2	11:45	8	Hanael Bay	RSV	WJS	EJS	OB								WW CR NT	Y	Y	N	Y	N	N	N	N			
23-Jul			3	12:00	2	Knot Again	RPV	WJS	EJS	SOTHER	PM							WW CR NT	Y	Y	N	Y	N	N	N	N			
23-Jul			4	13:20	3		RKG	WJS	WJS	WJS	C							WW FISH CR	Y	Y	N	Y	N	N	N	N			
23-Jul			5	13:30	1		RPV	WJS	WJS	WJS	TC							WW CR NT	Y	Y	N	Y	N	N	N	N			
23-Jul			6	13:40	2		RKG	WJS	WJS	TC	C							WW CR NT	Y	Y	N	Y	N	N	N	N			
23-Jul			7	13:45	5	Tanka	RSV	WJS	WJS	WJS	TC							WW CR NT	Y	Y	N	Y	N	N	N	N			
23-Jul			8	14:45	3		RKG	WJS	WJS	WJS	TC							WW CR NT	Y	Y	N	Y	N	N	N	N			
23-Jul			9	16:00	2		RPV	WJS	WJS	WJS	TC							WW CR NT	Y	Y	N	Y	N	N	N	N	had trouble judging 1 km		
24-Jul	8:00	20:00	W2	1	9:30	2	Restless Too	RPV	AB	NOETHER	EJS	OB						WW FISH CR	Y	Y	N	Y	N	N	N	N			
24-Jul			2	8:45	2	Steam Roll	RPV	AB	BMP	EJS	OB							WW FISH CR	Y	Y	N	Y	N	N	N	N			
24-Jul			3	9:45	2	Ertia	RSV	AB	WJS	EJS	OB							WW CR	N	N	Y	N	N	N	N	N			
24-Jul			4	10:10	5	Blue Dragon	RPV	AB	WJS	EJS	OB							WW FISH CR	Y	Y	N	Y	N	N	N	N			
24-Jul			5	10:35	2		RSV	AB	WJS	EJS	OB							WW CR OH	Y	Y	N	Y	N	N	N	N			
24-Jul			6	11:00	1	Derwyn Mar	RSV	AB	WJS	EJS	OB							WW CR	Y	Y	N	Y	N	N	N	N			
24-Jul			7	13:10	2		RPV	AB	WJS	EJS	OB							WW FISH CR	Y	Y	N	Y	N	N	N	N			
24-Jul			8	13:50	10	Sea to Sky	RKG	WJS	WJS	TC	C							WW CR NT	N	Y	N	Y	N	N	N	N			
25-Jul	9:45	14:00	W	1	11:30	8		RSV	WJS	WJS	TC	C						WW CR	N	Y	N	Y	N	N	N	N			
25-Jul			2	11:45	3	Discovery	RPV	WJS	WJS	TC	C							WW FISH CR	Y	Y	N	Y	N	N	N	N			
26-Jul	9:00	20:00	W1	1	11:00	4	Willey Sea Odyssey	RSV	WJS	WJS	TC	C						WW CR NT	N	Y	N	Y	N	N	N	N			
26-Jul			2	11:15	10	Odyssey	PRV	WJS	WJS	TC	C							WW CR	N	Y	N	Y	N	N	N	N			
26-Jul			3	11:45	2	Bonita	RSV	WJS	WJS	TC	C							WW CR	N	Y	N	Y	N	N	N	N			
26-Jul			4	13:00	2	Black Pearl	RPV	WJS	WJS	TC	C							FISH CR	N	Y	N	Y	N	N	N	N			
26-Jul			5	13:30	7	Christina Louise	RSV	AB	WJS	EJS	OB							GOV	N	Y	N	Y	N	N	N	N			
26-Jul			6	14:05	3	Honanea Orielle	RSV	AB	WJS	EJS	OB							WW FISH CR	Y	Y	N	Y	N	N	N	N			
26-Jul			7	14:30	14	HMCS Orielle	RSV	AB	WJS	EJS	OB							GOV	Y	Y	N	Y	N	N	N	N			
26-Jul			8	15:15	3	Nothing Down	RPV	AB	WJS	EJS	OB							WW FISH CR	Y	Y	N	Y	N	N	N	N			
26-Jul			9	16:40	2		RKG	AB	WJS	PH	PM							WW CR	Y	Y	N	Y	N	N	N	N			
26-Jul			10	16:00	5	Allente	CCV	AB	WJS	PH	PM							WW CR	Y	Y	N	Y	N	N	N	N			
26-Jul			11	16:10	2	Far Tortuga	RSV	AB	WJS	PH	PM							WW CR	Y	Y	N	Y	N	N	N	N			
26-Jul			12	16:25	2	Sand Blaster	RKG	AB	WJS	PH	PM							WW CR	Y	Y	N	Y	N	N	N	N			
26-Jul			13	18:00	4	Elsie	RSV	AB	WJS	PH	PM							WW CR	Y	Y	N	Y	N	N	N	N			
27-Jul	8:00	15:00	W1	1	10:30	2	Grizzly Coast	GPT	SOTHER	PM	OB							GOV	N	Y	N	Y	N	N	N	N	Ministry of Environment		
27-Jul			2	12:00	1	Island Sauvage	RKG	EJS	WJS	EJS	OB							WW CR NT	N	Y	N	Y	N	N	N	N			
27-Jul			3	12:25	2	Royal Sepire	RSV	EJS	WJS	EJS	OB							WW FISH CR	N	Y	N	Y	N	N	N	N			
27-Jul			4	13:15	2	Elysium	RSV	PH	PH	PH	OB							WW CR FISH NT	N	Y	N	Y	N	N	N	N			
27-Jul			5	10:50	2	Alligator	RPV	PH	PH	PH	OB							CR	N	Y	N	Y	N	N	N	N			
27-Jul			6	14:00	3	Growler	RSV	PH	PH	PH	OB							CR NT	N	Y	N	Y	N	N	N	N			
27-Jul			7	14:15	2	Ready	RSV	PH	PH	PH	OB							CR	N	Y	N	Y	N	N	N	N			
27-Jul			8	16:15	2	Secret Cove	RSV	PH	PH	PH	OB							CR	N	Y	N	Y	N	N	N	N			
27-Jul			9	16:45	12	Volunteer	RSV	PH	PH	PH	OB							CR NT	N	Y	N	Y	N	N	N	N			
27-Jul			10	17:30	3	Elsie	RSV	PH	PH	PH	OB							CR	N	Y	N	Y	N	N	N	N			
28-Jul	8:00	12:00	W1	1	9:40	2	Chautauqua	RPV	PH	PH	OB							CR	N	Y	N	Y	N	N	N	N			
28-Jul			2	10:30	2		RPVb	WJS	WJS	OB	OB							CR	N	Y	N	Y	N	N	N	N			
28-Jul			3	10:40	2	Shalomer	RPVb	WJS	WJS	OB	OB							FISH	Y	Y	N	Y	N	N	N	N			
28-Jul			4	10:50	2	Nautique	RPV	WJS	WJS	OB	OB							WW FISH CR	N	Y	N	Y	N	N	N	N			
28-Jul			5	11:10	2		RPV	WJS	WJS	OB	OB							CR	N	Y	N	Y	N	N	N	N			
28-Jul			6	11:30	2		RPV	WJS	WJS	OB	OB							CR	N	Y	N	Y	N	N	N	N			
28-Jul			7	14:00	2		CEV	PH	PH	OB	OB							CR	N	Y	N	Y	N	N	N	N			
28-Jul			8	20:00	W1	1	8:30	5	Springer	RPV	PH	OB							WW FISH	Y	Y	N	Y	N	N	N	N		
28-Jul			9	9:15	4	Mudder Kaa	RPV	PH	PH	OB	OB							FISH	Y	Y	N	Y	N	N	N	N			
28-Jul			10:00	3	10:30	3	9:15	4	Mudder Kaa	RKG	PH	OB						WW CR	N	Y	N	Y	N	N	N	N			
28-Jul			10:30	3	10:50	3	9:15	4	Mudder Kaa	RKG	PH	OB						WW CR	N	Y	N	Y	N	N	N	N			
29-Jul			11:00	2	12:00	2	9:15	4	Mudder Kaa	RKG	PH	OB						WW FISH	Y	Y	N	Y	N	N	N	N			
29-Jul			12:00	2	12:30	2	9:15	4	Mudder Kaa	RKG	PH	OB						WW FISH	Y	Y	N	Y	N	N	N	N			
29-Jul			13:00	2	13:30	2	9:15	4	Mudder Kaa	RKG	PH	OB						WW FISH	Y	Y	N	Y	N	N	N	N			
29-Jul			14:00	2	14:30	2	9:15	4	Mudder Kaa	RKG	PH	OB						WW FISH	Y	Y	N	Y	N	N	N	N			
29-Jul			15:00	2	15:30	2	9:15	4	Mudder Kaa	RKG	PH	OB						WW FISH	Y	Y	N	Y	N	N	N	N			
29-Jul			16:00	2	16:30	2	9:15	4	Mudder Kaa	RKG	PH	OB						WW FISH	Y										

Appendix C - warden survey data

Date	Time On	Time Off	WN	CN	Contact Time	NP Vessel Name	Vessel Type	Todays Dest.	Trip Dest.	Launch Point	Accom.	Reason						Warden Survey						Comments		
												NI	SI	INT	VA	BC	CN	US	for trip	PV	NE	KB	C	RO	WI	
30-Jul			4	10:10	4	RKG	SOTHER			TC	C							4	WW CR	N	N	Y	N	N	Interp on kakash	
30-Jul			5	10:50	3	Equilibrium	RSV	SOTHER	WJS	OB	OB	6						3		Y	Y	Y	N	N		
30-Jul			6	11:10	6		RSV	TC		OTH	AB							WW CR	Y	N	N	Y	N	N		
30-Jul			7	12:40	2		RPV	RB	WJS	EJS	C	2						WW CR	N	Y	N	Y	N	N		
30-Jul			8	15:00	1		RKG	WJS										WW CR	N	Y	N	Y	N	N		
30-Jul			9	15:30	3	Kapduva	RSV	TC		EJS	WJS							WW CR	N	Y	N	Y	N	N		
30-Jul			10	16:15	4		RKG&RPV	WJS		OB	OB							WW CR	N	Y	N	Y	N	N		
31-Jul	8:00	19:00	W1	1	9:00	1	Jilano	RPV	EJS	WJS	WJS						1	WW FISH CR NT	N	Y	Y	Y	N	N		
31-Jul			2	12:15	2		RKG	WJS	WJS	WJS	WJS						2	CR	Y	Y	Y	Y	N	N		
31-Jul			3	12:25	2	Susan-K	RPV	EJS	WJS	WJS	WJS						2	WW FISH CR	Y	Y	Y	Y	N	N		
31-Jul			4	13:15	2		RKG	WJS	WJS	WJS	WJS						2	CR	Y	Y	Y	Y	N	N		
31-Jul			5	13:30	10	Dormee IV	RPV	WJS	AB	OB							10	WW FISH CR	Y	N	N	Y	N	N		
31-Jul			6	14:30	2		RKG	WJS	WJS	EJS	C						2	WW CR NT	N	Y	Y	Y	N	N		
31-Jul			7	15:20	7		RKG	WJS	SOTHER	KAIK	C	1					6	CR	Y	Y	Y	Y	N	N		
31-Jul			8	15:45	2	Aithril	RPV	EJS	WJS	PH	OB	2					2	CR	N	Y	Y	Y	N	N		
31-Jul			9	17:20	2	Kaolin	RSV	WJS	WJS	KAIK	C						2	CR	N	Y	Y	Y	N	N		
31-Jul			10	17:50	2		RKG	WJS	WJS	WJS	WJS						2	CR	N	Y	Y	Y	N	N		
1-Aug	9:30	20:00	W1	1	10:10	2	Marielle	RSV		OB	OB						2	FISH CR	Y	Y	Y	Y	N	N		
1-Aug			2	11:30	2	Night Drifter	CFV	WJS	RB	OB							2	FISH	Y	Y	Y	Y	N	N		
1-Aug			3	10:45	3	Western 3	CFV	WJS	AB	PM	LH	2					2	WW FISH CR	Y	N	Y	Y	N	N		
1-Aug			4	11:00	2	Vitamin Sea	RPV	WJS	WJS	KAIK	C						8	WW CR NT	N	Y	Y	Y	N	N		
1-Aug			5	11:25	8		RKG	WJS	WJS	WJS	WJS														shift sport fishing in reserve	
1-Aug			6	12:00	1	Robert B.	CFV	WJS	WJS	OB	OB														complied with leaving to fish	
1-Aug			7	13:20	2	Tamaro	RPV	WJS	AB	OB	OB															
1-Aug			8	14:00	3	Leigh Way II	RSV	EJS	WJS	OB	OB															
1-Aug			9	14:30	3	Chandelle	RSV	EJS	WJS	OB	OB															
1-Aug			10	15:45	4	Stawamus Chief	CFV	WJS	AB	OB	TC	C														
1-Aug			11	18:30	3		RPV	WJS	AB	ALDER	C	2														
1-Aug			12	18:45	2	Monomot	RPV	WJS	SOTHER	WJS	OB															
2-Aug	8:00	19:00	W1	1	8:25	2	Blue Devil	RPV	WJS	AB	ALDER	C	3													
2-Aug			2	10:30	3		RPV	WJS	AB	OB	OB															
2-Aug			3	11:20	8	The Spirit Lodge	RPV	WJS	AB	OB	OB															
2-Aug			4	11:40	7	Pacific Rim	RKG	KAIK	OB	OB	OB															
2-Aug			5	12:20	4		RPV	WJS	AB	OB	OB															
2-Aug			6	15:30	2		CFV	CCV	OB	OB	OB															
2-Aug			7	17:00	7	Vent de But	RPV	WJS	AB	OB	OB															
3-Aug	19:50	20:30	W2	1	19:50	1	CFV	OB	OB	OB	OB						1	WW FISH CR	Y	Y	Y	Y	N	N		
4-Aug	8:00	20:00	W2	2	8:00	2	Marguerite	RPV	BMP	SOTHER	EJS						2	WW CR	N	Y	Y	Y	N	N		
4-Aug			3	11:00	4	Hosh	RSV	EJS	OB	OB	OB						4	CR	N	Y	Y	Y	N	N		
4-Aug			4	11:20	2		RSV	EJS	OB	OB	OB						2	WW CR	N	Y	Y	Y	N	N		
4-Aug			5	12:20	2	Even Flow	RPV	WJS	KAIK	OB	OB						2	WW CR	N	Y	Y	Y	N	N		
4-Aug			6	12:25	1		RKG	OB	KAIK	OB	OB						1	CR	N	Y	Y	Y	N	N		
4-Aug			7	12:30	2		RKG	OB	KAIK	OB	OB						2	WW CR	N	Y	Y	Y	N	N		
4-Aug			8	13:10	2		RKG	OB	PM	OB	OB						3	CR	N	Y	Y	Y	N	N		
4-Aug			9	13:30	3	Baroness	CCV	OB	OB	OB	OB						3	WW CR	N	Y	Y	Y	N	N		
4-Aug			10	15:10	3		RPV	WJS	AB	OB	OB						3	OB	N	Y	Y	Y	N	N		
4-Aug			11	15:20	4	Blue Fin II	RPV	WJS	AB	OB	OB						4	OB	N	Y	Y	Y	N	N		
5-Aug	9:30	20:00	W1	1	10:30	5	6 Rainbow Air	PLANE	OB	OB	OB						5	1	WW NT	Y	Y	Y	Y	N	N	
5-Aug			2	10:45	2	Trident	RPV	OB	OB	OB	OB						2	WW CR	N	Y	Y	Y	N	N		
5-Aug			3	11:00	4		RPV	OB	OB	OB	OB						2	WW CR	N	Y	Y	Y	N	N		
5-Aug			4	11:15	2		RKG	OB	OB	OB	OB						4	OB	N	Y	Y	Y	N	N		
5-Aug			5	11:15	2		RPV	OB	OB	OB	OB						2	WW CR	N	Y	Y	Y	N	N		
5-Aug			6	11:30	3	Quipper III	RKG	OB	OB	OB	OB						1	WW CR	N	Y	Y	Y	N	N		
5-Aug			7	11:45	4		RPV	OB	OB	OB	OB						2	WW CR	N	Y	Y	Y	N	N		
5-Aug			8	12:30	16	Giffin	RKG	OB	OB	OB	OB						1	WW CR	N	Y	Y	Y	N	N		
5-Aug			9	14:15	1	Griffin	RSV	EJS	SOTHER	AB	OB						1	CR	N	Y	Y	Y	N	N		
5-Aug			10	17:10	1		RKG	WJS	PH	EJS	C						1									

stayed 60m off shore because of weather conditions





Appendix C - warden survey data

Date	Time	Time Off	WN	CN	Contact	NP	Vessel Name	Vessel Type	Todays Date	Trip Dest.	Launch Point	Accom.	Reason for trip				Warden Survey						
													NI	SI	INT	VA	BC	CN	US	PK	PV	NE	
13-Aug	10:00	18:00	W1	1	11:05	2	RR II	RPy	AB	WJS	EJS	OB						FISH CR	Y	N	Y	N	N
13-Aug				2	12:45	4	Lady J	RPy	AB	WJS	KI	OB						WW CR	N	Y	N	Y	N
13-Aug					3	12:50	3			CCV	RB	TC						WW CR	N	Y	N	Y	N
13-Aug					4	13:15	2			RKG	RB	KAIAK						WW CR NT	N	Y	N	Y	N
13-Aug					5	13:45	2			RPy	RB	AUDER						WW FISH CR	N	Y	N	Y	N
20-Aug	8:00	16:30	W1	1	16:10	4	Orcia Strait	CCV	WJS	WJS	PM	OB					WW	N	Y	Y	N	N	
20-Aug				2	14:20	2	Pielades	RPy	NOTHER	WJS	OB						CR	N	Y	Y	N	N	
20-Aug					1	14:45	2			CFV	RB	OB						COM	N	Y	Y	N	N
20-Aug					2	17:45	2	Allisa		CFV	RB	OB						WW CR	Y	Y	Y	N	N
21-Aug	8:00	18:00	W2	1	11:45	2				RKG	RB	KAIAK	C					WW CR NT	Y	N	Y	N	N
21-Aug					2	12:00	2	Island Rover	CEV	RB	RB	OB					CR	Y	N	Y	N	N	
21-Aug					3	12:15	7		RKG	RB	KAIAK	C					WW CR NT	N	Y	N	Y	N	
21-Aug					4	12:20	2		RKG	RB	BMP	C					WW CR NT	N	Y	N	Y	N	
21-Aug					5	12:45	2	Mae West	RPy	RB	WJS	TC	C				WW CR NT	N	Y	N	Y	N	
21-Aug					6	13:45	3	Celebrity	CFV	RB	TC	OB					WW FISH	N	Y	N	Y	N	
21-Aug					7	16:00	2		RPy	RB	OB	OB					WW CR	Y	Y	N	Y	N	
21-Aug					8	16:30	2	Leiko 3	RSV	RB	OB	OB					WW CR	N	Y	N	Y	N	
21-Aug					9	17:00	3		CFV	RB	OB	OB					NT	Y	N	Y	N	N	
21-Aug					10	17:15	2		CFV	RB	OB	OB					WW NT	Y	N	Y	N	N	
22-Aug	8:00	18:00	W1	1	10:45	2			RKG	WJS	WJS	TC	C					CR	N	Y	N	Y	N
22-Aug				2	10:55	2			RKG	WJS	WJS	KAIAK	C				WW CR	N	Y	N	Y	N	
22-Aug				3	12:05	2			RPy	PM	EJS	OB					WW CR	N	Y	N	Y	N	
22-Aug				4	13:00	2	Evangeline VI	RPy	EJS	WJS	OB					WW CR NT	N	Y	N	Y	N		
22-Aug				5	13:30	2			RPy	WJS	WJS	PM	OB				CR	Y	Y	N	Y	N	
22-Aug				6	14:50	4	Native Girl	RSV	EJS	WJS	OB	OB				WW CR	N	Y	N	Y	N		
22-Aug				7	15:45	4	Jacaranda	RPy	EJS	WJS	OB	OB				WW CR	N	Y	N	Y	N		
23-Aug	8:00	13:00	W1	1	10:15	2			RKG	WJS	WJS	KAIAK	C				WW CR	Y	Y	N	Y	N	
23-Aug				2	10:20	2			RKG	WJS	WJS	KAIAK	C				WW CR	N	Y	N	Y	N	
23-Aug				3	10:30	1			RPy	EJS	WJS	OB					WW CR NT	Y	N	Y	N	N	
23-Aug				4	11:30	4	Stellar	RSV	EJS	NOTHER	WJS	OB					WW FISH CR	Y	N	Y	N	N	
24-Aug	8:00	20:00	W1	1	9:45	2	Off Blue Somer Time	RPy	EJS	OB	OB						WW FISH CR	Y	N	Y	N	N	
24-Aug				2	10:40	2			RKG	EJS	KAIAK	C					WW CR	N	Y	N	Y	N	
24-Aug				3	11:00	16	Northern Lights	RKG	WJS	KAIAK	C					WW CR	N	Y	N	Y	N		
24-Aug				4	11:15	2			RKG	WJS	KAIAK	OB					WW FISH CR	N	Y	N	Y	N	
24-Aug				5	11:30	3			RPy	EJS	OB						CR	N	Y	N	Y	N	
24-Aug				6	12:00	2	Carmia	RPy	EJS	OB									Y	N	Y	N	N
24-Aug				7	14:35	3	Mister Christian	RPy	WJS	OB									Y	N	Y	N	N
24-Aug				8	14:50	2	Cathrina	RSV	WJS	OB									Y	N	Y	N	N
24-Aug				9	15:30	2			RPy	WJS	TC	C							Y	N	Y	N	N
25-Aug	8:00	18:00	W1	1	10:45	6	Sterling III	RPy	WJS	WJS	OB						WW	Y	Y	Y	Y	N	
25-Aug				2	11:55	2	Jenny Gibson	RSV	WJS	SOTHER	OB						CR	Y	N	Y	N	N	
25-Aug				3	12:50	6		RPy	WJS	OB	OTH	6					CR	Y	N	Y	N	N	
25-Aug				4	13:10	1		CFV	RB	OB	OB	1					COM	Y	Y	Y	Y	N	
25-Aug				5	15:30	6		RPy	WJS	OB	LH	5	1				WW	Y	N	Y	N	Y	
25-Aug				6	16:05	2		CFV	RB	OB	OB	2					FISH	Y	Y	Y	Y	N	
25-Aug				7	16:15	3	Maria Anna	RSV	AB	WJS	OB	OB	3				CR	Y	N	Y	N	N	
25-Aug				8	16:45	2		RKG	RB	OB	KAIAK	C	2					Y	Y	Y	Y	N	
26-Aug	8:00	19:00	W1	1	8:45	3	Mar-Liu	RPy	EJS	OB	BMP	OB					WW CR	Y	Y	Y	Y	N	
26-Aug				2	8:55	2		RSV	EJS	OB	OB	OB					WW CR NT	N	Y	Y	Y	N	
26-Aug				3	10:50	3	Batuch	RSV	EJS	OB	OB	OB	2				WW FISH CR	N	Y	Y	Y	N	
26-Aug				4	11:30	3	Cur-Ric III	RPy	EJS	OB	OB	OB	3				WW FISH CR	Y	Y	Y	Y	N	
26-Aug				5	11:45	3		RPy	EJS	OB	SOOTHER	LH	3				WW CR	Y	Y	Y	Y	N	
26-Aug				6	15:00	3		RPy	OB														



Date	Time	W/N	CN	Contact	NP	Vessel Name	Type	Today's Dest	Trip Dest	Launch Point	Accom.	Vessel Origin						Reason for trip		Warden Survey						
												NI	SI	INT	VA	BC	CN	US	In	PK	PV	NE	KB	C	RO	WI
19-Aug	10:00	W2	1	11:05	2	RR II	RPV	AB	WJS	OB								FISH CR	Y	N	Y	N	Y	N	N	
19-Aug			2	12:45	4	Lady J	RPV	RB	WJS	KJ	OB							WW CR	N	Y	Y	N	Y	N	N	
19-Aug			3	12:50	3													WW CR	N	Y	Y	N	Y	N	N	fishing guide wanted to know where the whales are
19-Aug			4	13:15	2													WW CR NT	N	Y	Y	N	Y	N	N	
19-Aug	8:00	W1	1	16:10	4	Orca Strait	CCV	WJS	TC	LH	1	2						WW FISH CR	N	Y	Y	N	Y	N	N	
20-Aug	8:00	W2	1	14:20	2	Pleiades	CCV	WJS	KAIK	C								WW CR	N	Y	Y	N	Y	N	N	
20-Aug	16:30	W2	1	14:45	2		RSV	WJS	ALDER	C								WW CR	N	Y	Y	N	Y	N	N	
20-Aug			2	17:45	2	Alisa	CFV	WJS	NOETHER	OB								WW CR	N	Y	Y	N	Y	N	N	
21-Aug	8:00	W2	1	11:45	2		RKG	RB	OB									WW CR	N	Y	Y	N	Y	N	N	
21-Aug			2	12:00	2	Island Rover	CFV	RB	OB									WW CR	N	Y	Y	N	Y	N	N	
21-Aug			3	12:15	7		RKG	RB	KAIK	C								WW CR NT	N	Y	Y	N	Y	N	N	
21-Aug			4	12:20	2		RKG	RB	BMP	KAIK	C							WW CR NT	N	Y	Y	N	Y	N	N	
21-Aug			5	12:45	2	Mae West	RPV	RB	WJS	TC	C							WW CR NT	N	Y	Y	N	Y	N	N	
21-Aug			6	13:45	3	Celebrity	RPV	TC	OB	TC	C							WW FISH	N	Y	Y	N	Y	N	N	
21-Aug			7	16:00	2		CFV	RB	OB	OB								WW CR	N	Y	Y	N	Y	N	N	
21-Aug			8	16:50	2	Leko 3	RSV	RB	OB									WW CR	N	Y	Y	N	Y	N	N	
21-Aug			9	17:00	3		CFV	RB	OB	OB								WW CR	N	Y	Y	N	Y	N	N	
21-Aug			10	17:15	2		CFV	RB	OB	OB								WW CR	N	Y	Y	N	Y	N	N	
22-Aug	8:00	W1	1	10:45	2		RKG	WJS	TC	C								WW CR	N	Y	Y	N	Y	N	N	
22-Aug			2	10:55	2		RKG	WJS	KAIK	C								WW CR	N	Y	Y	N	Y	N	N	
22-Aug			3	12:05	2	Evangeline VI	RSV	WJS	EJS	OB								WW CR	N	Y	Y	N	Y	N	N	
22-Aug			4	13:00	2		RPV	WJS	EJS	WJS	OB							WW CR	N	Y	Y	N	Y	N	N	
22-Aug			5	13:30	2		RPV	WJS	EJS	OB								WW CR	N	Y	Y	N	Y	N	N	
22-Aug			6	14:50	4	Native Girl	RSV	WJS	EJS	WJS	OB							WW CR	N	Y	Y	N	Y	N	N	
22-Aug			7	15:45	4	Jecaranda	RPV	EJS	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
23-Aug	8:00	W1	1	10:15	2		RKG	WJS	KAIAK	C								WW CR	N	Y	Y	N	Y	N	N	
23-Aug			2	10:20	2		RKG	WJS	KAIAK	C								WW CR	N	Y	Y	N	Y	N	N	
23-Aug			3	10:30	1		RPV	WJS	EJS	KAIAK	C							WW CR	N	Y	Y	N	Y	N	N	
23-Aug			4	11:30	4	Stellar	RSV	EJS	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
24-Aug	8:00	20:00	W1	1	9:45	2	Blue	RSV	EJS	NOETHER	OB							WW FISH CR	N	Y	Y	N	Y	N	N	
24-Aug			2	10:40	2	Somer Time	RPV	EJS	WJS	OB								WW FISH CR	N	Y	Y	N	Y	N	N	
24-Aug			3	11:00	18	Northern Lights	RSV	EJS	WJS	OB								WW FISH CR	N	Y	Y	N	Y	N	N	
24-Aug			4	11:15	2		RKG	WJS	EJS	OB								WW FISH CR	N	Y	Y	N	Y	N	N	
24-Aug			5	11:30	3		RKG	WJS	EJS	OB								WW FISH CR	N	Y	Y	N	Y	N	N	
24-Aug			6	12:00	2	Carina	RPV	EJS	OB									WW FISH CR	N	Y	Y	N	Y	N	N	
24-Aug			7	14:35	3	Mister Christian	RPV	WJS	OB									WW FISH CR	N	Y	Y	N	Y	N	N	
24-Aug			8	14:50	2	Cathrina	RSV	WJS	OB									WW FISH CR	N	Y	Y	N	Y	N	N	
24-Aug			9	15:30	2		RPV	WJS	OB									WW FISH CR	N	Y	Y	N	Y	N	N	
25-Aug	8:00	W1	1	10:45	6	Sterling III	RPV	WJS	SOTHER	OB								WW CR	N	Y	Y	N	Y	N	N	
25-Aug			2	11:55	2	Jenny Gibson	RSV	WJS	OB	OTR								WW CR	N	Y	Y	N	Y	N	N	
25-Aug			3	12:50	6		RPV	WJS	OB	OB								WW CR	N	Y	Y	N	Y	N	N	
25-Aug			4	13:10	1		CFV	WJS	OB	OB								WW CR	N	Y	Y	N	Y	N	N	
25-Aug			5	15:30	6		RPV	WJS	OB	LH		5	1					WW CR	N	Y	Y	N	Y	N	N	
25-Aug			6	16:05	2	Maria Anna	CFV	RB	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
25-Aug			7	16:15	3		RPV	RB	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
25-Aug			8	16:45	3	Mar-Liu	CFV	RB	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
25-Aug			9	15:30	2		RPV	RB	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
26-Aug	8:00	W1	1	8:45	3		RPV	RB	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
26-Aug			2	8:55	1		RSV	RB	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
26-Aug			3	10:50	3	Baruch	RSV	RB	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
26-Aug			4	11:30	3		RPV	RB	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
26-Aug			5	11:45	3	Cur-Ric III	RPV	RB	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	
26-Aug			6	15:00	3		RPV	RB	WJS	OB								WW CR	N	Y	Y	N	Y	N	N	

Date	Time	W/N	CN	Contact	NP	Vessel Name	Type	Trip Dest.	Launch Point	Accom.	Vessel Origin					Reason for trip	IN	PK	PV	NE	KB	C	RO	W	Comments	
											N	I	S	INT	VA	BC	CN	US								
26-Aug	08:00		7	16:00	2	R/V	R/V	RB	TC	LH								WW CR	Y	Y	Y	Y	N	N	N	
26-Aug			8	16:30	2	Kum Bah Yah	R/PV	EJS	EJS	C	2							WW CR	Y	Y	Y	Y	N	N	N	
26-Aug			9	17:45	3	Kum Bah Yah	R/PV	WJS	WJS	OB							GOV	X	X	X	X	X	X	X	DFO fisheries guardian boat.	
27-Aug	08:00	13:30	W1	1	8:10	3	Queen of Kelso	R/PV	SOTHER	NOTHER	AB	OB					WW CR	N	Y	Y	Y	N	N	N		
27-Aug			2	9:50	2	Gester II	R/PV			PH	OB						CR	N	Y	Y	Y	N	N	N		
27-Aug			3	10:00	4	Ninth Circuit	R/PV		EJS	OB							WW CR	N	N	N	N	N	N	N		
27-Aug			4	10:15	4	For Nada	R/PV	CCV	RB	WJS	TC	LH	1				WW CR	N	Y	Y	Y	N	N	N		
27-Aug			5	10:30	3		R/PV	RB		SOTHER	LH	6					WW CR	N	Y	Y	Y	N	N	N	Roy from TC.	
27-Aug			6	11:00	6		R/PV	RB		PM	OB						WW CR	N	Y	Y	Y	N	N	N		
27-Aug			7	11:45	3	Fyle	R/KG	EJS	KAIK	C	6						CR	Y	Y	Y	Y	N	N	N		
27-Aug			8	13:30	6		R/KG	EJS	WJS	KAIK	C						WW CR	Y	Y	Y	Y	N	N	N		
27-Aug			9	15:15	3		R/KG	EJS	WJS	CIRCUM						WW CR	Y	Y	Y	Y	N	N	N			
27-Aug			10	17:30	1	Pacific Cruises-	R/KG	WJS	WJS	PH	LH						WW CR NT	Y	Y	Y	Y	N	N	N		
28-Aug	08:00	18:00	W1	1	12:30	20	Malastein	CCV	SOTHER	WJS	EJS	OTH	4				WW CR	Y	Y	Y	Y	N	N	N		
28-Aug			2	14:00	6	French	R/PV	WJS	WJS	PH	OTH						WW CR	Y	Y	Y	Y	N	N	N		
28-Aug			3	14:40	2	Connession	R/PV	WJS	WJS	AB	OTH	2					CR	Y	Y	Y	Y	N	N	N		
28-Aug			4	15:40	3		R/PV	WJS	WJS	PM	OB						FISH CR	Y	Y	Y	Y	N	N	N	friends with seine fishers.	
28-Aug			5	16:00	1	Page I	R/PV	CCV	WJS	WJS	TC	LH	1	2			WW FISH	N	Y	Y	Y	N	N	N	travelling with a CFV	
28-Aug			6	16:15	3		R/KG	EJS	WJS	WJS	WJS						WW CR	Y	Y	Y	Y	N	N	N	Roy	
29-Aug	08:00	18:00	W1	1	11:15	2	R/KG	WJS	WJS	KAIK	C						WW CR	N	Y	Y	Y	N	N	N	feet they were being harassed by wardens, refused communication	
29-Aug			2	12:15	2		R/KG	WJS	WJS	ALDER	LH						WW CR	N	Y	Y	Y	N	N	N		
29-Aug			3	12:25	6	Sun Tracker	R/KG	WJS	WJS	KAIK	C						WW FISH CR	Y	Y	Y	Y	N	N	N		
29-Aug			4	14:15	2		R/KG	WJS	WJS	KAIK	C						WW FISH CR NT	N	Y	Y	Y	N	N	N		
29-Aug			5	14:25	10	Northern Lights	R/KG	WJS	WJS	KAIK	C						WW CR	Y	Y	Y	Y	N	N	N		
30-Aug	08:00	19:00	W1	1	13:00	3	Archde II	R/SV	SOTHER	AB	OB						WW CR NT	N	Y	Y	Y	N	N	N		
30-Aug			2	13:30	4	Takulli	R/PV	EJS	SOTHER	PH	OB						WW FISH CR	N	Y	Y	Y	N	N	N		
30-Aug			3	13:40	3	Susie VI	R/PV	EJS	WJS	PH	OB						WW FISH CR	N	Y	Y	Y	N	N	N		
30-Aug			4	14:30	3		R/B	RB	WJS	TC	C						WW FISH CR	Y	Y	Y	Y	N	N	N		
30-Aug			5	16:00	2		R/KG	RB	WJS	KAIK	C						WW FISH CR NT	N	Y	Y	Y	N	N	N		
30-Aug			6	16:10	2		R/PV	RB	WJS	WJS	OB						WW CR	Y	Y	Y	Y	N	N	N		
31-Aug	08:00	17:30	W1	1	12:30	4	R/KG	RB	WJS	TC	C						WW CR NT	N	Y	Y	Y	N	N	N		
31-Aug			2	14:45	2	Wei Whare	R/SV	SOTHER	WJS	PM	OB						WW FISH CR	N	Y	Y	Y	N	N	N		
1-Sep	08:00	18:30	W1	1	8:50	1	Sorcery	R/SV	KB	SOTHER	PH	OB	1				CR	N	Y	Y	Y	N	N	N		
1-Sep			2	10:00	2	Distant Drummer	R/SV	EJS	WJS	SOTHER	BMP	OB					WW CR NT	N	Y	Y	Y	N	N	N		
1-Sep			3	10:10	2	Fun Balance	R/PV	WJS	WJS	EJS	ALDER	OB					WW FISH CR NT	N	Y	Y	Y	N	N	N		
1-Sep			4	11:00	3	Sea Sea	R/PV	EJS	WJS	ALDER	PM	OB					WW FISH CR	N	Y	Y	Y	N	N	N		
1-Sep			5	13:00	4	Hobbit	R/PV	CCV	WJS	WJS	PH	LH					WW FISH CR NT	N	Y	Y	Y	N	N	N		
1-Sep			6	14:45	20	Island Roamer	R/KG	WJS	WJS	KAIK	C					WW CR NT	N	Y	Y	Y	N	N	N			
1-Sep			7	15:30	2		R/KG	WJS	WJS	KAIK	C						WW FISH CR NT	N	Y	Y	Y	N	N	N		
1-Sep			8	15:35	2		R/KG	WJS	WJS	KAIK	C						WW FISH CR	N	Y	Y	Y	N	N	N		
1-Sep			9	15:45	6	Bell Buoy	R/PV	WJS	WJS	WJS	OB						WW FISH CR	N	Y	Y	Y	N	N	N		
1-Sep			10	16:45	10	Fantasia	R/PV	WJS	WJS	KAIK	EJS	OB					WW CR NT	N	Y	Y	Y	N	N	N		
1-Sep			11	18:00	2		R/KG	WJS	WJS	KAIK	C	2					WW CR NT	Y	Y	Y	Y	N	N	N		
2-Sep	11:00	18:00	W1	1	13:45	6	Comox Valley	R/PV	WJS	EJS	LH						WW FISH	Y	Y	Y	Y	N	N	N	two skiffs travelling together	
2-Sep			2	16:00	8	Keyaks	R/KG	WJS	WJS	KAIK	C	2					WW FISH CR NT	N	Y	Y	Y	N	N	N		
3-Sep	13:00	18:00	W1	1	13:30	2		R/KG	WJS	WJS	KAIK	C	2				WW FISH CR	Y	Y	Y	Y	N	N	N		
3-Sep			3	13:40	7		R/KG	WJS	WJS	ALDER	LH						WW FISH CR	Y	Y	Y	Y	N	N	N		
3-Sep			4	17:45	4		R/PV	RB	WJS	WJS	SOTHER	C	11				WW FISH CR	Y	Y	Y	Y	N	N	N		
4-Sep	12:00	18:30	W1	1	12:00	11	Mad Hatteras	R/PV	KB	WJS	KAIK	OB					WW CR	Y	Y	Y	Y	N	N	N		
4-Sep			2	12:30	2		R/KG	RB	WJS	WJS	WJS	OB					WW CR	Y	Y	Y	Y	N	N	N		
4-Sep			3	12:50	2		R/KG	RB	WJS	WJS	WJS	OB					WW CR	Y	Y	Y	Y	N	N	N		
4-Sep			4	14:45	4		R/KG	RB	WJS	WJS	WJS	OB					WW FISH CR NT	Y	Y	Y	Y	N	N	N		

**Appendix C - Warden Survey Ward**

11/VMP, 1995

Date	Time	Time	WN	CN	Contact	NP	Vessel Name	Vessel Type	Todays Dest	Trip Point	Launch	Accom.	Vessel Origin				Reason for trip				Warden Survey				Comments		
													NI	SI	INT	VA	BC	CN	US	WW CR	PK	PV	NE	KB	C	RO	WI
4-Sep	On Off	5	15:15	6	Polar Fortitude	RPV	RPV	RB	OTH	OTH	AB	4								Y	N	Y	N	Y	N	N	
4-Sep		6	15:30	4		RPV	RPV	RB	OTH	OTH	AB	4								Y	Y	Y	N	N	N	N	
Total					Total								Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	
Vessel					No. of Pass.								=	=	=	=	=	=	=	=	=	=	=	=	=		
Critics					#								153	266	106	277	117	86	567								
=					503																						

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**APPENDIX D              Sample Data Logs**

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**Includes:**

- Whale Scan Log
- Boat Count Log
- Vessel Traffic Log
- Warden Survey Sheet

## **RBMBER 1995 Whale Scan Log**

- 1) Scans are to be conducted for all schools\* within the study area.**  
**2) Scans will be recorded for each school on the surfacing which follows each quarter hour.**  
**3) Activity = R = Resting; B = Beach Rubbing; T = Travelling; F = Foraging; S = Socializing**

**IMPORTANT:** Change Data Sheets when Subord. Composition Changes

Sheet No. \_\_\_\_\_  
Total Sheets Today: \_\_\_\_\_

**Date:** \_\_\_\_\_  
**Start Time:** \_\_\_\_\_  
**End Time:** \_\_\_\_\_

**Observer:** \_\_\_\_\_  
**Recorder:** \_\_\_\_\_  
**Subpods:** \_\_\_\_\_

**Sky State (/8):** \_\_\_\_\_  
**Sea State(/12):** \_\_\_\_\_

RECORD TIME IN INTERNATIONAL HOURS

\*See 1995 Project Design for details.

**\*\* Note the sub zone (A, B, or C) for Zone 2 along with the time.**

bion research inc.

## **RBMBER - '95 Boat Count Log**

**Sheet No.** \_\_\_\_\_ of \_\_\_\_\_

Date: \_\_\_\_\_  
Time Start: \_\_\_\_\_  
Time End: \_\_\_\_\_  
Observer: \_\_\_\_\_  
Recorder: \_\_\_\_\_

**CFV:** Commercial Fishing Vessel\*  
**CCV:** Commercial Charter Vessel  
**COL:** Commercial Ocean Liner  
**GPV:** Government Patrol Vessel  
**TUG:** Tugboat with/without Barge

*RKG: Recreational Kayak Group  
RPV: Recreational Power Vessel (big or small)  
RSV: Recreational Sailing Vessel  
PRV: Photographer/Research Vessel  
CAR: Self propelled Cargo Vessel*

\* If CFVs are engaged in Fishing activities, then Gear Type must also be recorded. (S=Siene, T=Troll, G=Gillnet)

\*\* Zone X is that portion of Zone 2A which is adjacent to the Ecological Reserve. If Zone X data is recorded, the value recorded for Zone 2A (2A') must NOT include the Zone X count (i.e. 2A'+X=2A).

## **RBMBER - '95 Vessel Traffic Log**

**Record "centre line" crossing time for all vessels transiting Strait.**

**Sheet No.** \_\_\_\_\_ of \_\_\_\_\_

Date: \_\_\_\_\_  
Observer: \_\_\_\_\_  
Recorder: \_\_\_\_\_  
Start Time: \_\_\_\_\_  
End Time: \_\_\_\_\_

*CFV: Commercial Fishing Vessel\**  
*CCV: Commercial Charter Vessel*  
*COL: Commercial Ocean Liner*  
*GPV: Government Patrol Vessel*  
*TUG: Tugboat with/without Barge*

- RKG: Recreational Kayak Group
- RPVb/s: Rec. Power Vessel (big or small)
- RSV: Recreational Sailing Vessel
- PRV: Photographer/Research Vessel
- CAR: Self propelled Cargo Vessel

\* If CFVs are engaged in Fishing activities, then Gear Type must also be recorded. (S=Seine, T=Troll, G=Gillnet)

# ECOLOGICAL RESERVE VISITOR SURVEY

BION RESEARCH INC. 1993

Warden Crew: \_\_\_\_\_ Time On: \_\_\_\_\_ hrs (nearest 5 min)  
 Date: \_\_\_\_\_ (yy/mm/dd) Time Off: \_\_\_\_\_ hrs (nearest 5 min)  
 (complete for first contact of day only)

## Visitor Interview (complete for each vessel observed in or approaching reserve)

Weather: \_\_\_\_\_ Sea State: \_\_\_\_\_

Time: \_\_\_\_\_ hrs (nearest 5 min interval) Contact No.: \_\_\_\_\_

Vessel Type:	RKG RPV Other	<input type="checkbox"/>	RSV CFV	<input type="checkbox"/>	CCV COL	<input type="checkbox"/>	PRV GPV	<input type="checkbox"/>
--------------	---------------------	--------------------------	------------	--------------------------	------------	--------------------------	------------	--------------------------

Vessel Name:	Number of Passengers:
Vessel Number:	_____
Description:	Vessel Home Port:
Operator Name:	Today's Destination:
	Trip Destination:

Launch Point: <small>(today's)</small>	Telegraph Cove Alder Bay Kaikash	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Port McNeill Port Hardy Other	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Kelsey Bay Georgia Strait	<input type="checkbox"/> <input type="checkbox"/>
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Accomodations:	Camping Local Hotel/Motel	<input type="checkbox"/> <input type="checkbox"/>	On Board Vessel Other	<input type="checkbox"/>
----------------	------------------------------	--	--------------------------	--------------------------

Visitor Origin: <small>(Indicate number of each)</small>	North Island South Island International	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Vancouver B.C. Other <small>(please specify)</small>	<input type="checkbox"/> <input type="checkbox"/>	Canada Other USA	<input type="checkbox"/> <input type="checkbox"/>
---	---	--	--	--	---------------------	--

Reason for Trip: <small>(choose one or more)</small>	Whale watching Fishing Other	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Cruising Commercial	<input type="checkbox"/> <input type="checkbox"/>	Government Nature Tour	<input type="checkbox"/> <input type="checkbox"/>
---	------------------------------------	--	------------------------	--	---------------------------	--

Contact In Reserve	Yes	No
Prior Knowledge of Ecological Reserve	<input type="checkbox"/>	<input type="checkbox"/>
Prior Visits to Area	<input type="checkbox"/>	<input type="checkbox"/>
Familiar with No Entry Policy	<input type="checkbox"/>	<input type="checkbox"/>

Knowledge of Boundaries	Yes	No
Compliance	<input type="checkbox"/>	<input type="checkbox"/>
Repeat Offender	<input type="checkbox"/>	<input type="checkbox"/>
Warning Issued	<input type="checkbox"/>	<input type="checkbox"/>

## Comments

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**APPENDIX E      Brochures**

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**APPENDIX E      Brochures**

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## Johnstone Strait

# Whale Watching Guide

Digitized by

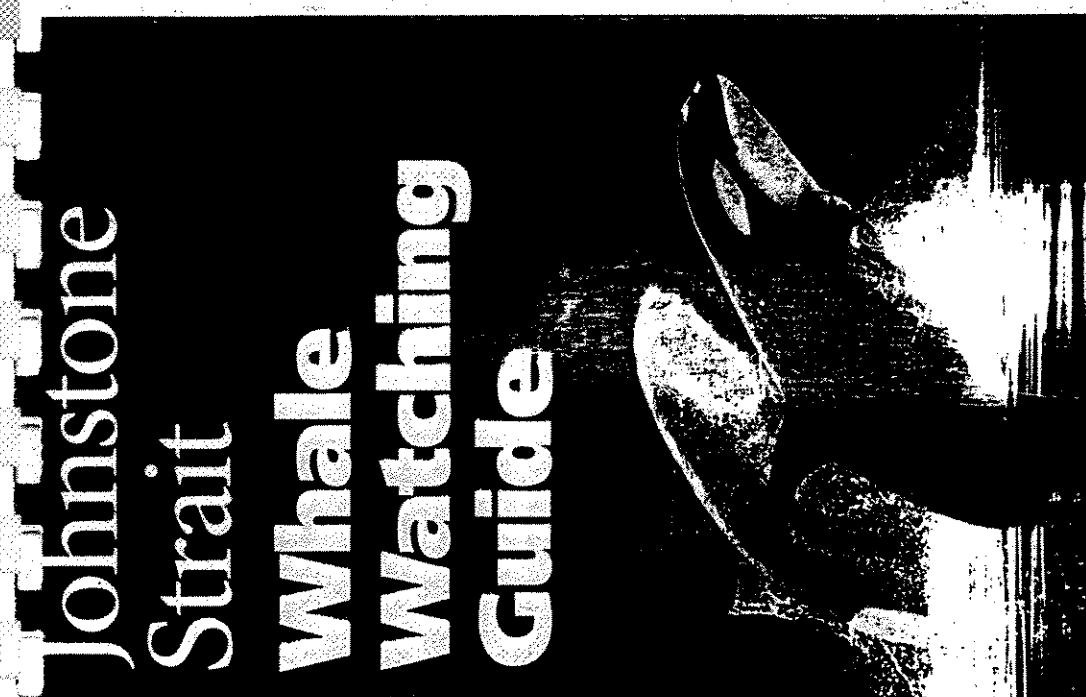
Killer whales or orca inhabit all oceans from the tropics to the edge of the polar ice pack. Throughout this vast range, only one species is recognized (*Orcinus orca*). The largest known concentrations of killer whales are found in the cooler coastal waters of both hemispheres. Norway, Japan, the Antarctic and our Pacific coast have such concentra-

British Columbia is distinguished by its large populations of killer whales which are predictably found in sheltered, accessible waters. More than 600 whales inhabit our coastal waters, each identifiable by unique natural markings.

These whales live in at least four communities: northern resident, southern resident, transient and offshore. The ranges of the resident communities are shown at right.

Northern resident killer whales frequent the Johnstone Strait area off northern Vancouver Island, primarily during the summer and fall. This community consists of

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Phin family and  
guidelines for  
one of their  
habitats. John

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This aerial photograph shows the city of Nanaimo, British Columbia, situated on Vancouver Island. The city is built along the coast, with numerous streets and residential areas visible. A large body of water, likely the Juan de Fuca Strait, is to the west. In the upper right corner, the town of Harmac is partially visible. The image captures the urban sprawl of Nanaimo and its proximity to the ocean.

WASHINGTON

Offshore whales seem to travel in large loosely associated groups.

Government of Canada / Gouvernement du Canada  
Fisheries and Oceans  
Pêches et Océans

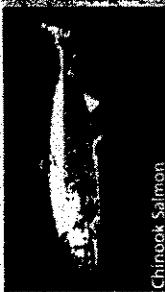


## Feeding

Resident and transient killer whales have very different diets. Residents have been observed to feed only on fish. In pursuit of migrating salmon, resident killer whales regularly visit the inshore areas during the summer and fall. Resident whales often forage in dispersed groups spread out over an area of several kilometres.

## Life Facts

The killer whale is the largest member of the dolphin family. Although potential life spans for residents range from 80-90 years for females and 40-50 years for males, lifespans are more likely to average 50 years and 30 years respectively. Typically, females calve for the first time at 11-14 years and continue to calve every 3-4 years until age 40 or more. Males may not become reproductive active until age 20 or older.



Chinook Salmon

Transient whales are the 'killers of whales' for which the species is named, even capable of attacking baleen whales such as gray whale. Transients are dependent on warm-blooded prey including harbour seals, porpoises and sea lions. While foraging, transients enter bays and inlets, and often dive and change direction unpredictably.

## Arctic Fox

When resident areas are nearby, their calls can often be heard with the aid of an underwater microphone or hydrophone. Killer whales use two types of vocalizations: sonar or echolocation and a repertoire of whistles and squeals which are discrete call types. Each of the 16 resident pods has a repertoire of 7-17 discrete calls – a distinctive dialect. Pods with overlapping and similar calls have been grouped into clans.



**Matrilineal group:** a female and 1-3 generations of her descendants.

These resident dialects appear to be unique among mammals, other than humans, and are not even found among transient killer whales. In contrast, transients rarely call and they make their echolocation clicks only sporadically.

Transients may be quieter to avoid detection by their prey.

## Identification

Much of our knowledge of killer whales has come from the use of a photo-identification method developed by the late Dr. Michael Bigg.

Convinced that killer whales could be uniquely identified by markings and nicks on their dorsal fins and the saddle patch behind the fin, Dr. Bigg used high quality black and white photographs of each whale's left side to identify individuals. After more than 20 years of this research, much is known about each whale and its relationship to other animals.

## Social Structure

Our understanding of the structure of killer whale society comes largely from this photo-identification research. The resident communities are made up of successively more closely related units: pods, subpods and matrilineal groups.

Killer whales often feed cooperatively. Residents often forage in small groups of 1-3 individuals separated by several kilometers, vocalizing frequently. Typically, transients also hunt in small groups, but may congregate for larger prey. Transients hunt in silence, vocalizing only when they have made a kill.

**Subpod:** one or more matrilineal groups which may temporarily separate from the pod to travel independently

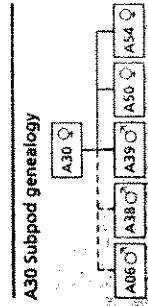
**Pod:** one or more subpods that travel together most of the time

Throughout their lives, members of a matrilineal group remain within hearing distance of each other. In most large mammal societies,

male and/or female offspring disperse after a period of time to set up their own territories. Resident killer whale society is unique in that males remain with their birth group throughout their lives. Females may gradually spend less and less time with their birth group as they become the matriarchs of their own matrilineal group.

Several times each summer, up to 100 resident whales gather in Johnstone Strait. With much vocalizing and socializing between groups, excitement levels are high.

The purpose of these gatherings is not known, but researchers suspect that social bonds and dominance hierarchies are being reinforced through male-female consorting and all-male play groups.



A30 - Matriarch born 1986

predators with no natural enemies except humans.

They exhibit a wide variety of behaviours, most of which we can only guess the meaning of. The following is a key of individual and group behaviours.



The most of water comes from above the whale's back during exhalation. Result of short dives typically breathe before next dive for 3-4 minutes. In contrast, transient dive times are just 5-10 minutes.



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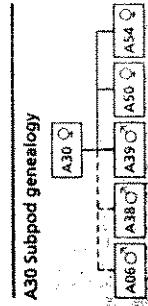
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A25 - Matriarch born 1986

## Whale Watching Guidelines

### I Regulatory Measures

Under the *Fisheries Act*, the Department of Fisheries and Oceans is responsible for the management and protection of marine mammals, including killer whales. The *Marine Mammal Regulations* specifically prohibit disturbance of whales.

Summary convictions for contravention of the *Fisheries Act* or its regulations carry a fine of up to one hundred thousand dollars (\$100,000), a prison term not exceeding twelve (12) months, or both. Indicative convictions carry fines up to five hundred thousand dollars (\$500,000), prison terms of up to twenty four (24) months or both (*Fisheries Act*, S. 78).

### II Licenses and Permits

Researchers wishing to study whales should check with the Department of Fisheries and Oceans to ensure that their proposed study activity is permissible and to determine whether or not they will require a scientific license. For research activities that may require entry of Robson Bight (Michael Bigg) Ecological Reserve, researchers should contact BC Parks.

Although permits are not required to operate a whale watching vessel, the Department of Fisheries and Oceans strongly recommends that operators follow the guidelines for whale watching described herein.

### III Guidelines for Whale Watching

The guidelines apply from June to November, when resident whales are in the Special Management Zone (see map). Be conscious of the effect of your actions on the whales. Be familiar with the distances required and activities which will disturb or interfere with orcas. Whale watching activities should not take place in Robson Bight (Michael Bigg) Ecological Reserve.

#### 1. Guidelines for a Single Vessel Watching Whales

Diving or swimming with whales constitutes a type of approach to killer whales and falls under the same guidelines and regulations.

##### Spyhop



Spyhop

**Breach**  
The whale leaps out of the water, exposing 2/3 or more of its body. Re-entry can be a spectacular belly-flop or side-flop. Breaching may occur during play, or possibly when the animal is disturbed.



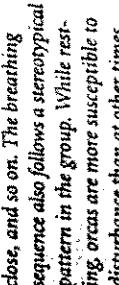
##### Tailslap

Forceful slapping of the tail fluke on the water surface, in sound like a gunshot. Slapping can also be playful, as with calves and breaches, tail slaps may occur during socializing, after testing or when whales are disturbed.



##### Resting

When not foraging, killer whales typically travel in close proximity to each other. Killer whales generally cruise at speeds of 2-4 knots, but can attain speeds of 15 knots or more.



Approach whales from the side, not from the front or the rear. Approach and depart slowly, avoiding sudden changes in speed or direction. Do not "leapfrog". Avoid disturbing groups of resting whales.

Maintain low speeds and constant direction if travelling parallel to whales. When whales are travelling close to shore, avoid crowding them near shore or coming between the whales and shore.

Limit the time spent with any group of whales to less than 30 minutes at a time when within 100-200 metres of whales.

#### 2. Guidelines for More than One Vessel at the Same Observation Site

Avoid any boat position that would result in encircling the whale(s).

Minimize the time spent and number of vessels with any one group of whales, limit time to 30 minutes within 100 - 200 metres and then move out to allow other vessels access to good viewing positions. Coordinate activities by maintaining contact with other aircraft operators and ensure that all operators are aware of the whale watching guidelines.

Respect the same guidelines that apply when only one vessel is watching whales.

#### 3. Guidelines for Aircraft

Limit approaches to 250 metres above the water over whales. Do not hover over, circle around or "buzz" whales. Ensure that you are more than 300 metres from whales before attempting landings or take-offs.

#### 4. Guidelines for Cruiseships

The large vessel and engine size of cruiseships are potentially disturbing to killer whales, particularly when whales are between vessels and the shore. Therefore, cruiseships should observe the following guidelines.

Observe the same guidelines that apply to single vessels or multiple vessels watching whales, but maintain a minimum distance of 300 metres from whales.

Avoid turning or the use of bowthrusters for the purposes of whale watching, when in Johnstone Strait or Blackfish Sound. Do not enter Robson Bight (Michael Bigg) Ecological Reserve.

Leave the area slowly, gradually accelerating when more than 300 metres from the whale(s).

Resting  
When not foraging, killer whales typically travel in close proximity to each other. Killer whales generally cruise at speeds of 2-4 knots, but can attain speeds of 15 knots or more.

Traveling  
When not foraging, killer whales typically travel in close proximity to each other. Killer whales generally cruise at speeds of 2-4 knots, but can attain speeds of 15 knots or more.

## Robson Bight (Michael Bigg) Ecological Reserve

BC Parks is responsible for the protection of killer whale habitat in Robson Bight (Michael Bigg) Ecological Reserve. The reserve was established in 1982 as a sanctuary for killer whales and to protect important killer whale habitat. It includes 1248 ha of marine area and 505 ha of upland buffer zone. Land access is restricted in the ecological reserve.

### Guidelines

Recreational activities, such as whale watching, should not take place in Robson Bight (Michael Bigg) Ecological Reserve, and landing is prohibited. Do not follow whales into the ecological reserve.

Boats requiring sheltered waters such as canoes and kayaks, should cross over to West Cracroft Island, where there are good anchorages and camping is permitted.

**SPECIAL MANAGEMENT ZONE**  
The Special Management Zone is an area where northern resident killer whales are found on virtually a daily basis each summer. Because of its importance as killer whale habitat, warden and monitoring programs have been implemented to educate visitors and determine levels of activity by whales and vessels.

### Typical travel pattern of whales

#### Special Management Zone

#### 1. Robson Bight (Michael Bigg) Ecological Reserve



## Boater Safety

Boaters (including kayakers) should be aware of the hazards associated with commercial seine fishing. Beach lines and running lines (see diagram) are under extreme tension, and may break or 'backlash' unexpectedly. Persons in the path of these lines may be severely injured or killed. For your safety, all boaters should stay well clear of seine fishing operations.

### Special Management Zone

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### For Further Information

#### Recommended reading and viewing:

- Ford, J.K.B., G.M. Ellis and K.C. Balcomb. 1994. *Killer Whales*. UBC Press, Vancouver.  
Bigg, M.A. et al. 1990. Social organization and genealogy of resident killer whales (*Orcinus orca*) in the coastal waters of British Columbia and Washington State. Rep. IWC (Special Issue 12): pp. 383-405.  
Morton, Alexandra. 1993. *In the Company of Whales*. Orca Book Publishers, Victoria.  
Video: *Island of Whales*. National Film Board, Vancouver. 1989.  
Video: *Killer Whales: Wolves of the Sea*. National Geographic Society. 1993.

### Report whale strandings:

Marine Mammal Research,  
Pacific Biological Station,  
Nanaimo  
Report whale sightings:  
1-800-665-5539

A production of  
JOHNSTONE STRAIT  
KILLER WHALE Joint Management Committee

A production of

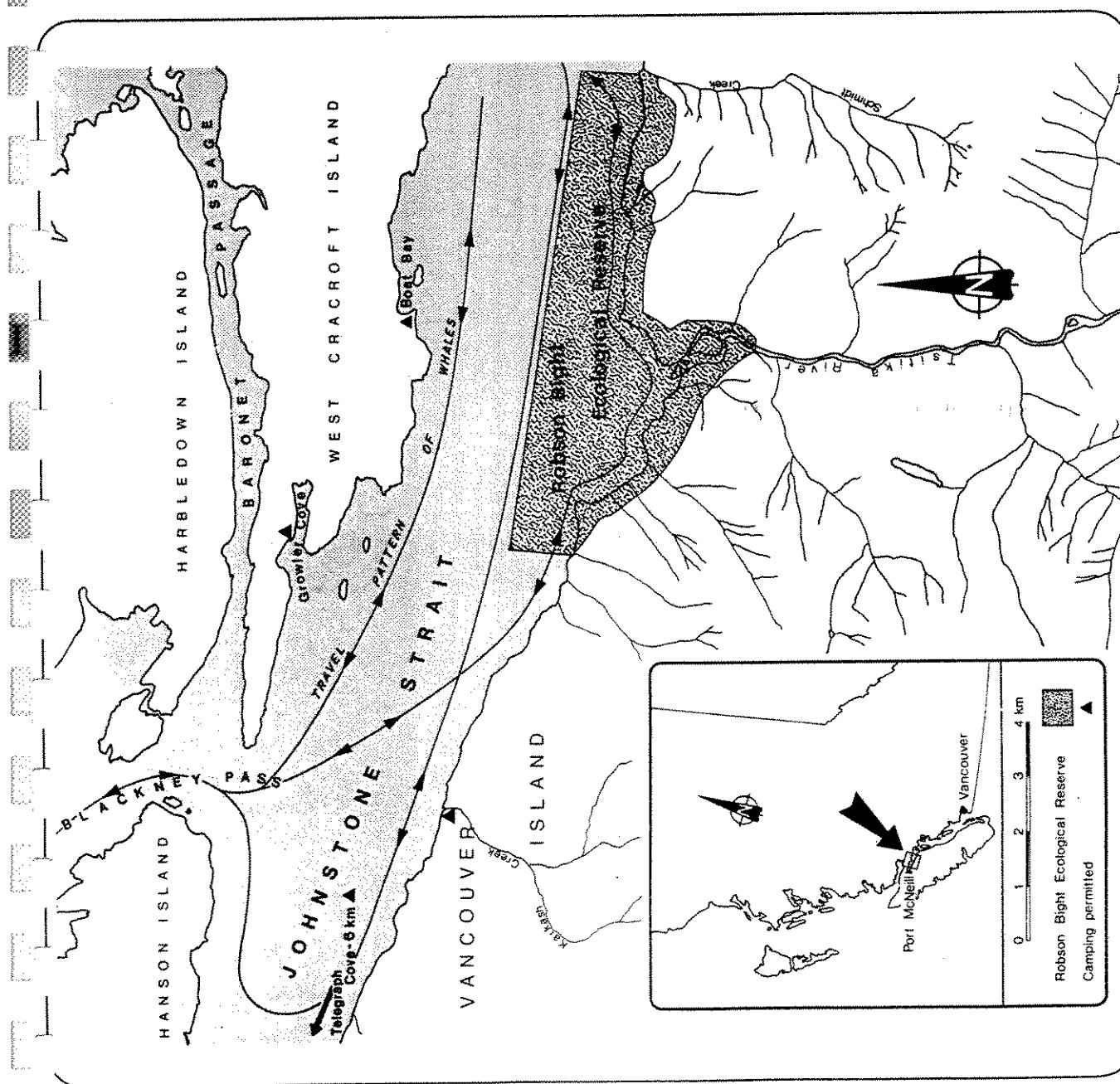
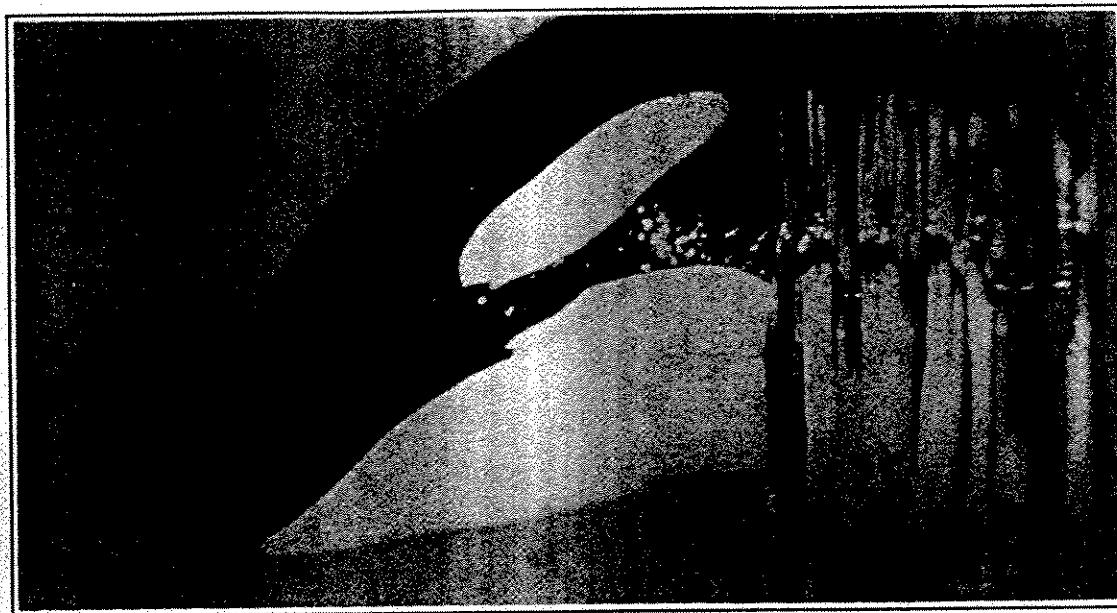
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# Robson Bight (Michael Bigg) Ecological Reserve



## WHAT IS AN ECOLOGICAL RESERVE?

Ecological reserves are areas selected to preserve representative and special ecosystems, plant and animal species, and other natural features and phenomena. Scientific research and education are the principle uses of ecological reserves; they are not created for recreation.

## ROBSON BIGHT (MICHAEL BIGG) ECOLOGICAL RESERVE

This ecological reserve was established in 1982 as a sanctuary for killer whales (*Orcinus orca*) to protect an important portion of their habitat. While scientific research and education programs may be carried on within the reserve (under permit from the Ministry of Environment, Lands and Parks), the purpose of the reserve is to provide the whales with an area where they can rest, socialize and feed without being disturbed.

Recent research has found that boating traffic, including canoes and kayaks, can be very disruptive to killer whales in the reserve. **Boaters must refrain from entering the reserve.** As our knowledge of killer whales increases, other changes may be required to further improve their protection in this important area.

These magnificent marine mammals can be easily observed elsewhere in Johnstone Strait and Blackfish Sound (see map).

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## HISTORY OF THE ECOLOGICAL RESERVE

The 1248 hectare marine portion of Robson Bight Ecological Reserve was established in June, 1982 in recognition of the unique importance this area provides for killer whales. The upland buffer zones, totalling 505 hectares, were added in 1988 and 1989. These areas were closed to public access (except by permit) in 1992 to further reduce disturbance. In 1991 the reserve was renamed Robson Bight (Michael Bigg) Ecological Reserve to commemorate the contributions of the late Dr. Michael Bigg to our knowledge of killer whales.

In 1987, in response to the need to better inform visitors and to ensure a sanctuary for the whales, a seasonal warden program was established to augment the volunteer warden program.

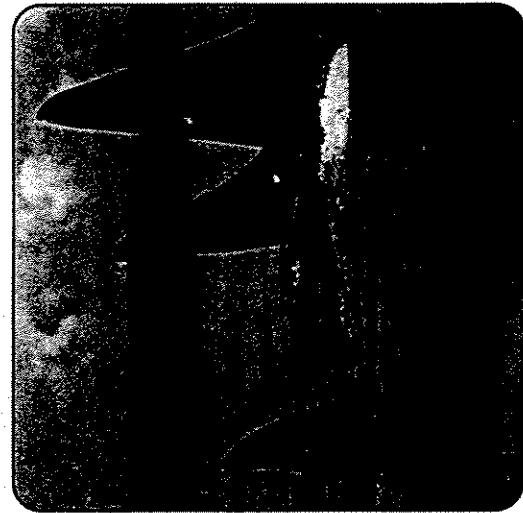
## GUIDELINES FOR OBSERVING KILLER WHALES

Ecological reserves are established for the benefit of wild species and their environment and are not intended for human recreation. To avoid disturbing the whales and for your safety, please follow these guidelines:

- 1) DO NOT enter the reserve or follow whales into the reserve.
- 2) Outside the reserve, approach whales no closer than 100 metres and shift your motor into neutral or idle.
- 3) Approach whales from the side, not from the front or from the rear. Approach and depart slowly avoiding sudden changes in speed or direction. Avoid disturbing a "line" or "group" of resting whales.
- 4) When travelling beside whales, maintain a speed of 2 to 4 knots; do not alter your speed or change course abruptly.
- 5) Keep noise levels down - no horns, whistles, shouting or racing of motors.
- 6) Start your motor only after the whales are more than 100 metres from your vessel, gradually accelerating when more than 300 metres from the whales.
- 7) Landing in the reserve is not permitted. It is recommended that boats, including canoes and kayaks, cross over to the West Cracroft Island side where good anchorages exist and camping is permitted.
- 8) Be conscious of the effect of your actions on the whales. Do not engage in any activity which will disturb or interfere with them. Under Section 71 (A) (2) of the Federal Fisheries Regulations it is illegal to disturb or molest killer whales.

## CAMPING

Camping is permitted at Telegraph Cove, Kaikash Creek, Boat Bay or Growler Cove on West Cracroft Island (See Map). The



last two sites have good anchorages and are excellent locations for whale watching. Neither has fresh water. Entry or camping in the upland portion of Robson Bight (Michael Bigg) Ecological Reserve is NOT permitted.

## ABOUT KILLER WHALES

Killer whales travel in stable family groups called pods that are organised on a matriarchal (female) lineage. Pods usually consist of several mothers and their offspring which generally travel together. Pods may have as many as 45 individuals, but average size is five to twenty. Bulls remain with their mother as long as she lives. Female offspring eventually split off to form their own sub groups. Occasionally a number of pods come together to form a 'super pod'.

Individual killer whales may be recognized by the shape of their dorsal fin, saddle patch markings and from scars and nicks (especially to the dorsal fin) a method pioneered by Dr. Michael Bigg. From this method we know that more than 480 killer whales are found in British Columbia. Of these about 300 specialise as fish eaters and are known as 'resident' killer whales. The remainder are the marine mammal hunters known as 'transients'. Nearly 200 of the resident whales have been seen in Johnstone Strait. In addition each pod can be recognized by a set of calls or 'dialect' of sounds they make while travelling, foraging or socializing.

Killer whales generally swim at speeds of 2 to 8 km/h, sometimes travelling as a tight-knit group and at other times dispersed over a few square kilometres. The dive sequence of individual resident whales usually consists of one long dive lasting 3 to 4 minutes followed by shorter dives lasting 15 to 20 seconds.

Killer whales range in length from 2.5 metres at birth to 8 m for mature females and nearly 10 m for adult bulls. Dorsal fins of adult bulls are about 2 m tall; those of females may reach 1 m. A cow may live for 75 years and may have five viable offspring during her lifetime. Bulls may live as long as 50 years. The average life expectancy is lower than this since a high proportion of calves die of natural causes before age five.

Whales rest in groups, abreast of each other and synchronize their breathing. During these periods they are particularly susceptible to disturbance.

For Further Information:

BC Parks  
Strathcona District  
Bathravore Beach Provincial Park  
Box 1479, Parksville, B.C.  
V9P 2H4  
Telephone: (604) 248-3931

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**APPENDIX F**

**Warden Policy and Guidelines Memorandum**

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## M E M O R A N D U M

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**TO:** BC Parks, and all Robson Bight Staff  
**FROM:** Ed Gregr  
**DATE:** June 16, 1995

### *RE: Robson Bight Warden Protocol*

This memo outlines the protocol to be used by wardens under specific traffic and staffing conditions. All staff are expected to be familiar with objectives and priorities of the warden program.

#### ***Warden Priorities***

In order to act efficiently and consistently, all wardens must be aware of the priorities with respect to warden service. These are outlined below in order of importance:

1. **Ensure that no boaters approach whales in the ecological reserve.** This implies brief contacts, and constant vigilance to intercept any whale oriented traffic approaching or already inside the reserve. Wardens should maintain a position OUTSIDE the reserve boundaries, unless it is necessary to intercept a whale oriented boat within the reserve.
2. **Ensure that no vessels follow the whales into the reserve.** Vessels engaged in whale watching will often follow whales towards the reserve. Proactive action is necessary to ensure that all vessels are contacted prior to reaching the boundary. This implies brief contacts, and good prioritization of vessels.
3. **Minimize vessel traffic within the boundaries of the reserve.** When no whales are in the area, the emphasis of the wardens is on education. It is not a priority, at these times, to intercept all vessels before they enter the reserve. If no whales are in the area, it is permissible for the Wardens to allow a vessel to travel a certain distance through the reserve to minimize the Warden's travel distances. *However under no circumstances is a recreational vessel to travel all the way through the reserve without being contacted.*
4. **Educate as many boaters as possible about the reserve, the boundaries the "no entry" policy, and proper whale watching guidelines.** When no whales are in the area, wardens should contact as many recreational boaters as possible. This may imply cutting one contact short to ensure that another is made. Provide as much information as the visitors desire, but do not allow your time to be monopolized.
5. **Conduct interpretive sessions as often as possible, to as many people as possible.** This provides the wardens with options for activities at times when there is NO CHANCE that whales will approach near Zone 2 or the reserve. Wardens should offer interpretive services to any charter operators in the area and actively seek out groups camped in the area.

Under no circumstances are wardens to leave the reserve area if whales are in or approaching the reserve.

## ***Operating Protocol***

Wardens are not expected to intercept commercial traffic transiting the reserve. This includes commercial fishing vessels. If commercial crews are engaged in recreational activities within the reserve, contact may be initiated at the discretion of the warden. Extreme diplomacy is must be used when contacting commercial fishers.

Any group camping or lighting fires on shore must be approached and have BC Parks policy explained. Compliance with the Ecological Reserves Act should be requested. Belligerent or repeat offenders are to be reported to BC Parks.

Wardens should make all efforts to avoid creating confrontational situations. Wardens should extract themselves as expediently as possible from any serious confrontation and report it to BC Parks.

When the whale-vessel interaction monitoring program is in progress, a single vessel will be available to patrol the boundaries of the reserve. Wardens must be familiar with the following protocol for two and one boat coverage respectively.

### **Two Boat Coverage**

Warden II (15' Hurricane) will monitor the eastern boundary of the reserve and contact all westbound recreational traffic. Warden I (17' Hurricane) will monitor the western boundary of the reserve and contact all eastbound recreational traffic. Warden I will also be responsible for the Roving Interpretive program to Kaikash and Blinkhorn campsites.

When whales are in the reserve, Warden II will maintain position while Warden I will ensure no vessels follow the whales into the reserve, and then maintain a position abeam the whales, outside the reserve, as they move towards the east end.

### **One Boat Coverage**

During one boat coverage, the Warden will monitor the reserve from the western boundary. This boundary has a higher priority since the majority of whale-oriented traffic, particularly kayak groups, originates from this direction. All eastbound traffic will be contacted outside the reserve. After an interpretive session the vessel will be asked to voluntarily comply with the "No Entry" policy.

Westbound traffic *traveling* through the reserve will be contacted by the wardens around the Zone 3-4 boundary. After an interpretive session, the vessel will be asked to leave the reserve, and for voluntary compliance in the future. This will alleviate the need for the Warden to travel 9 km back and forth between the East and West boundaries.

Any vessel observed to be *recreating* in the reserve will be responded to immediately, regardless of its location within the reserve. After an interpretive session, the vessel will be asked to leave the reserve, and for voluntary compliance in the future.

When whales are in the reserve, the Warden will maintain a position abeam the whales, on the outside boundary, as they move through the reserve. Any whale oriented traffic from either direction will be contacted.