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OCEANOGRAPHIC, GEOGRAPHIC, AND HYDROLOGICAL PARAMETERS OF SCOTIA-FUNDY AND SOUTHERN GULF OF ST. LAWRENCE INLETS

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Les établissements des Sciences et levés océaniques dans les régions et à l'administration centrale ont cessé de publier leurs diverses séries de rapports en décembre 1981. Une liste complète de ces publications figure dans le volume 39, Index des publications 1982 du *Journal canadien des sciences halieutiques et aquatiques*. La série actuelle a commencé avec la publication du rapport numéro 1 en janvier 1982.

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Gulf of St. Lawrence (Cape North to Baie des Chaleurs)

Embayment Name	Embayment ID	Reference Map	Page
Amet Sound	CR		11
Antigonish Harbour	CU		15
Baie Verte	CY		17
Baie des Chaleurs	DI		19
Buctouche Harbour	DL		21
Cardigan Bay	DB		23
Caribou Harbour	CQ		25
Cascumpeque Bay	DA		27
Cheticamp Harbour	CV		29
Fox Harbour	CNa	Wallace Harbour	68
George Bay	CT		31

Embayment Name	Embayment ID	Reference Map	Page
Hillsborough Bay	DN		33
John Bay	CRb	Amet Sound	12
Mabou Harbour	CM		35
Malpeque Bay	DH		37
Margaree Harbour	CW		39
Merigomish Harbour	CP		41
Miramichi Bay	DJ		43
Murray Harbour	DG		45
New London Bay	DE		47
Pictou Harbour	CO		49
Port Philip	CSb	Pugwash Harbour	52
Pugwash Harbour	CSa	Pugwash Harbour	52
Pugwash Harbour/Port Philip	CS	Pugwash Harbour	51
Richibucto Harbour	DM		55
Rustico Bay	DF		57
Shediac Bay	DK		59
St. Peters Bay PEI	DC		61
Summerside Harbour	CZ		63
Tatamagouche Bay	CRa	Amet Sound	12
Tracadie Bay	DD		65
Wallace Harbour	CNb	Wallace Harbour	68
Wallace Harbour and vicinity	CN		67

Eastern Nova Scotia (Cape North to Halifax)

Embayment Name	Embayment ID	Reference Map	Page
Arichat Harbour	BRd	Chedabucto Bay	77
Bay of Rocks	BSb	St. Peter's Bay NS	138
Beaver Harbour	BZ		71
Bedford Basin	CJb	Halifax Inlet	98
Canso Harbour	BA		73
Chedabucto Bay (Black Pt. to Cape Argos)	BRa	Chedabucto Bay	75
Chedabucto Bay (Durell Is. to Guet Pt.)	BR	Chedabucto Bay	75
Chezzetcook Inlet	AB		81
Cole Harbour	AXb	Tor Bay	146
Country Harbour	ARa	Country Hbr/Isaacs Hbr	84
Country Harbour/Isaacs Harbour	AR		83
Dover Bay	CD		87
Ecum Secum Inlet	CI		89
Gabarus Bay	BH		91
Gegogan Harbour	AQb	Liscomb Hbr/Gegogan Hbr	106
Glasgow Harbour	AZa	Glasgow Hbr/Portage Cove	93
Great Bras d'Or Inlet	CL		95
Guysborough River	BRb	Chedabucto Bay	76
Halifax Inlet	CJ		97
Indian Harbour	APa	Indian Hbr/Wine Hbr	101

Embayment Name	Embayment ID	Reference Map	Page
Inhabitants Bay	BRe	Chedabucto Bay	77
Isaacs Harbour	ARb	Country Hbr/Isaacs Hbr	84
Jeddore Harbour	AL		103
Larry's River	AXa	Tor Bay	145
Lennox Passage East	BSc	St. Peter's Bay NS	138
Lennox Passage West	BRf	Chedabucto Bay	78
Liscomb Harbour	AQa	Liscomb Hbr/Gegogan Hbr	106
Liscomb Harbour/Gegogan Harbour	AQ		105
Mira Bay	BI		109
Molasses Cove	AXc	Tor Bay	146
Morien Bay	BO		111
Mushaboom Harbour	AM		113
Musquodoboit Harbour	AK		115
Necum Teuch Harbour	CH		117
North West Arm (Halifax Harbour)	CJa	Halifax Inlet	98
Owl's Head Bay	ADb	Ship Harbour	127
Petpeswick Inlet	AC		119
Popes Harbour	AOc	Shoal Bay/Spry Bay	129
Portage Cove	AZc	Glasgow Hbr/Portage Cove	93
Porter's Lake	AA		121
Quoddy Inlet	CA		123
Sheet Harbour	CG		125
Ship Harbour	ADa	Ship Harbour	127
Shoal Bay	AOd	Shoal Bay/Spry Bay	129
Spry Bay	AOa	Shoal Bay/Spry Bay	130
St. Anns Harbour	BJ		133
St. Mary's River	AN		135
St. Peter's Bay NS	BSa	St. Peter's Bay NS	137
St. Peter's Bay NS and vicinity	BS		76
Strait of Canso	BRc	Chedabucto Bay	141
Sydney Harbour	CB		141
Sydney Harbour Northwest Arm	CBb	Sydney Harbour	142
Sydney Harbour South Arm	CBa	Sydney Harbour	142
Tangier Harbour	AOb	Shoal Bay/Spry Bay	130
Tor Bay	AX		145
Whitehaven Harbour	AY		149
Wine Harbour	APb	Indian Harbour/Wine Harbour	101

Nova Scotia and Bay of Fundy (Sambro to Chignecto Bay)

Embayment Name	Embayment ID	Reference Map	Page
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Avon Bay	BKc	Minas Basin/Cobequid Bay	186
Barrington Bay	AT		155
Barrington Passage	AEa	Barrington Passage	157
Black's Harbour	BYc	Letang Harbour	172
Blind Bay	BQa	Blind Bay/Shag Bay	159

Embayment Name	Embayment ID	Reference Map	Page
Chignecto Bay (Cap Enrage to Sand River)	BLa	Chignecto Bay	161
Chignecto Bay (Cape Chignecto to Martin Hd)	BL		161
Clarke's Harbour	AEb	Barrington Bay	157
Cobequid Bay	BKb	Green Bay/LaHavre River	186
Cumberland Basin	BLc	Chignecto Bay	162
Green Bay	BMa	Green Bay/LaHavre River	165
Green Harbour	BGb	Jordan Bay/Green Harbour	168
Jordan Bay	BGa	Jorday Bay/Green Hbr	168
Jordan Bay/Green Harbour	BG		167
LaHave River	BMb	Green Bay/LaHavre River	165
L'Etang Harbour	BYa	L'Etang Harbour	172
L'Etang Harbour and vicinity	BY		171
Liverpool Bay and vicinity	BT	Liverpool Bay	175
Liverpool Bay	BTa	Liverpool Bay	175
Lobster Bay	AId	Wedgeport	221
Lockeport Harbour	AW		177
Lunenburg Harbour	BNa	Lunenburg Bay/Rose Bay	179
Mahone Bay	BX		181
Medway Harbour	BU		183
Minas Basin (from Cape Chignecto)	BK	Minas Basin/Cobequid Bay	185
Minas Basin (from Cape Sharp)	BKa	Minas Basin/Cobequid Bay	185
Negro Harbour	AVa	Negro Hbr/Northeast Hbr	190
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Northeast Harbour	AVb	Negro Hbr/Northeast Hbr	190
Passamaquoddy Bay	CEa	Passaquoddy/St. Croix	194
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Rose Bay	BNb	Lunenburg Bay/Rose Bay	179
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Shag Bay	BQb	Blind Bay/Shag Bay	159
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Shelburne Harbour	BFa	Shelburne Bay	215
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St. Croix River	CEb	Passamaquoddy/St. Croix	194
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ABSTRACT

D. Gregory, B. Petrie, F. Jordan, and P. Langille. 1993. Oceanographic, geographic and hydrological parameters of Scotia-Fundy and southern Gulf of St. Lawrence inlets. Can. Tech. Rep. Hydrogr. Ocean Sci. No. 143: viii + 248 pp.

This report presents a tabulation of some of the geographic, oceanographic, and hydrological parameters for 141 coastal embayments in the Scotia-Fundy region and southern Gulf of St.Lawrence. The presentation includes:

(a) geographic parameters - area at high water and chart datum, perimeter, axis length, low water volume, maximum depth, width and area at the mouth of the inlet, and watershed area;

(b) oceanographic parameters - mean and large tidal range, mean tidal volume, tidal current at the mouth of the inlet and an estimate of the flushing time;

(c) hydrological parameters - monthly mean and standard deviation of the freshwater discharges into the inlet.

Monthly mean temperatures and standard deviations for NAFO fishing areas and the locations of moored thermographs in the area are presented in appendices.

RESUME

D. Gregory, B. Petrie, F. Jordan, and P. Langille. 1993. Oceanographic, geographic and hydrological parameters of Scotia-Fundy and southern Gulf of St. Lawrence inlets. Can. Tech. Rep. Hydrogr. Ocean Sci. No. 143: viii + 248 pp.

Le présent rapport contient sous forme de tableaux des données géographiques océanographiques et hydrologiques sur 141 échancrures côtièree de la baie de Fundy,de la péninsule néo-écossaise et de la partie méridionale du golfe du St-Laurent:

a) données géopraphiques - superficie à marée haute, zéro hydrographique, périmètre, longueur de l'axe, volume d'eau à marée basse, profondeur, largeur et superficie maximales à l'entrée, et superficie du bassin hydrographique;

b) données océanographiques - narnage moyen et aux grandes marées, volume tidal moyen, courant de marée à l'entrée et estimation du temps de chasse;

c) données hydrologiques - moyenne et écart-type mensuels des débits d'eau douce dans l'échancrure.

Les températures moyennes et les écarts-type pour les zones de pêche de l'OPANO, ainsi que les positions des thermographes amarrées dans la région sont données dans les annexee.

Introduction

In 1970, the coastal oceanography group at Bedford Institute of Oceanography began to compile basic oceanographic and geographic parameters for inlets in the Atlantic Provinces. The project was not completed because changing priorities led to a greater emphasis on open shelf problems. However, the rapid expansion of nearshore aquaculture, the concerns with marine pollution and the demands for information pertinent to shallow water engineering have prompted increased interest in the coastal zone. A basic description of the inlets in the Scotia-Fundy region and southern Gulf of St. Lawrence, like the one started in 1970, would help to address many of the issues related to the nearshore area. Thus, the project was revived under the title "Classification of Estuaries, Inlets and Coastal Embayments" or CEICE for short.

The primary goal of this project is to group the approximately 140 inlets in the region into a smaller number of units based on similarities of their oceanographic, geographic and hydrological properties. A necessary first step is to tabulate the basic information into a database that can be easily accessed, modified and added to as new data become available. This publication provides an overview of the parameters assembled for these inlets. The basic presentation consists of a map and a table of variables including:

(a) geographic parameters - area at high water (HW) and chart datum (CD), perimeter, axis length, volume at chart datum, maximum depth in the inlet, width and area at the mouth of the inlet, and watershed area;

(b) oceanographic parameters - mean and large tidal range, mean tidal volume, tidal current at the mouth of the inlet and an estimate of the flushing time;

(c) hydrological parameters - monthly mean freshwater discharges into the inlet and their standard deviations.

Monthly mean temperatures and standard deviations for broad coastal areas and the locations of moored thermographs in the Scotia-Fundy region and the southern Gulf of St. Lawrence are presented in appendices.

With the overall objective of the program established , it was necessary to decide the best way to determine the areas and volumes of each inlet. Earlier efforts involved using a planimeter to determine the area enclosed by each contour on a hydrographic chart - a tedious, time-consuming process subject to considerable error unless done with great care. An even greater drawback was that this process often had to be repeated if, for example, a problem required adjustment of an inlet's boundaries. In a new system, an ability to partition an area of digitized bathymetry in an arbitrary fashion was highly desirable. A local company, Earth and Oceans Research, was contracted to design a system based on their product inFOcus.

inFOcus/QUIKmap

inFOcus is a low cost Geographic Information System (GIS) based on a mapping module (QUIKmap) and a Dbase compatible data management system (FoxPro). inFOcus supports the usual sort of GIS data types - points, lines and polygons, but does not have many of the analytical procedures normally associated with a high end GIS such as CARIS or SPANS. As a result it was necessary for Earth and Oceans to develop custom software (CLIPPOLY) which in combination with the features offered by QUIKmap permit a user to calculate areas and volumes for an arbitrary area within an embayment. In very simple terms, CLIPPOLY and QUIKmap provide the means to calculate the areas and volumes while inFOcus and FoxPro provide the means of storing, manipulating and displaying the data.

Data Files

The two major data sources in CEICE are the maps of coastlines and bathymetry (base or theme maps in GIS terminology), and dBase III compatible database records which contain the various fields calculated by CLIPPOLY. Maps and database records are related by an embayment indentifier (BAY_ID). Additional parameters from other sources (i.e. tidal range) are added to the database record to permit the calculation of other variables. As an example, surface area and cross-sectional area computed from CLIPPOLY are used with the tidal range to compute a mean tidal current across the section.

Base Maps

With the decision to proceed with a digital mapping system, it immediately became apparent that there is virtually no digital bathymetry for the inshore regions of Nova Scotia, New Brunswick and Prince Edward Island. In order to obtain the necessary bathymetric contours, bathymetric charts from the Canadian Hydrographic Service were digitized as a series of ASCII files. Fifty seven different charts were used with scales from 1:10000 (Halifax Inlet) to 1:200000 (Minas Basin, Chignecto Bay, Baie de Chaleur). The majority of the maps fell within the range of 1:20000 to 1:60000. Metric charts were selected when available, but charts with contour intervals in both fathoms and feet were also used. In some cases a single basemap consists of a number of bays (e.g. Barrington Passage and vicinity) which are reported in the database separately.

Earth and Oceans Research Ltd converted the ASCII files using AUTOCAD where they were plotted at full scale and overlayed over the original charts. Any digitizing errors were corrected in AUTOCAD and the resulting files converted to a QUIKmap base map. In some cases, for example Lennox Passage, the shoreward end of the embayment was artificially closed off. A comment on the data page for a particular embayment will make note when this has occurred.

Each QUIKmap basemap is made up of a number of layers with each layer representing

the coastline or a bathymetric level. Individual layers may be turned on or off as well as assigned a different colour or line pattern. To improve readability, not all of the contours used in the computations are displayed. To prepare paper copies of the maps for this report, it was necessary to use different line patterns rather than color to designate the individual contours. Unfortunately with the limited graphics resolution available, these patterns are not always obvious on the maps. In general, the shorter the dashed line, the deeper the contour.

The QUIKmap basemaps are available upon request by contacting the author.

System requirements

QUIKmap and inFOcus are designed to operate on any IBM-PC with graphics monitor and hard disk drive. Practically, a 286 based CPU with a math co-processor is a minimal system to use the mapping and database components and a 386 or 486 CPU is required to perform the map partitioning necessary to calculate embayment areas and volumes. The system, when used for partitioning, also requires essentially all available memory. An upper memory manager which permits the loading of DOS above 640K is almost essential, particularly when working with the larger maps.

The inFOcus package is available from Earth & Ocean Research Limited, Dartmouth, Nova Scotia. The cost of the system is $1500 to $2000 depending upon which additional features are ordered.

Data Presentation

All of the embayments included in the report are organized alphabetically within three regions determined by the NAFO fishing zones (see figure 1). The first region is the Gulf of St. Lawrence and includes all of the embayments located in NAFO zone 4T. The second region is the eastern shore of Nova Scotia and Cape Breton and includes NAFO zones 4VN and 4W. The third region covers the south shore of Nova Scotia and Bay of Fundy in zone 4X. Some of the areas have been subdivided into smaller embayments and for these the reader is referred to the reference map area listed in the Table of Contents under Appendix A. Where no reference map is given, the embayment name and reference map name are the same. Where a reference map is given, the embayment and the data associated with it will be found under the name of the reference map. For example, Amet Sound, the first map of Appendix A, is further subdivided into John Bay and Tatamagouche Bay. Information concerning these two embayments is referenced under Amet Sound. (see Table of Contents, Appendix A)

As an additional source of information, monthly mean temperatures and standard deviations for broad coastal areas are compiled in Appendix B. The statistics were derived from data from the Long Term Temperature Monitoring Program and reported by R.H. Loucks Oceanology Limited, Discovery Consultants Limited and Brian Petrie. 1991. To assist the reader in identifying the geographic areas for which the statistics apply, the map showing the NAFO fishing zones is repeated in Appendix B.

The locations of moored thermographs in the Scotia-Fundy region and southern Gulf of St. Lawrence on which these statistics are based are shown in Appendix C. Data from these instruments are available from the BIO archives.

Embayment Description

A map and a data sheet of the physical parameters are provided for each bay. All parameters are specified to one decimal place which is simply a result of the computations. These should be rounded off as appropriate.

The title includes the embayment name, NAFO fishing zone, Canadian Hydrographic chart number from which the bathymetric contours were derived and a bay identification number. The bay number normally consists of two uppercase letters. A third lower case letter denotes that the bay is a sub-area of a larger area.

A description of the rest of the parameters is as follows;

Area(CD)	Surface area (km^2) at the 0 contour (chart datum) - computed by CLIPPOLY
Area(HW)	Surface area (km^2) at the coastline (high water) - computed by CLIPPOLY
Perimeter	Distance (km) along the perimeter of the coastline - computed by CLIPPOLY
Volume(CD)	Volume below the 0 contour (chart datum) - computed by CLIPPOLY
Axis Length	Distance (km) from head to open boundary - measured from CHS chart
Maximum depth	Maximum depth (m) reported on the CHS chart
Section width	Total width (km) across the open boundary(s) - calculated by CLIPPOLY
Section area	Cross-sectional area (m^2) across the section - calculated by CLIPPOLY
Tidal range	Tidal range (m) for mean and large tides as compiled by the CHS and Marine Environmental Data Service.
Tidal Volume	Based on mean tidal range, defined as;

$$\textit{Mean tidal range} \times \frac{\textit{Area(CD)} + \textit{Area(HW)}}{2}$$

Tidal Current — Computed from Tidal Volume passing through section over half a tidal cycle referred to the M2 tide (T = 12.42 hours)

$$\textit{mean tidal current} = \frac{2}{T} \times \frac{\textit{Tidal volume}}{\textit{Section area}}$$

$$\textit{peak tidal current} = \frac{\pi}{2} \times (\textit{mean tidal current})$$

Flushing time — The estimated time in hours that it takes for a tracer to be reduced to approximately a third of its initial concentration. It assumes complete mixing of the incoming tidal volume with the surrounding embayment volume and the subsequent complete removal from the bay of the tidal volume. One would normally expect the actual flushing time to be somewhat longer. Specifically, the flushing time is defined as;

$$\frac{-12.42}{\ln\left(\frac{Vol(CD)}{Vol(CD) + \textit{Tidal volume}}\right)}$$

Tidal/Freshwater Ratio — Ratio of the tidal volume to the equivalent amount of freshwater entering the system during one-half tidal cycle. The freshwater amount is based on an average annual discharge.

Watershed area — Drainage area (km^2) for an embayment

Freshwater Discharge — Estimated monthly discharge based on ;
a) gauged rivers in inlet adjusted by watershed areas not gauged
b) gauged rivers from nearby inlets adjusted by ratio of watershed areas in the two inlets

Standard deviation is given as a % of the monthly mean

Acknowledgements

This project was conceived by Dr. R.W. Trites over 20 years ago, but due to changing departmental priorities was never completed. We thank him for this idea and for his advice and encouragement through this phase of the work.

References

R. H. Loucks Oceanology Limited, Discovery Consultants Limited and Brian Petrie. 1991. Analyzing for climatological information in the long term temperature monitoring program sea temperature time series. Can. Tech. Rep. Hydrogr. Ocean Sci. No. 132: viii + 209 pp.

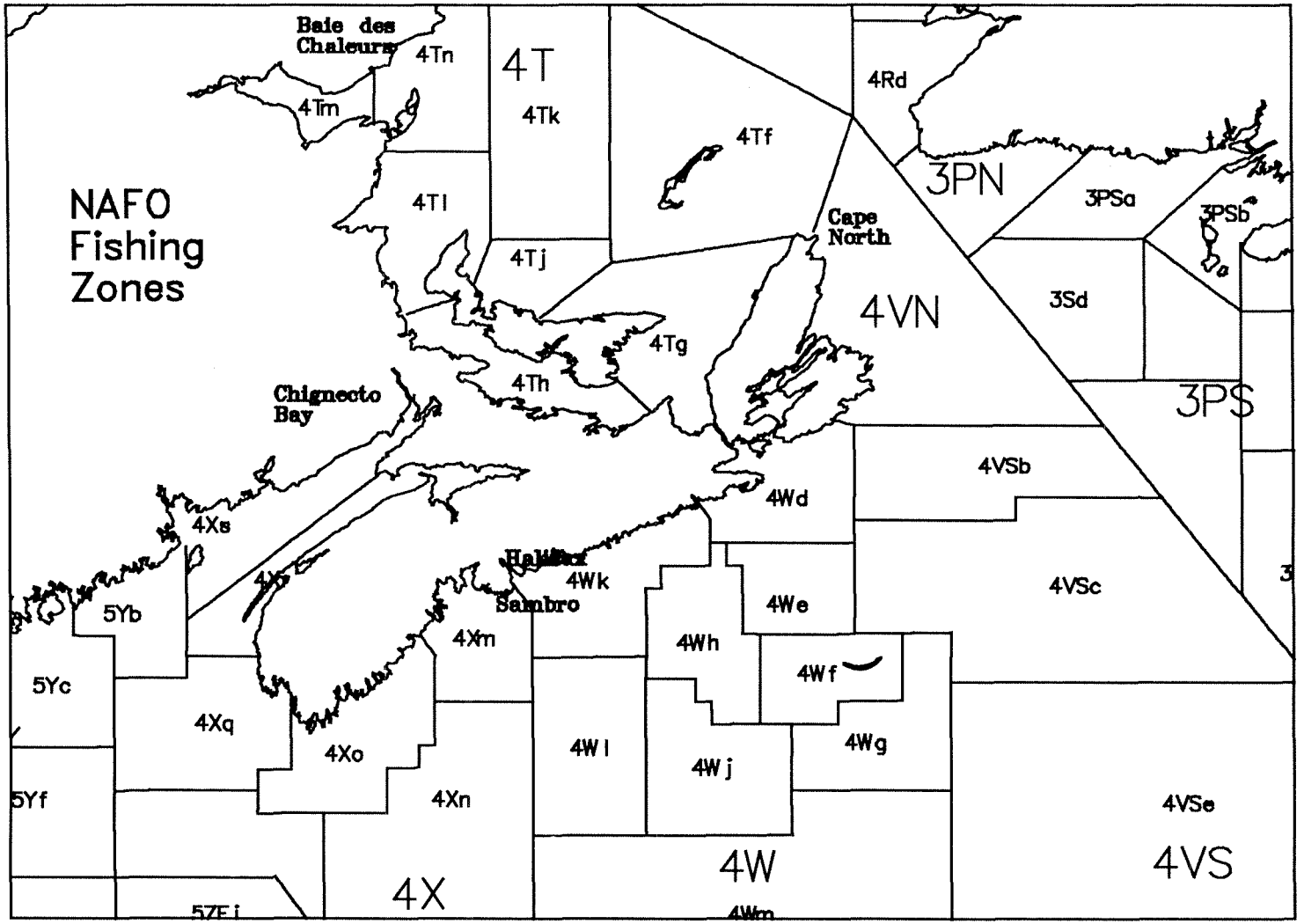


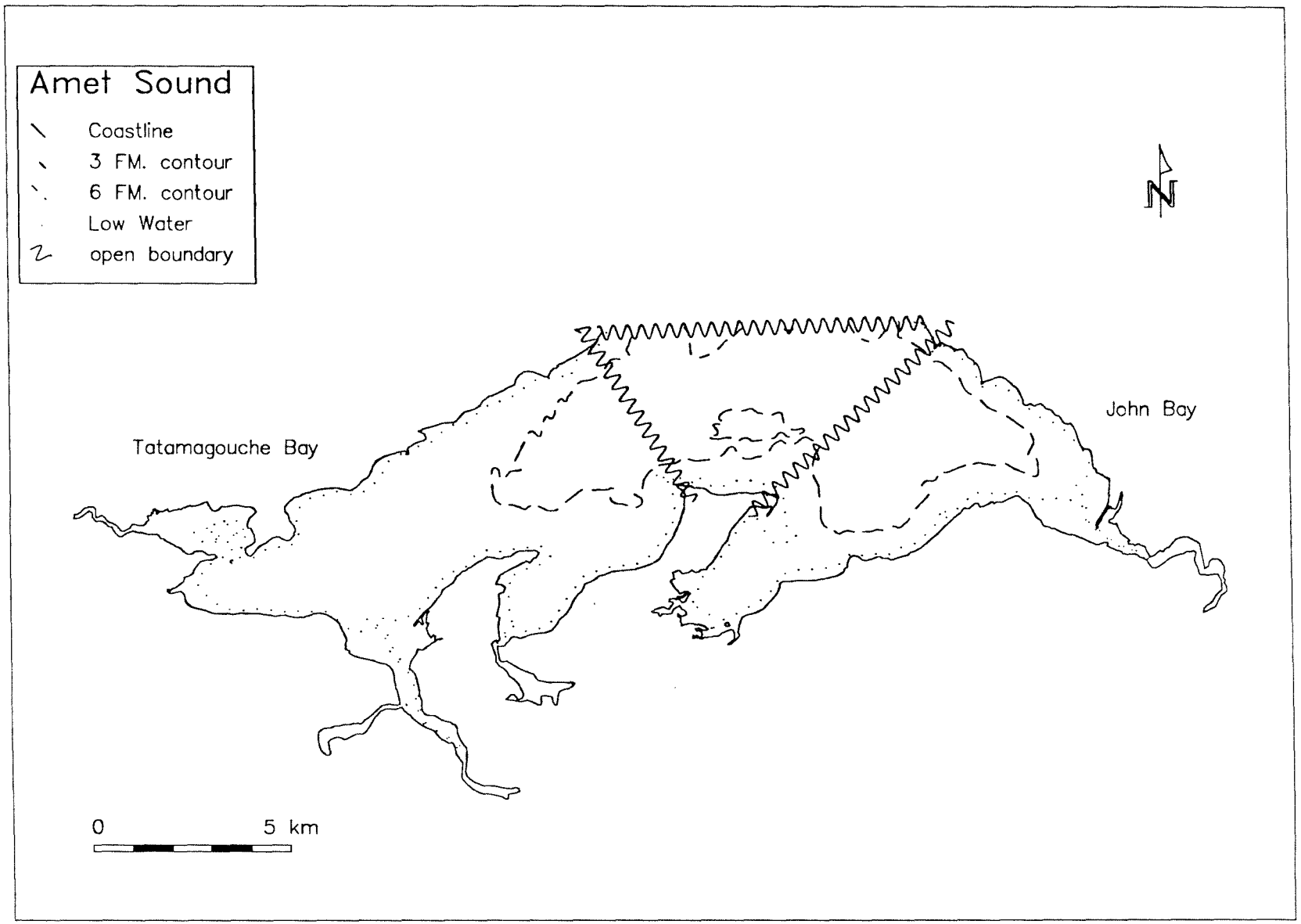
Figure 1 NAFO Fishing Zones

APPENDIX A

This appendix presents a location map and a data sheet for each of the embayments listed in Table 1. The embayments are grouped within three major areas, Gulf of St. Lawrence, Eastern Nova Scotia, and Southern Nova Scotia and Bay of Fundy. Within each major area, the embayments are listed alphabetically by the reference map name in Table 1.

APPENDIX A(i)

Gulf of St. Lawrence


Amet Sound
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
N
Tatamagouche Bay
John Bay
0
5 km

AMET SOUND Zone 4Th Chart 4497
Bay ID..CR

Area (CD)	90.8 km^2	Area (HW)	111.1 km^2
Perimeter	84.3 km	Volume (CD)	471.0 $10^6 m^3$
Axis Length	19.1 km	Maximum Depth	12.5 m
Section Width	7.8 km	Section Area	70465.2 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.50 m	161.5 $10^6 m^3$	0.10 m/s	0.16 m/s

Flushing time 42.1 hr
Tidal/Freshwater volume ratio 286.01

Watershed Area 971.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	29.6 (60%)	May	37.2 (72%)	Sept	5.4 (103%)
Feb	22.6 (77%)	June	13.6 (88%)	Oct	15.7 (96%)
Mar	39.0 (43%)	July	6.2 (98%)	Nov	32.8 (60%)
Apr	56.2 (36%)	Aug	7.2 (119%)	Dec	37.7 (43%)

TATAMAGOUCHE BAY Zone 4Th Chart 4497
Bay ID..CRa

Area (CD)	41.7 km^2	Area (HW)	53.9 km^2
Perimeter	50.1 km	Volume (CD)	139.0 $10^6 m^3$
Axis Length	16.2 km	Maximum Depth	9.4 m
Section Width	3.7 km	Section Area	18009.7 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.50 m	76.5 $10^6 m^3$	0.19 m/s	0.30 m/s

Flushing time 28.3 hr
Tidal/Freshwater volume ratio 237.34

Watershed Area 555.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	16.9 (60%)	May	21.3 (72%)	Sept	3.1 (103%)
Feb	12.8 (77%)	June	7.7 (88%)	Oct	9.0 (96%)
Mar	22.3 (43%)	July	3.6 (98%)	Nov	18.7 (60%)
Apr	32.1 (36%)	Aug	4.1 (119%)	Dec	21.5 (43%)

JOHN BAY Zone 4Th Chart 4497
Bay ID..CRb

Area (CD)	27.1 km^2	Area (HW)	34.5 km^2
Perimeter	29.9 km	Volume (CD)	141.0 $10^6 m^3$
Axis Length	11.5 km	Maximum Depth	10.4 m
Section Width	5.4 km	Section Area	35720.6 m^2

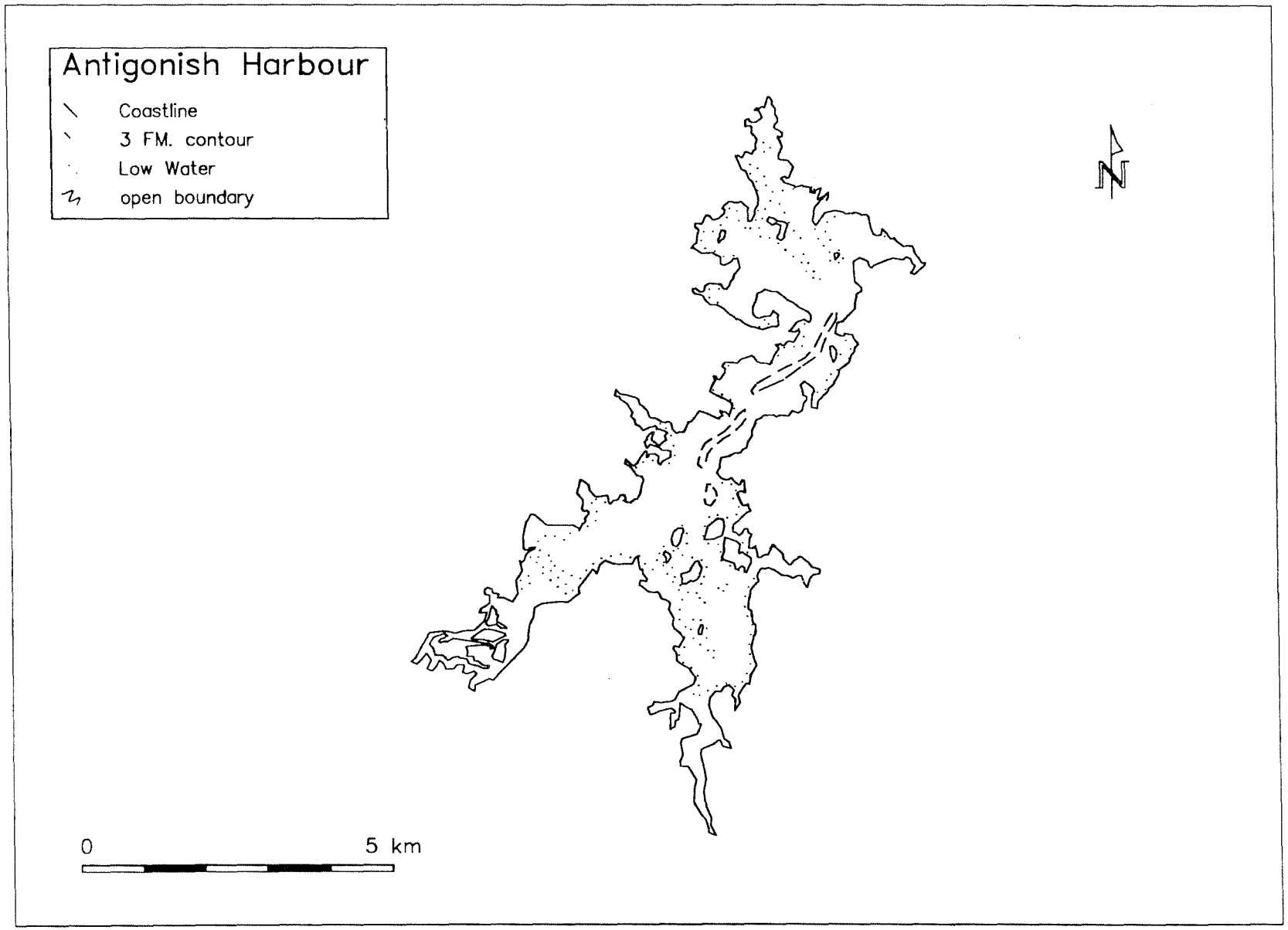
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.50 m	49.3 $10^6 m^3$	0.06 m/s	0.10 m/s

Flushing time 41.3 hr
Tidal/Freshwater volume ratio 217.38

Watershed Area 390.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	11.9 (60%)	May	14.9 (72%)	Sept	2.2 (103%)
Feb	9.1 (77%)	June	5.4 (88%)	Oct	6.4 (96%)
Mar	15.7 (43%)	July	2.5 (98%)	Nov	13.2 (60%)
Apr	22.5 (36%)	Aug	2.9 (119%)	Dec	15.2 (43%)


Antigonish Harbour
Coastline
3 FM. contour
Low Water
open boundary
N
0
5 km

ANTIGONISH HARBOUR Zone 4Tg Chart 4462
Bay ID..CU

Area (CD)	11.4 km^2	Area (HW)	17.5 km^2
Perimeter	46.1 km	Volume (CD)	15.0 $10^6 m^3$
Axis Length	11.8 km	Maximum Depth	8.2 m
Section Width	0.2 km	Section Area	233.3 m^2

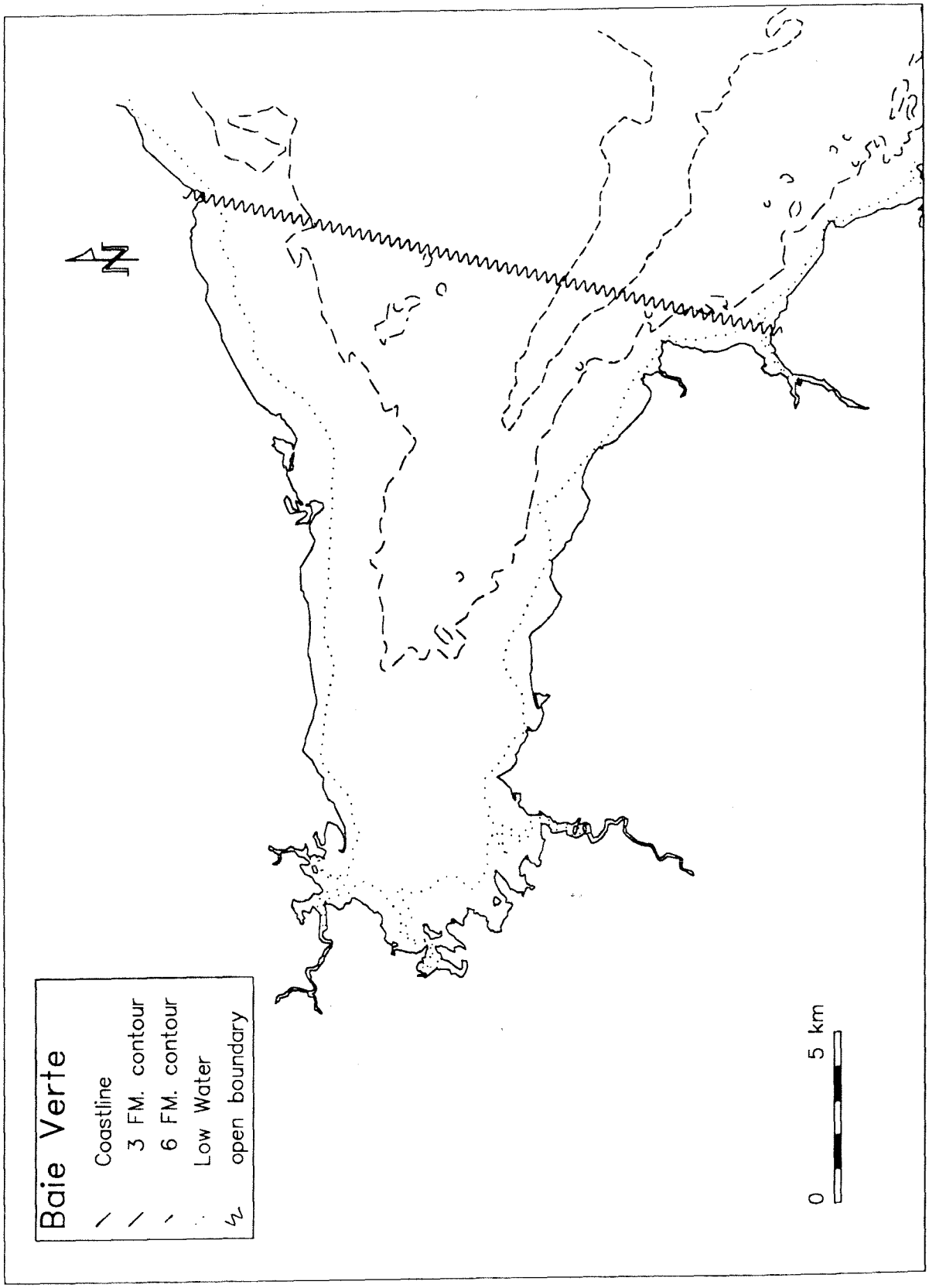
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.00 m	1.60 m	14.5 $10^6 m^3$	2.78 m/s	4.37 m/s

Flushing time 18.3 hr
Tidal/Freshwater volume ratio 28.96

Watershed Area 721.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	28.4 (51%)	May	27.9 (65%)	Sept	10.6 (78%)
Feb	21.8 (72%)	June	10.1 (73%)	Oct	17.9 (63%)
Mar	31.9 (44%)	July	7.0 (100%)	Nov	28.4 (52%)
Apr	44.1 (40%)	Aug	8.6 (118%)	Dec	32.2 (39%)


Baie Verte
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
N
0
5 km

BAIE VERTE Zone 4Th Chart 4406
Bay ID..CY

Area (CD)	118.0 km^2	Area (HW)	150.6 km^2
Perimeter	66.3 km	Volume (CD)	612.0 $10^6 m^3$
Axis Length	21.9 km	Maximum Depth	17.1 m
Section Width	12.9 km	Section Area	96070.0 m^2

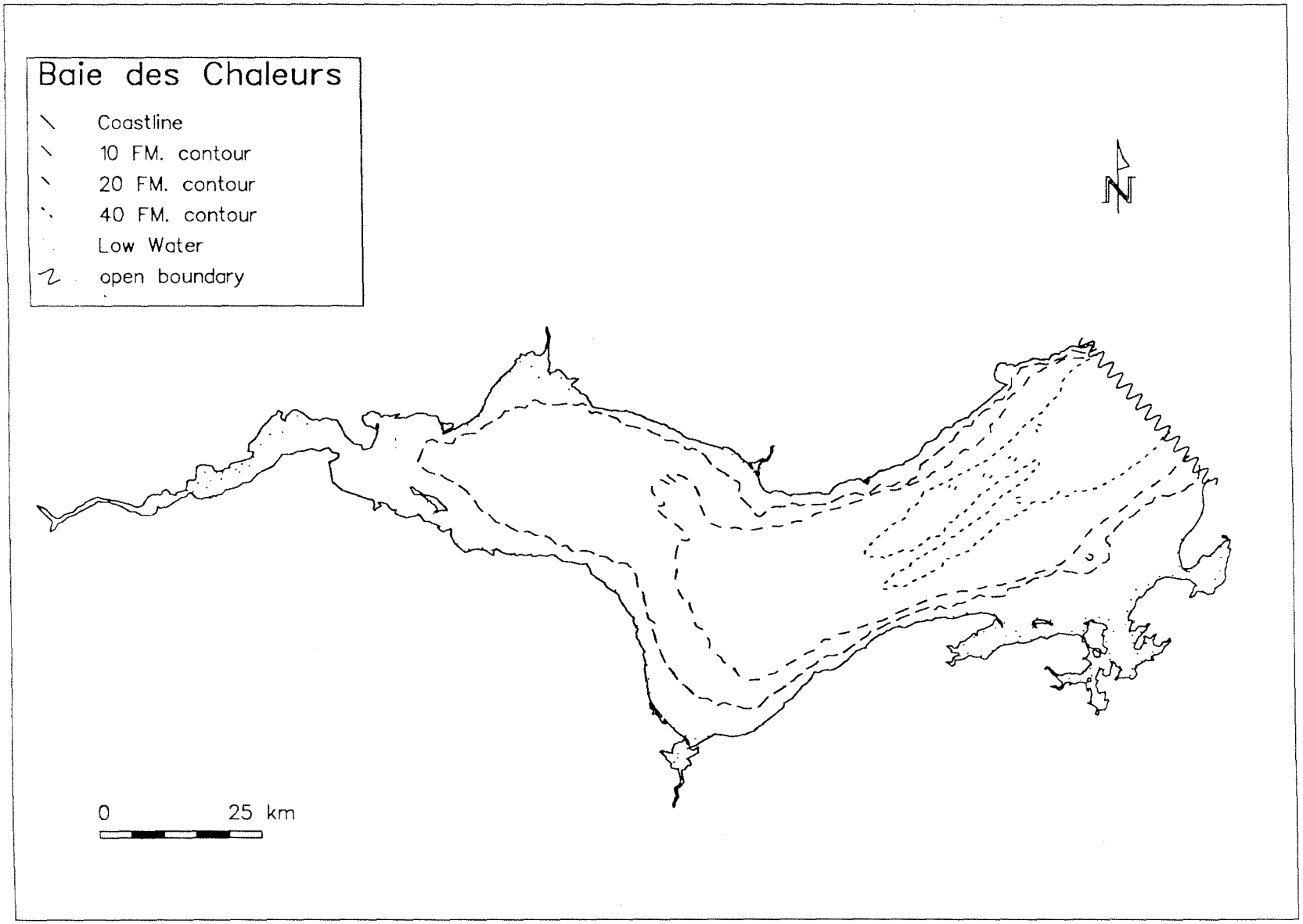
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.80 m	2.70 m	241.8 $10^6 m^3$	0.11 m/s	0.18 m/s

Flushing time 37.2 hr
Tidal/Freshwater volume ratio 622.46

Watershed Area 591.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	18.5 (57%)	May	28.0 (62%)	Sept	5.3 (90%)
Feb	15.8 (64%)	June	10.7 (62%)	Oct	12.0 (87%)
Mar	23.4 (48%)	July	5.9 (63%)	Nov	20.6 (61%)
Apr	37.5 (33%)	Aug	5.7 (101%)	Dec	25.2 (36%)


Baie des Chaleurs
Coastline
10 FM. contour
20 FM. contour
40 FM. contour
Low Water
open boundary
N
0
25 km

BAIE DES CHALEURS Zone 4Tm Chart 4024
Bay ID..DI

Area (CD)	4123.8 km^2	Area (HW)	4287.6 km^2
Perimeter	608.9 km	Volume (CD)	142716.0 $10^6 m^3$
Axis Length	187.0 km	Maximum Depth	89.6 m
Section Width	27.4 km	Section Area	1603254.6 m^2

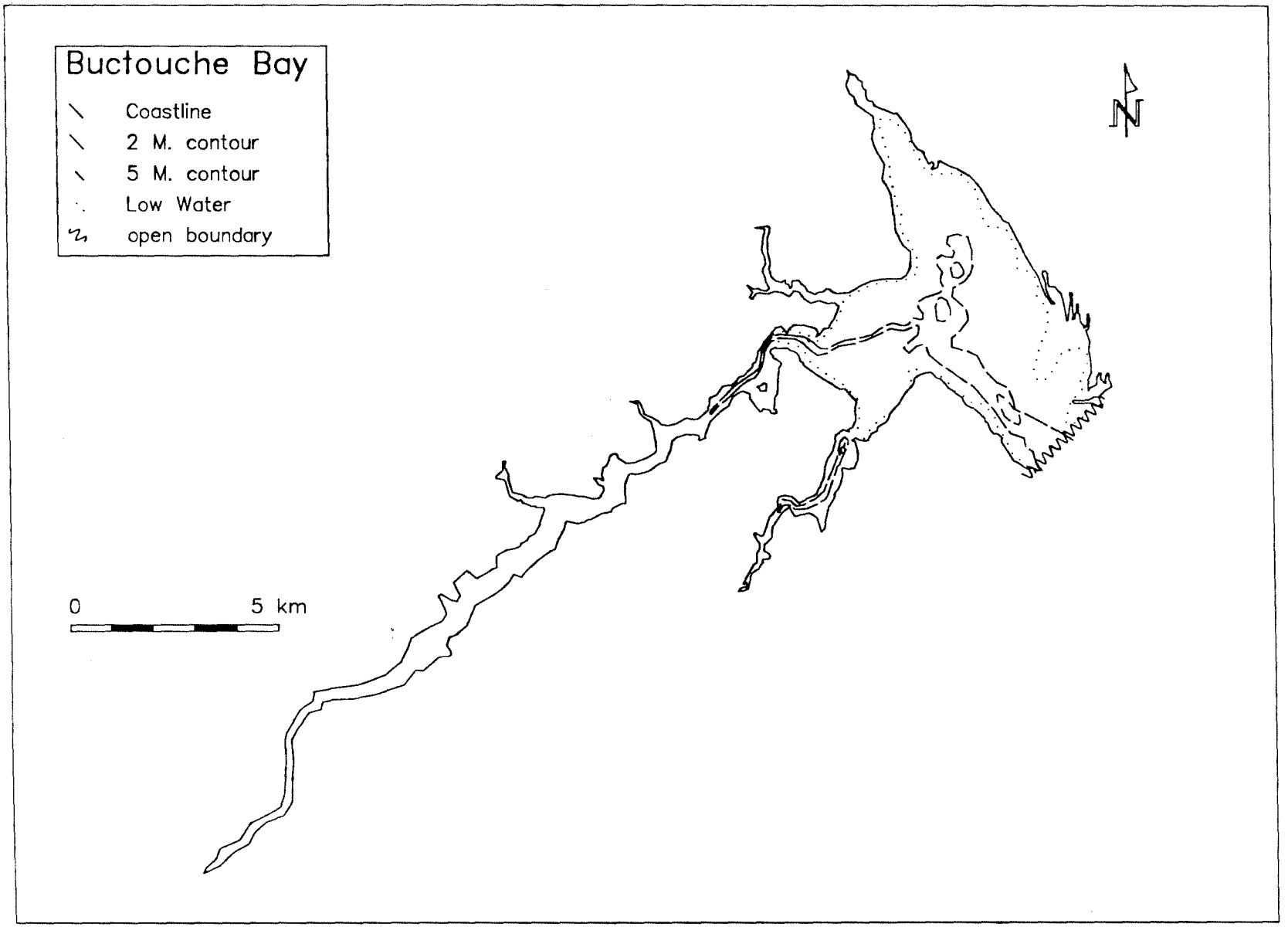
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.40 m	6729.2 $10^6 m^3$	0.19 m/s	0.29 m/s

Flushing time 269.5 hr
Tidal/Freshwater volume ratio 412.83

Watershed Area 33047.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	229.7	(45%)	May	3000.4	(28%)	Sept	370.4	(45%)
Feb	220.2	(73%)	June	974.0	(37%)	Oct	519.4	(76%)
Mar	257.3	(102%)	July	482.4	(52%)	Nov	523.9	(54%)
Apr	1353.9	(56%)	Aug	376.5	(60%)	Dec	441.3	(66%)


Buctouche Bay
Coastline
2 M. contour
5 M. contour
Low Water
open boundary
0
5 km
N

BUCTOUCHE BAY Zone 4Th Chart 4905
Bay ID..DL

Area (CD)	34.3 km^2	Area (HW)	40.4 km^2
Perimeter	95.1 km	Volume (CD)	48.0 $10^6 m^3$
Axis Length	27.8 km	Maximum Depth	9.9 m
Section Width	1.8 km	Section Area	4283.6 m^2

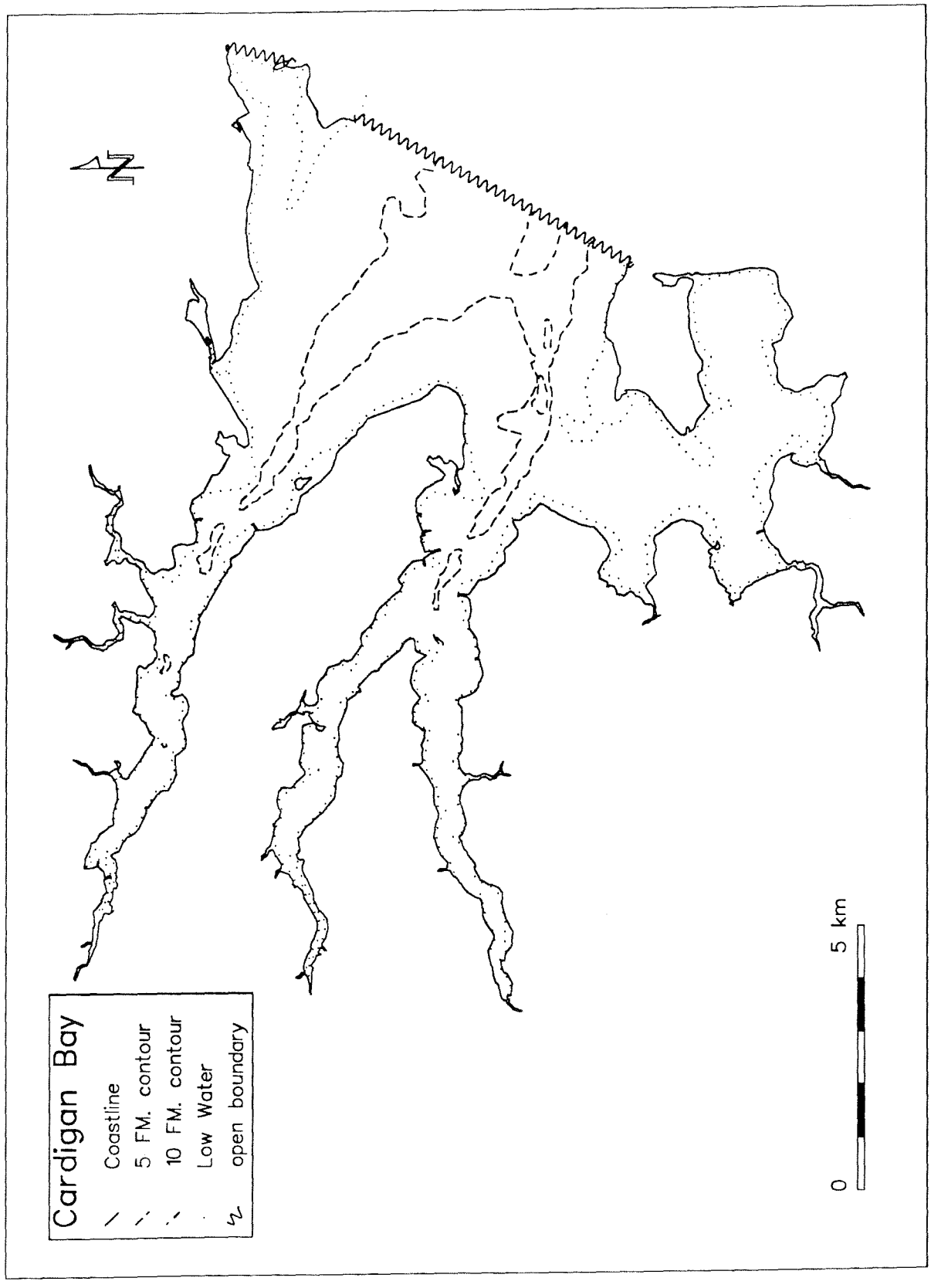
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.70 m	1.30 m	26.2 $10^6 m^3$	0.27 m/s	0.43 m/s

Flushing time 28.5 hr
Tidal/Freshwater volume ratio 86.36

Watershed Area 601.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	7.3 (92%)	May	28.0 (66%)	Sept	3.5 (90%)
Feb	7.3 (79%)	June	11.1 (70%)	Oct	8.9 (114%)
Mar	13.9 (63%)	July	7.3 (97%)	Nov	12.6 (63%)
Apr	44.6 (36%)	Aug	4.9 (91%)	Dec	13.4 (65%)


Cardigan Bay
Coastline
5 FM. contour
10 FM. contour
Low Water
open boundary
N
0
5 km

CARDIGAN BAY Zone 4Tg Chart 4422
Bay ID..DB

Area (CD)	64.7 km^2	Area (HW)	78.0 km^2
Perimeter	130.3 km	Volume (CD)	377.0 $10^6 m^3$
Axis Length	15.7 km	Maximum Depth	21.6 m
Section Width	5.6 km	Section Area	62275.0 m^2

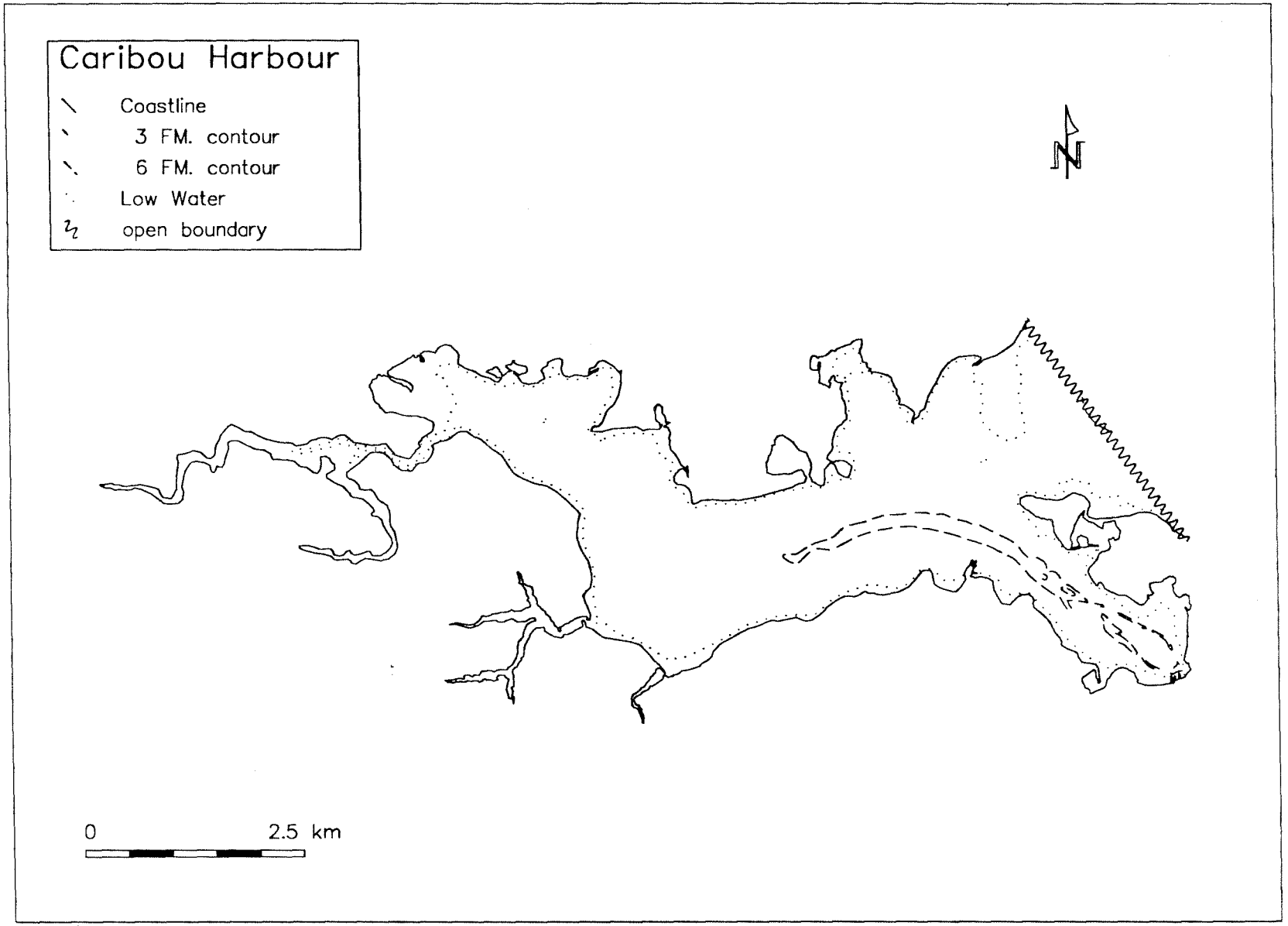
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.00 m	1.70 m	71.3 $10^6 m^3$	0.05 m/s	0.08 m/s

Flushing time 71.6 hr
Tidal/Freshwater volume ratio 291.89

Watershed Area 504.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	11.6 (48%)	May	18.3 (58%)	Sept	5.8 (18%)
Feb	11.3 (36%)	June	10.9 (26%)	Oct	7.0 (53%)
Mar	14.4 (33%)	July	7.8 (17%)	Nov	8.2 (44%)
Apr	18.8 (43%)	Aug	6.5 (20%)	Dec	10.7 (51%)


Caribou Harbour
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
N
0
2.5 km

CARIBOU HARBOUR Zone 4Th Chart 4483
Bay ID..CQ

Area (CD)	14.2 km^2	Area (HW)	18.8 km^2
Perimeter	38.3 km	Volume (CD)	39.0 $10^6 m^3$
Axis Length	14.2 km	Maximum Depth	12.8 m
Section Width	2.5 km	Section Area	9229.1 m^2

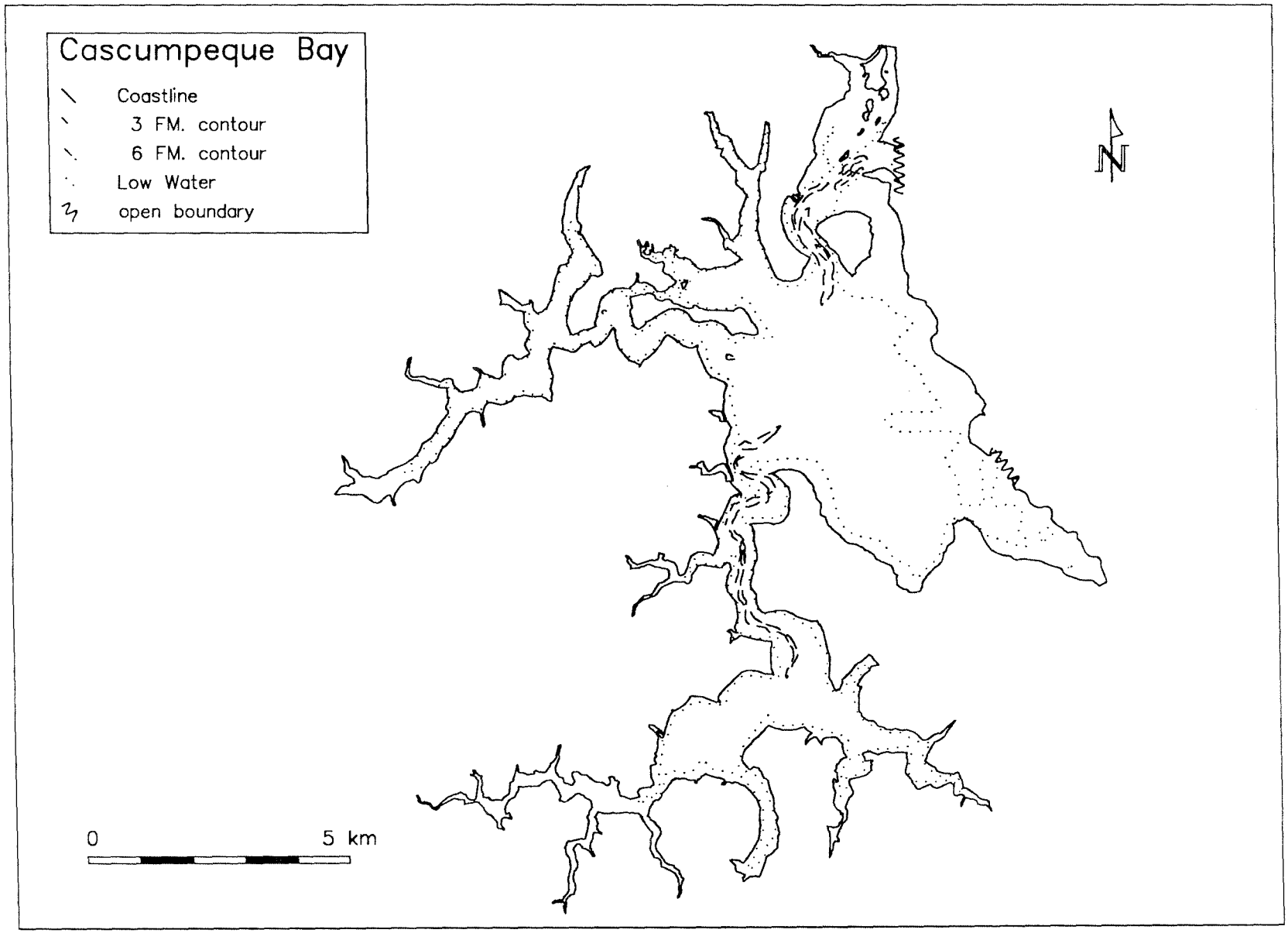
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	2.10 m	21.5 $10^6 m^3$	0.10 m/s	0.16 m/s

Flushing time 28.2 hr
Tidal/Freshwater volume ratio 238.75

Watershed Area 155.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	4.7 (60%)	May	5.9 (72%)	Sept	0.9 (103%)
Feb	3.6 (77%)	June	2.2 (88%)	Oct	2.5 (96%)
Mar	6.2 (43%)	July	1.0 (98%)	Nov	5.2 (60%)
Apr	9.0 (36%)	Aug	1.1 (119%)	Dec	6.0 (43%)


Cascumpeque Bay
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
0
5 km
N

CASCUMPEQUE BAY Zone 4Tl Chart 4492
Bay ID..DA

Area (CD)	31.8 km^2	Area (HW)	51.1 km^2
Perimeter	105.0 km	Volume (CD)	67.0 $10^6 m^3$
Axis Length	19.4 km	Maximum Depth	11.9 m
Section Width	0.4 km	Section Area	1020.7 m^2

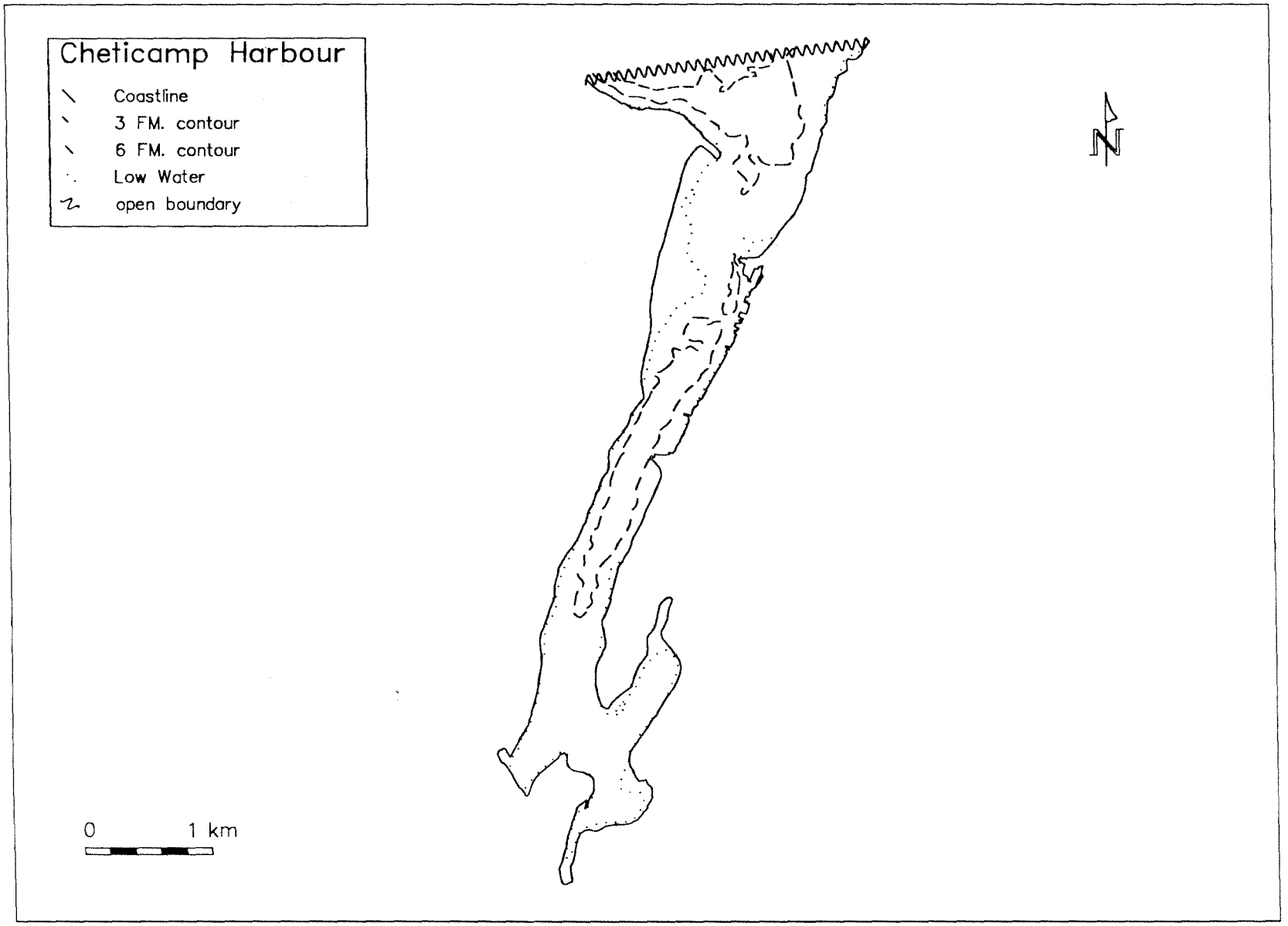
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.70 m	1.00 m	29.0 $10^6 m^3$	1.27 m/s	2.00 m/s

Flushing time 34.4 hr
Tidal/Freshwater volume ratio 137.51

Watershed Area 400.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	6.7 (56%)	May	7.1 (80%)	Sept	5.2 (55%)
Feb	7.9 (64%)	June	1.7 (50%)	Oct	3.9 (81%)
Mar	36.8 (57%)	July	2.8 (50%)	Nov	5.8 (57%)
Apr	26.3 (41%)	Aug	1.5 (50%)	Dec	7.7 (51%)


Cheticamp Harbour
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
0
1 km
N

CHETICAMP HARBOUR Zone 4Tg Chart 4449
Bay ID..CV

Area (CD)	3.9 km^2	Area (HW)	4.5 km^2
Perimeter	19.2 km	Volume (CD)	16.0 $10^6 m^3$
Axis Length	6.8 km	Maximum Depth	14.6 m
Section Width	2.1 km	Section Area	17907.3 m^2

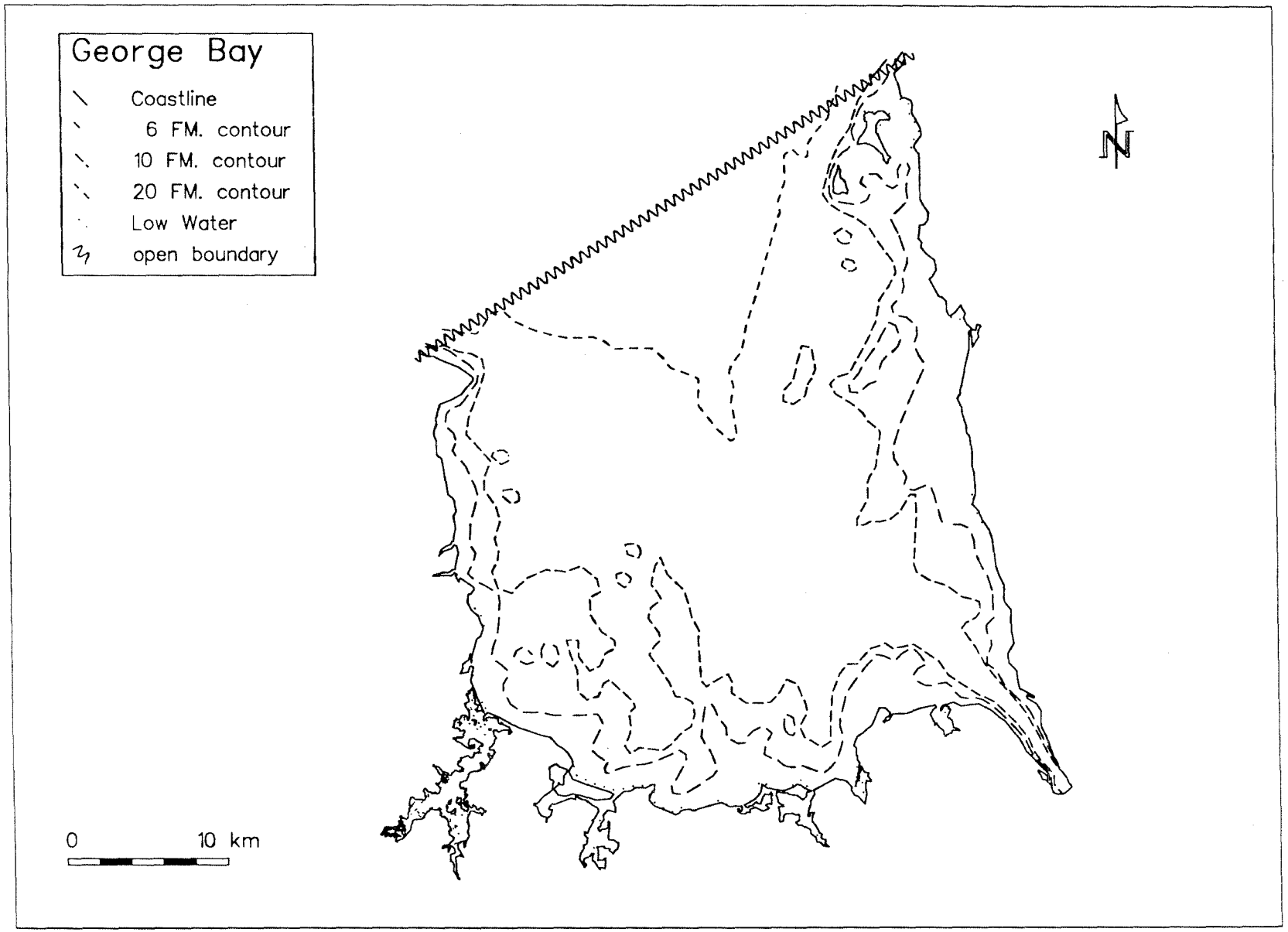
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.70 m	1.10 m	2.9 $10^6 m^3$	0.01 m/s	0.01 m/s

Flushing time 73.0 hr
Tidal/Freshwater volume ratio 41.55

Watershed Area 51.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.7 (50%)	May	9.7 (30%)	Sept	1.7 (56%)
Feb	1.9 (56%)	June	3.9 (62%)	Oct	3.1 (37%)
Mar	1.9 (68%)	July	1.0 (50%)	Nov	4.4 (27%)
Apr	4.1 (65%)	Aug	1.5 (58%)	Dec	3.4 (38%)


George Bay
Coastline
6 FM. contour
10 FM. contour
20 FM. contour
Low Water
open boundary
0
10 km
N

GEORGE BAY Zone 4Tg Chart 4023
Bay ID..CT

Area (CD)	1137.9 km^2	Area (HW)	1164.6 km^2
Perimeter	221.1 km	Volume (CD)	24120.0 $10^6 m^3$
Axis Length	41.5 km	Maximum Depth	41.1 m
Section Width	35.1 km	Section Area	1121011.5 m^2

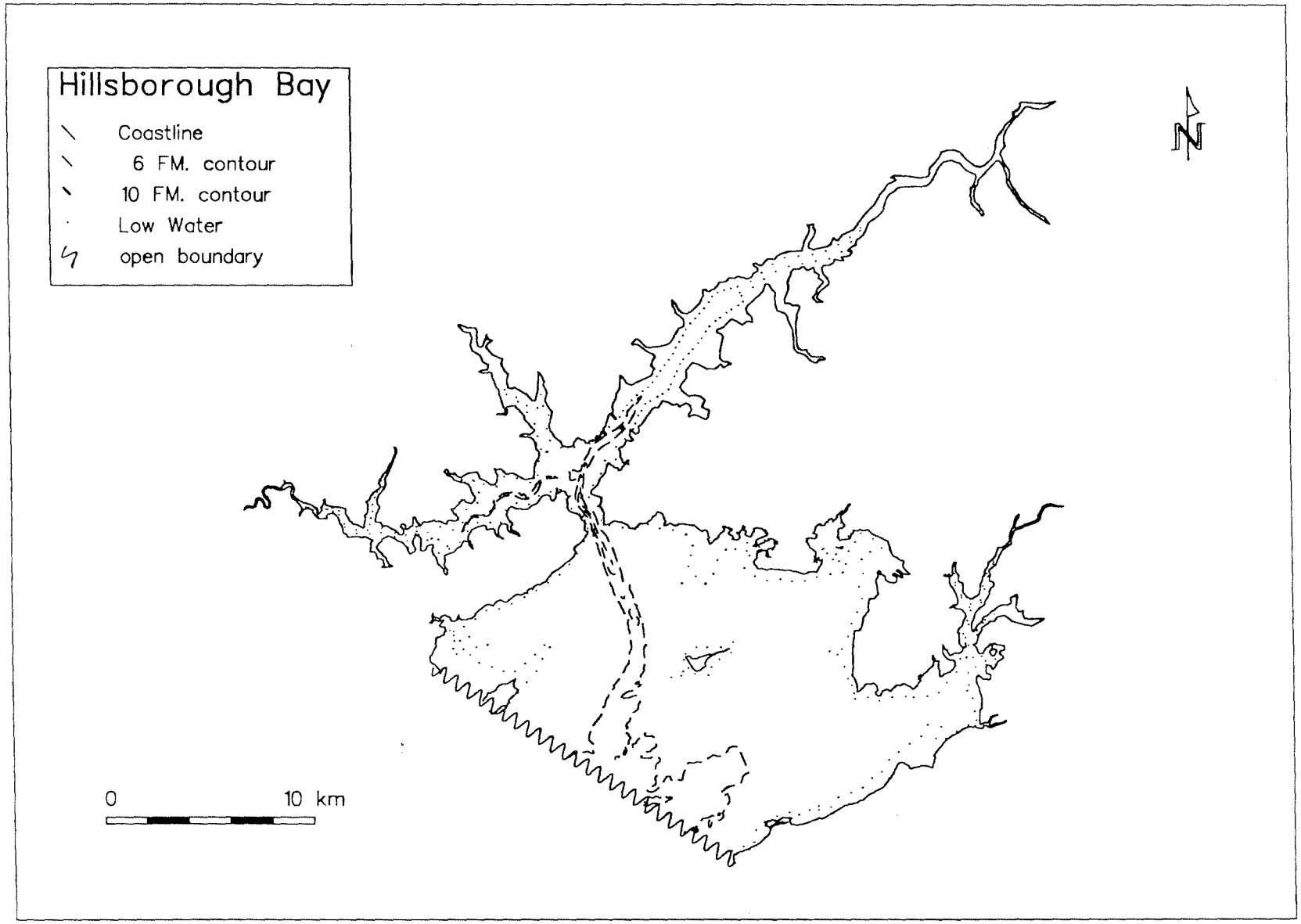
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.90 m	1.50 m	1036.1 $10^6 m^3$	0.04 m/s	0.06 m/s

Flushing time 295.2 hr
Tidal/Freshwater volume ratio 543.80

Watershed Area 2747.5 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	108.0 (51%)	May	106.0 (65%)	Sept	40.2 (78%)
Feb	82.9 (72%)	June	38.4 (73%)	Oct	68.0 (63%)
Mar	121.6 (44%)	July	26.7 (100%)	Nov	108.0 (52%)
Apr	167.7 (40%)	Aug	32.9 (118%)	Dec	122.4 (39%)


Hillsborough Bay
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
0
10 km
N

HILLSBOROUGH BAY Zone 4Th Chart 4466
Bay ID..DN

Area (CD)	230.3 km^2	Area (HW)	315.9 km^2
Perimeter	210.7 km	Volume (CD)	1470.0 $10^6 m^3$
Axis Length	45.0 km	Maximum Depth	22.6 m
Section Width	12.9 km	Section Area	138912.0 m^2

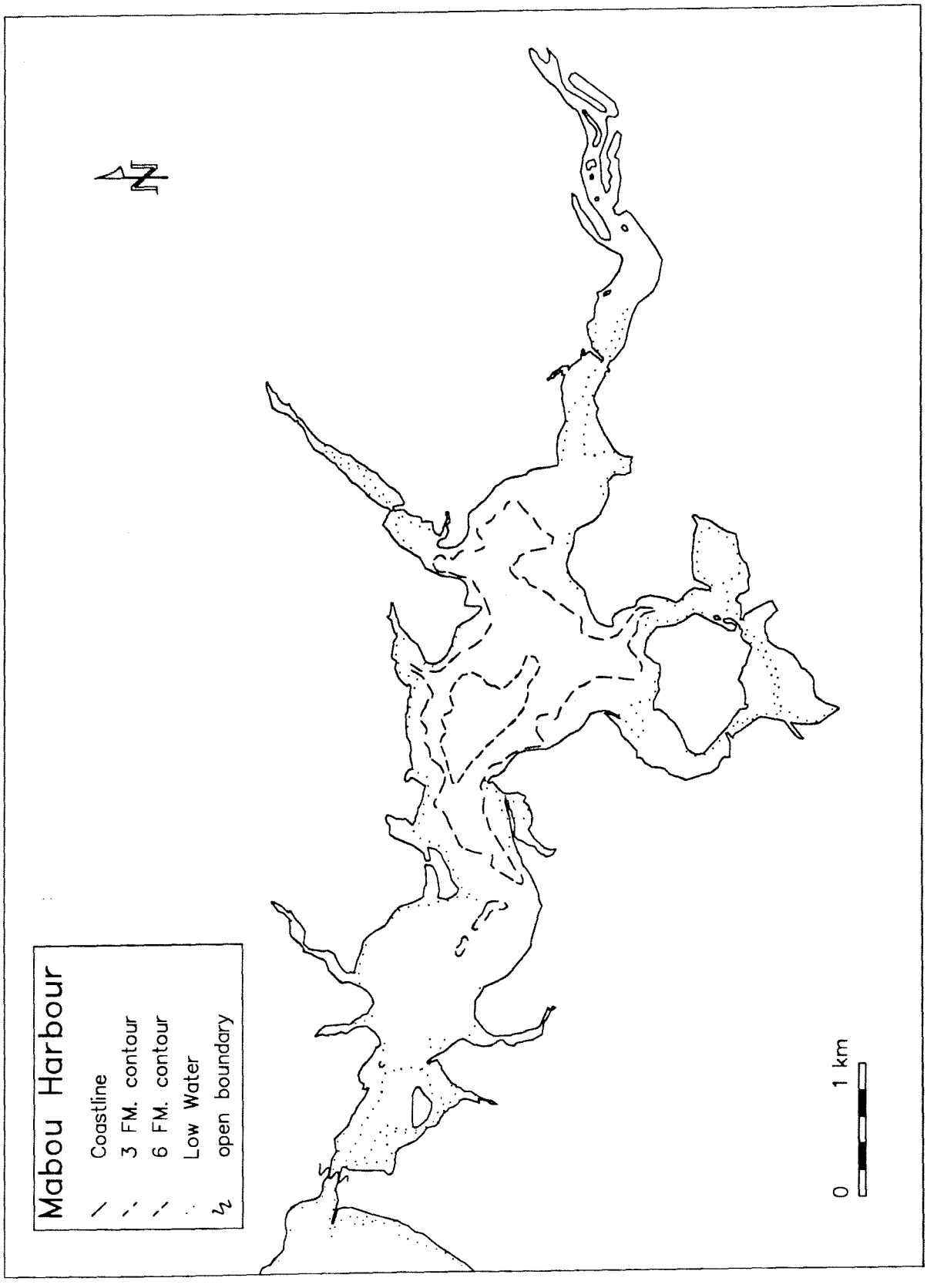
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.80 m	2.80 m	491.7 $10^6 m^3$	0.16 m/s	0.25 m/s

Flushing time 43.0 hr
Tidal/Freshwater volume ratio 1804.28

Watershed Area 918.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	11.8 (60%)	May	19.3 (61%)	Sept	6.5 (35%)
Feb	10.1 (26%)	June	9.3 (26%)	Oct	9.0 (65%)
Mar	18.1 (37%)	July	6.7 (23%)	Nov	10.4 (84%)
Apr	28.5 (36%)	Aug	6.2 (31%)	Dec	10.4 (53%)


Mabou Harbour
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
N
0
1 km

MABOU HARBOUR Zone 4Tg Chart 4448
Bay ID..CM

Area (CD)	5.0 km^2	Area (HW)	7.1 km^2
Perimeter	32.7 km	Volume (CD)	23.0 $10^6 m^3$
Axis Length	8.3 km	Maximum Depth	14.6 m
Section Width	1.7 km	Section Area	169.2 m^2

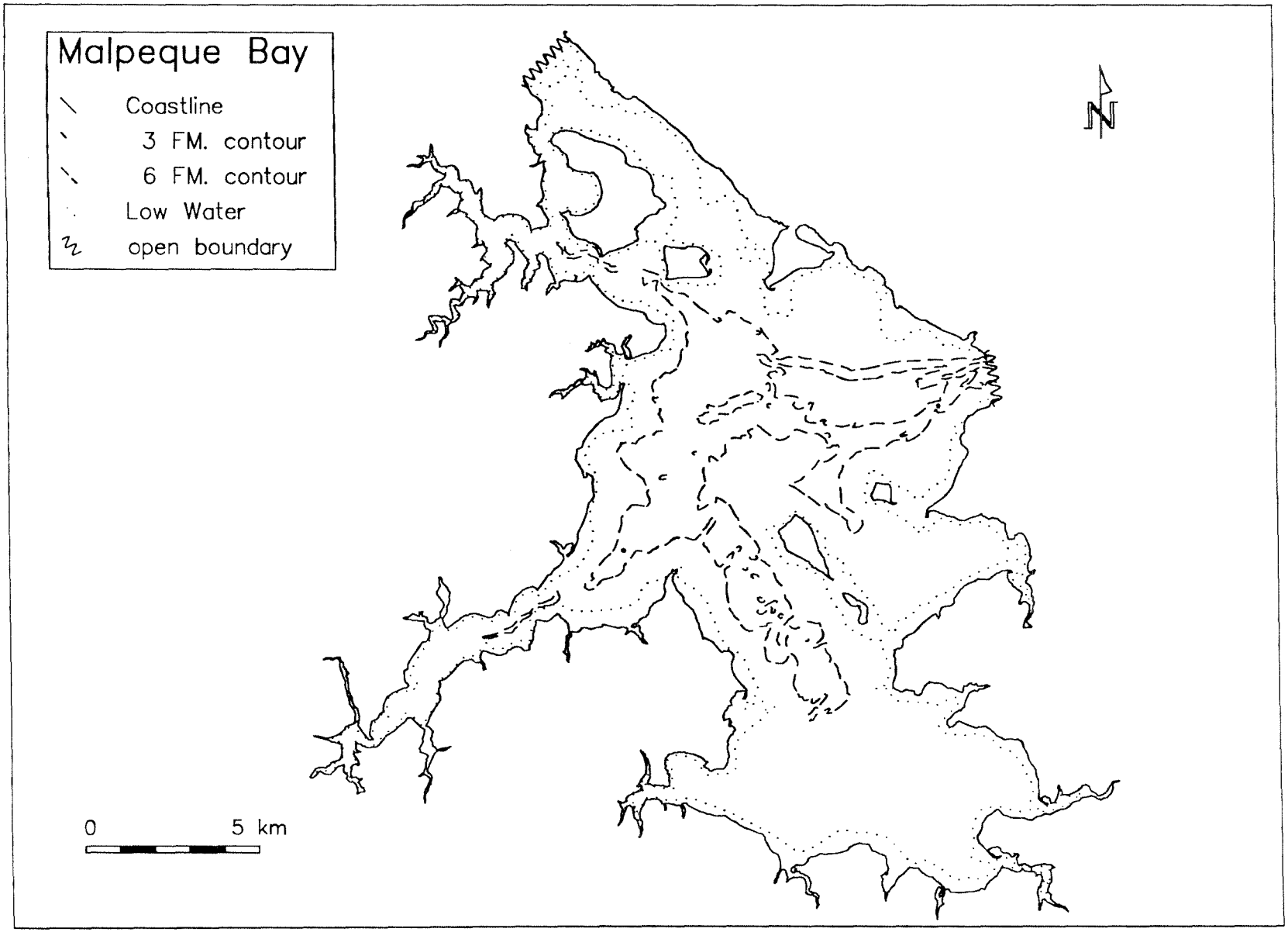
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.80 m	1.30 m	4.8 $10^6 m^3$	1.28 m/s	2.02 m/s

Flushing time 64.8 hr
Tidal/Freshwater volume ratio 13.27

Watershed Area 360.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	15.2 (61%)	May	44.2 (37%)	Sept	9.3 (51%)
Feb	11.2 (59%)	June	15.9 (54%)	Oct	9.3 (42%)
Mar	12.0 (70%)	July	6.7 (39%)	Nov	22.0 (35%)
Apr	24.7 (47%)	Aug	7.3 (72%)	Dec	18.8 (42%)


Malpeque Bay
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
0
5 km
N

MALPEQUE BAY Zone 4Tj Chart 4491
Bay ID..DH

Area (CD)	155.4 km^2	Area (HW)	197.3 km^2
Perimeter	178.9 km	Volume (CD)	592.0 $10^6 m^3$
Axis Length	28.5 km	Maximum Depth	13.7 m
Section Width	0.5 km	Section Area	7658.7 m^2

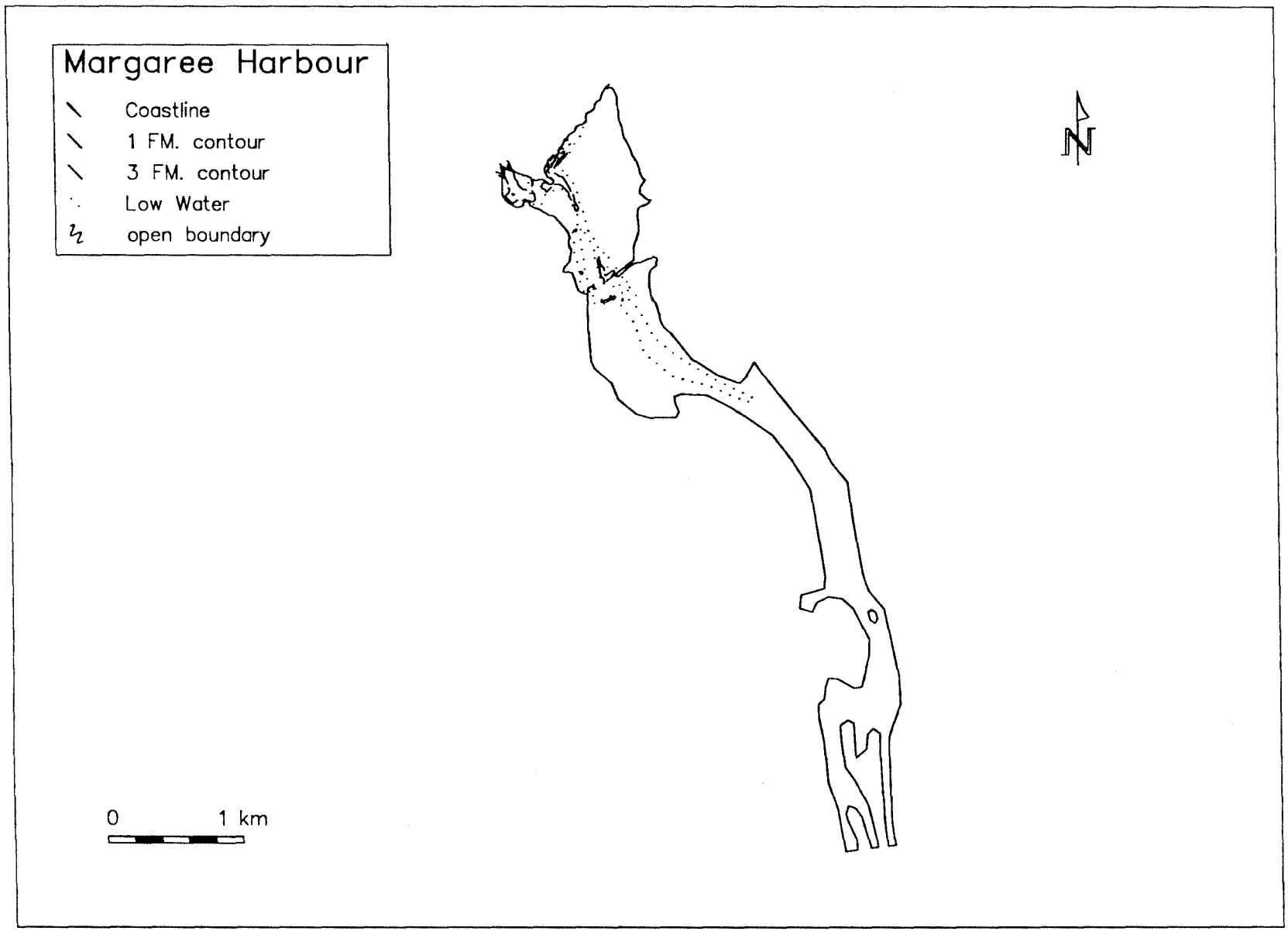
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.80 m	1.10 m	141.1 $10^6 m^3$	0.82 m/s	1.29 m/s

Flushing time 58.1 hr
Tidal/Freshwater volume ratio 506.21

Watershed Area 558.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	8.9 (59%)	May	22.7 (83%)	Sept	2.8 (60%)
Feb	8.7 (65%)	June	8.0 (57%)	Oct	7.9 (87%)
Mar	18.5 (57%)	July	3.7 (53%)	Nov	11.7 (55%)
Apr	39.8 (46%)	Aug	2.8 (63%)	Dec	14.1 (50%)


Margaree Harbour
Coastline
1 FM. contour
3 FM. contour
Low Water
open boundary
0
1 km
N

MARGAREE HARBOUR Zone 4Tg Chart 4449
Bay ID..CW

Area (CD)	0.3 km^2	Area (HW)	2.4 km^2
Perimeter	7.4 km	Volume (CD)	0.0 $10^6 m^3$
Axis Length	6.1 km	Maximum Depth	6.6 m
Section Width	0.1 km	Section Area	169.3 m^2

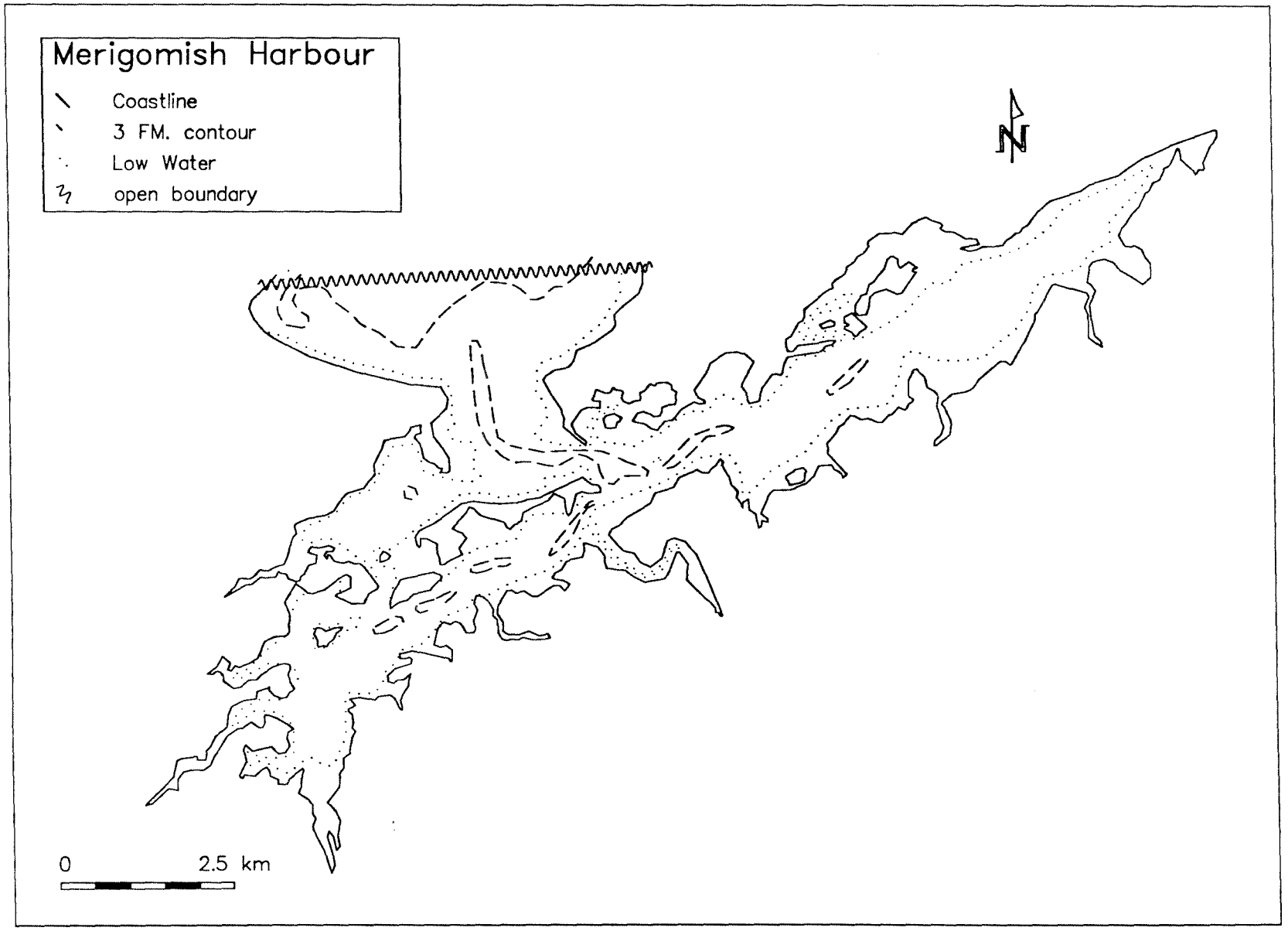
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.70 m	1.10 m	0.9 $10^6 m^3$	0.25 m/s	0.39 m/s

Flushing time 2.7 hr
Tidal/Freshwater volume ratio 0.79

Watershed Area 1151.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	48.5 (61%)	May	141.1 (37%)	Sept	29.6 (51%)
Feb	35.7 (59%)	June	50.7 (54%)	Oct	49.4 (42%)
Mar	38.2 (70%)	July	21.4 (39%)	Nov	70.1 (35%)
Apr	78.9 (47%)	Aug	23.3 (72%)	Dec	60.1 (42%)


Merigomish Harbour
Coastline
3 FM. contour
Low Water
open boundary
N
0
2.5 km

MERIGOMISH HARBOUR Zone 4Th Chart 4404
Bay ID..CP

Area (CD)	22.5 km^2	Area (HW)	35.2 km^2
Perimeter	59.3 km	Volume (CD)	59.0 $10^6 m^3$
Axis Length	12.0 km	Maximum Depth	8.8 m
Section Width	5.0 km	Section Area	25126.5 m^2

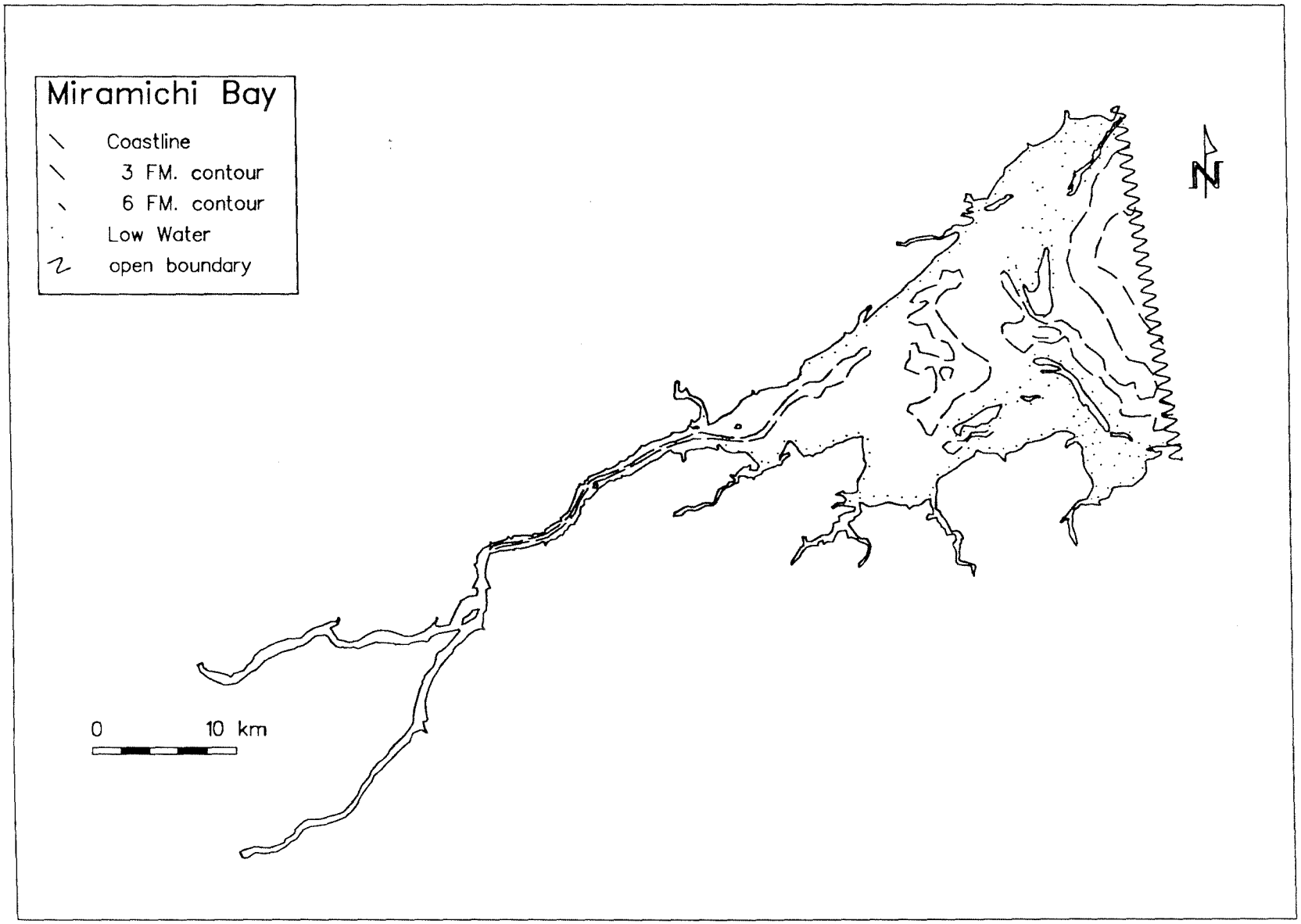
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.20 m	1.80 m	34.6 $10^6 m^3$	0.06 m/s	0.10 m/s

Flushing time 26.8 hr
Tidal/Freshwater volume ratio 117.19

Watershed Area 509.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	15.4 (60%)	May	19.5 (72%)	Sept	2.8 (103%)
Feb	11.8 (77%)	June	7.1 (88%)	Oct	8.2 (96%)
Mar	20.4 (43%)	July	3.3 (98%)	Nov	17.2 (60%)
Apr	29.4 (36%)	Aug	3.8 (119%)	Dec	19.8 (43%)


Miramichi Bay
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
0
10 km
N

MIRAMICHI BAY Zone 4Tl Chart 4024
Bay ID..DJ

Area (CD)	413.9 km^2	Area (HW)	488.8 km^2
Perimeter	254.8 km	Volume (CD)	1682.0 $10^6 m^3$
Axis Length	83.3 km	Maximum Depth	12.8 m
Section Width	21.8 km	Section Area	189422.7 m^2

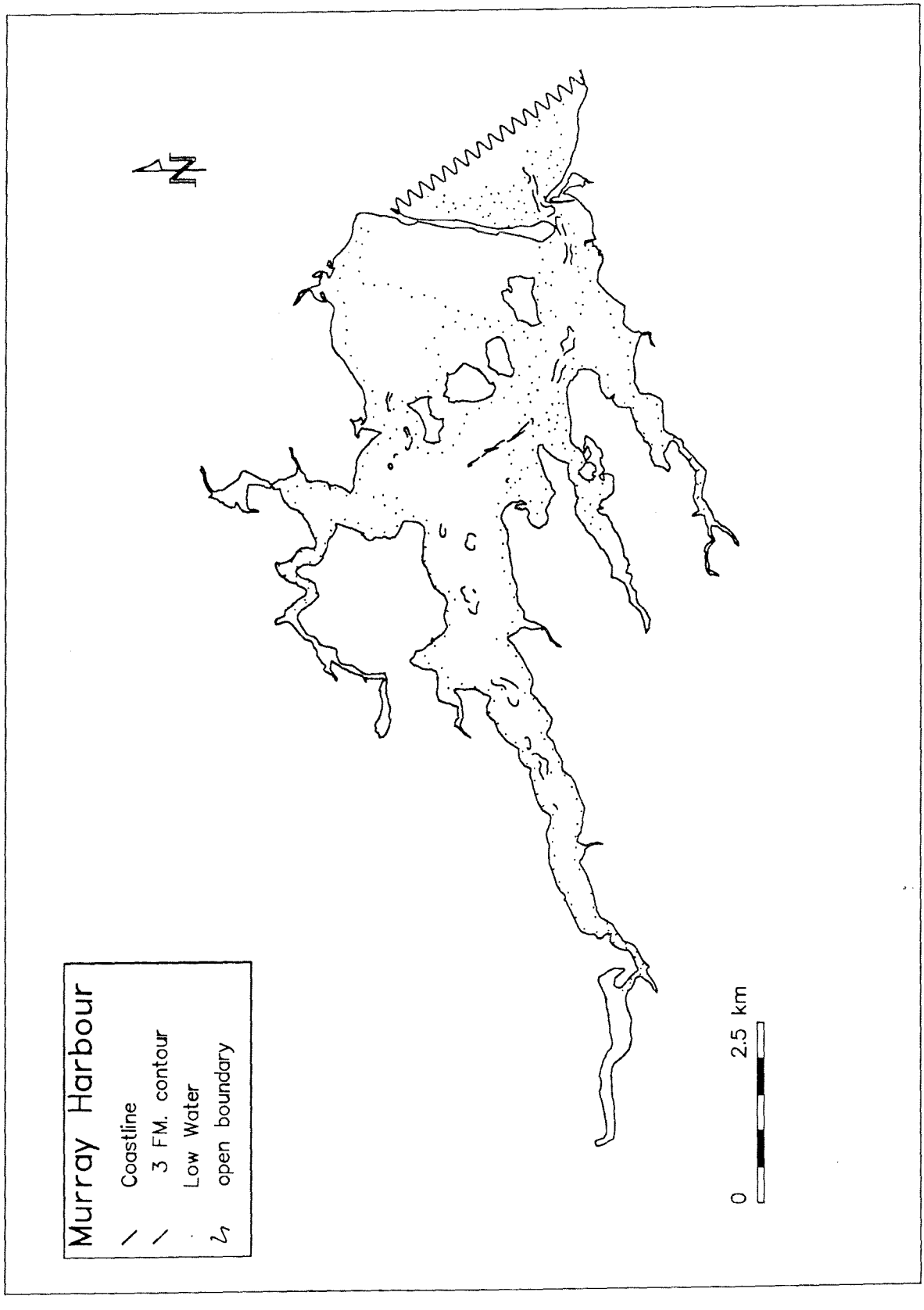
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.20 m	1.70 m	541.6 $10^6 m^3$	0.13 m/s	0.20 m/s

Flushing time 44.4 hr
Tidal/Freshwater volume ratio 72.75

Watershed Area 14085.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	162.4	(53%)	May	987.2	(41%)	Sept	160.7	(58%)
Feb	152.0	(88%)	June	370.4	(49%)	Oct	236.6	(68%)
Mar	187.8	(73%)	July	186.1	(40%)	Nov	306.0	(61%)
Apr	812.3	(43%)	Aug	152.4	(56%)	Dec	282.7	(67%)


Murray Harbour
Coastline
3 FM. contour
Low Water
open boundary
N
0
2.5 km

MURRAY HARBOUR Zone 4Tg . Chart 4420
Bay ID..DG

Area (CD)	12.1 km^2	Area (HW)	21.2 km^2
Perimeter	60.9 km	Volume (CD)	31.0 $10^6 m^3$
Axis Length	13.5 km	Maximum Depth	8.2 m
Section Width	0.2 km	Section Area	939.8 m^2

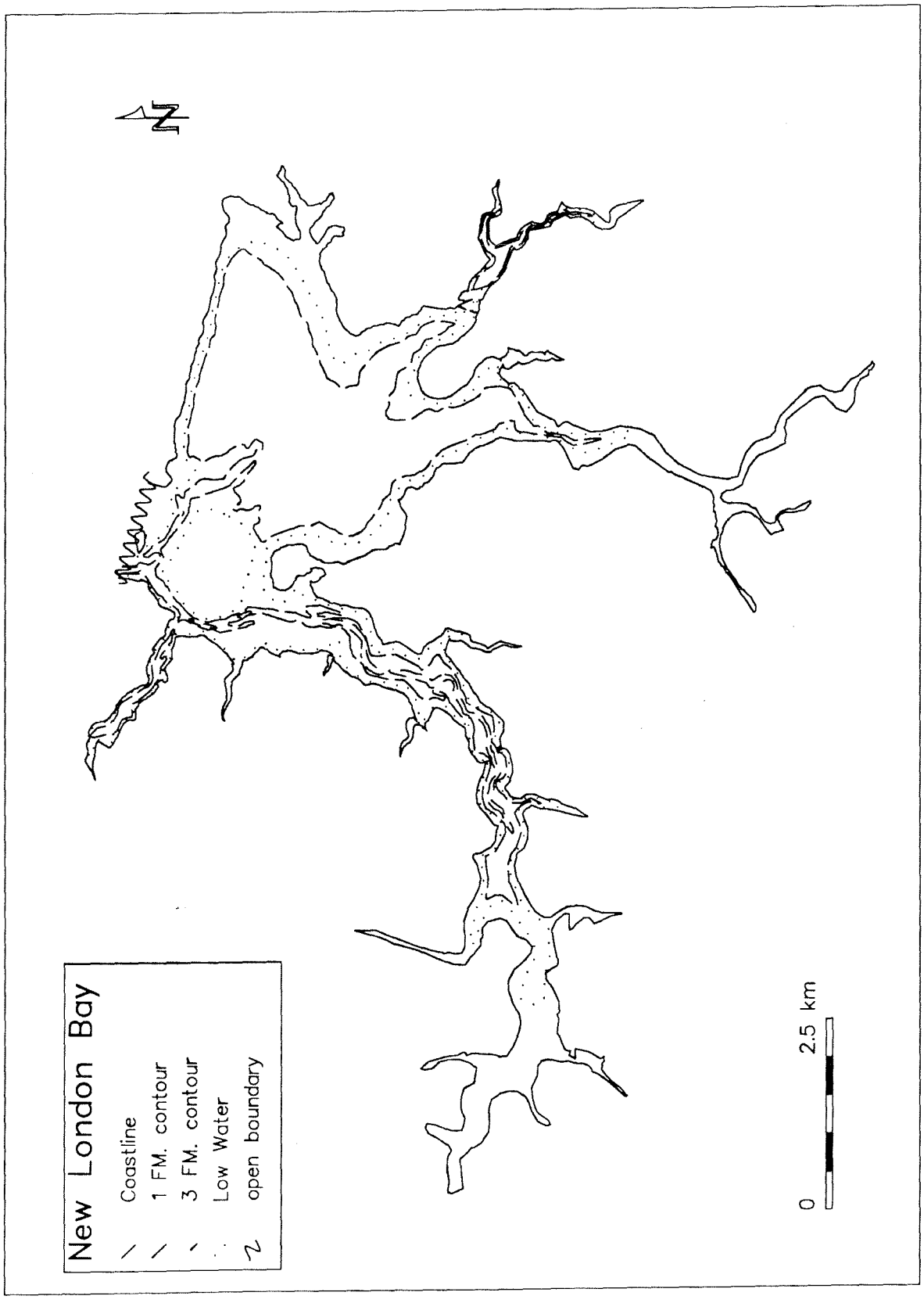
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.20 m	1.80 m	20.0 $10^6 m^3$	0.95 m/s	1.50 m/s

Flushing time 24.9 hr
Tidal/Freshwater volume ratio 270.42

Watershed Area 153.2 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.5 (49%)	May	5.6 (58%)	Sept	1.7 (20%)
Feb	3.3 (33%)	June	3.4 (27%)	Oct	2.1 (56%)
Mar	4.3 (33%)	July	2.4 (17%)	Nov	2.5 (40%)
Apr	5.6 (43%)	Aug	2.0 (21%)	Dec	3.3 (51%)


New London Bay
Coastline
1 FM. contour
3 FM. contour
Low Water
open boundary
N
0
2.5 km

NEW LONDON BAY Zone 4Tg Chart 4467
Bay ID..DE

Area (CD)	14.8 km^2	Area (HW)	23.9 km^2
Perimeter	55.4 km	Volume (CD)	40.0 $10^6 m^3$
Axis Length	11.9 km	Maximum Depth	8.5 m
Section Width	0.2 km	Section Area	700.2 m^2

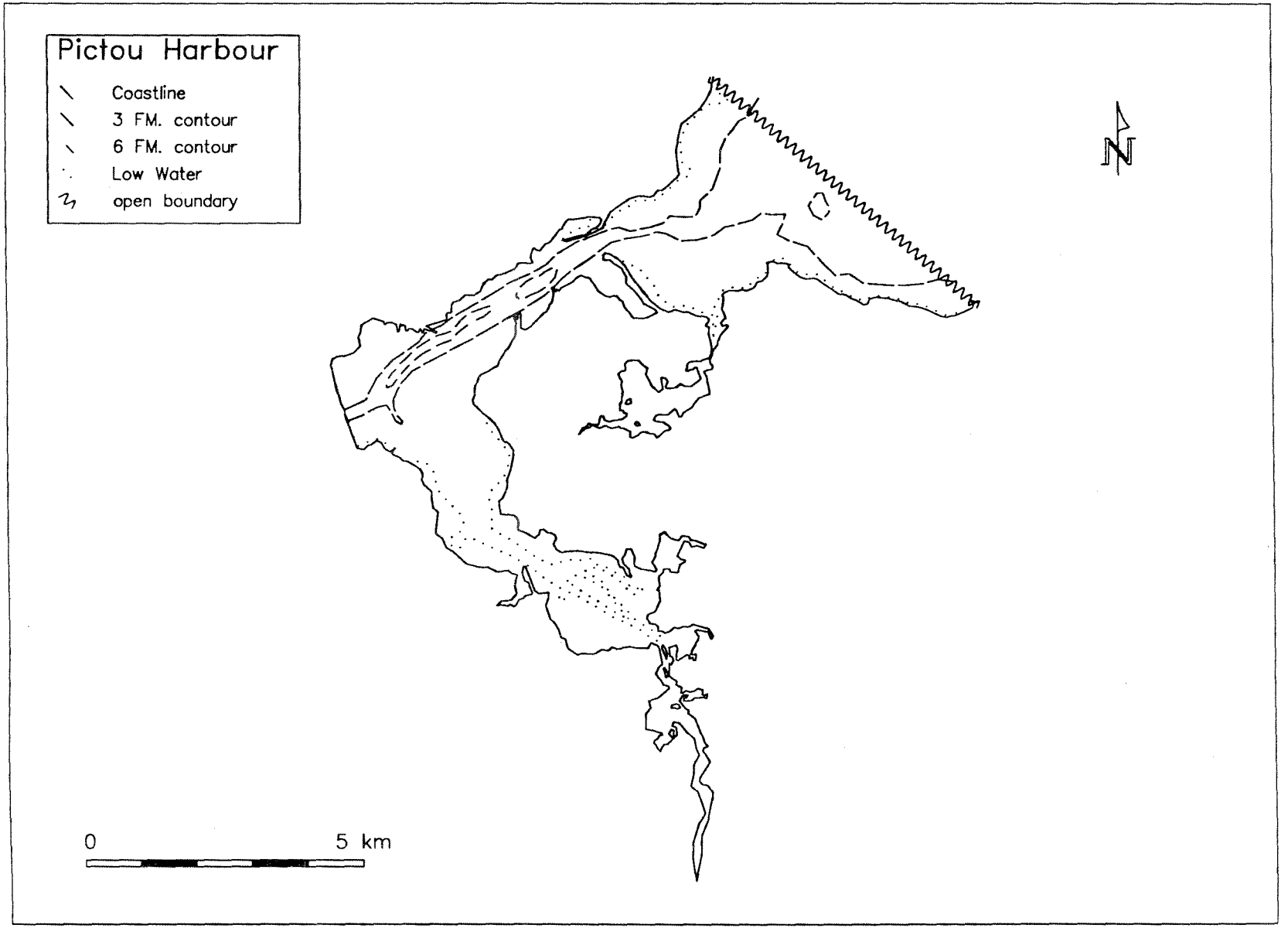
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.70 m	1.10 m	13.5 $10^6 m^3$	0.87 m/s	1.36 m/s

Flushing time 42.4 hr
Tidal/Freshwater volume ratio 124.31

Watershed Area 239.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.5 (56%)	May	9.5 (80%)	Sept	1.4 (55%)
Feb	3.4 (64%)	June	3.4 (50%)	Oct	2.8 (81%)
Mar	6.0 (57%)	July	2.0 (50%)	Nov	4.6 (57%)
Apr	15.4 (41%)	Aug	1.4 (50%)	Dec	5.3 (51%)


Pictou Harbour
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
0
5 km
N

PICTOU HARBOUR Zone 4Th Chart 4404
Bay ID..CO

Area (CD)	23.4 km^2	Area (HW)	31.8 km^2
Perimeter	48.4 km	Volume (CD)	111.0 $10^6 m^3$
Axis Length	19.4 km	Maximum Depth	14.9 m
Section Width	5.8 km	Section Area	41479.9 m^2

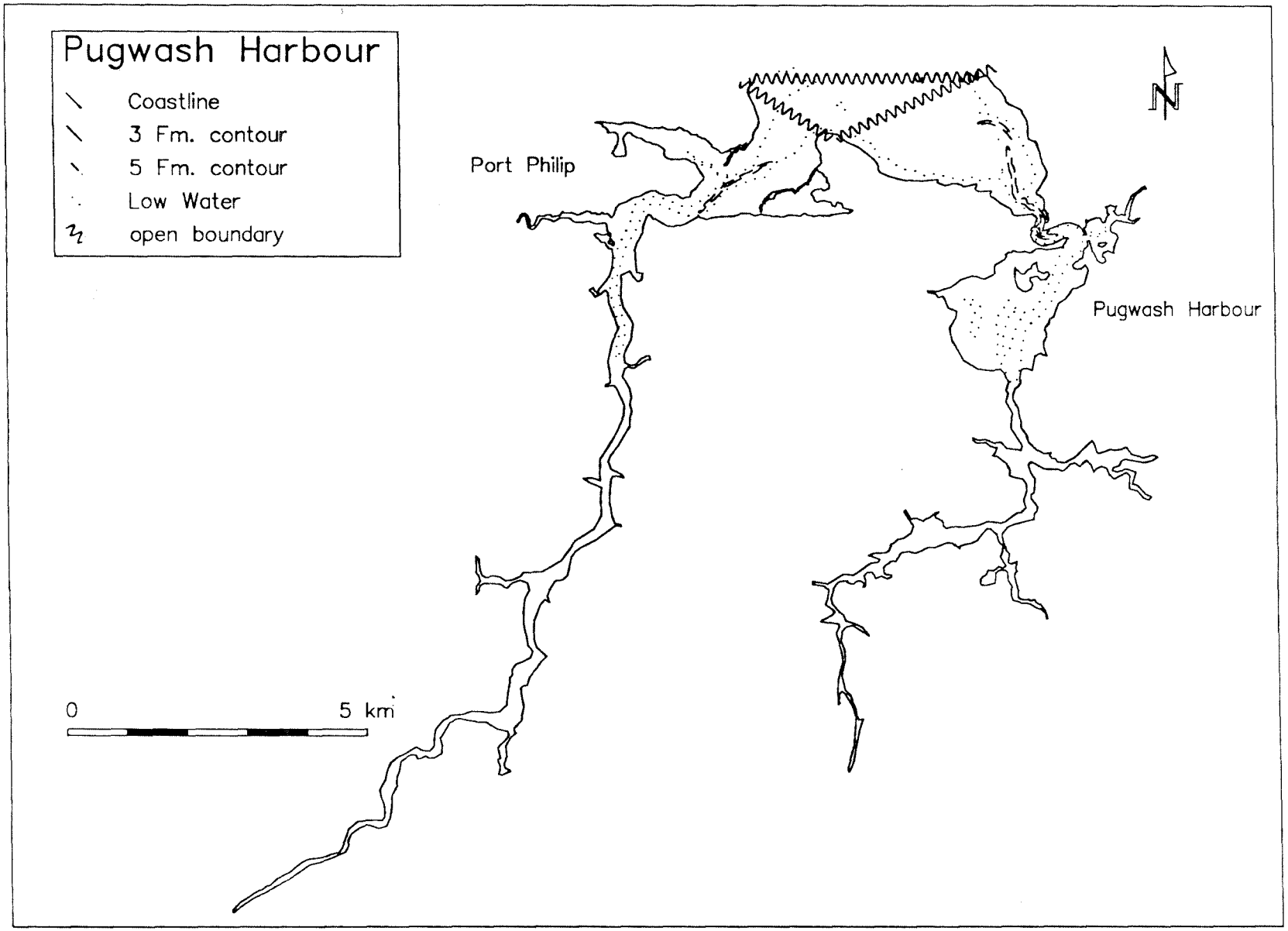
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.20 m	2.00 m	33.1 $10^6 m^3$	0.04 m/s	0.06 m/s

Flushing time 47.5 hr
Tidal/Freshwater volume ratio 44.11

Watershed Area 1124.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	37.2 (55%)	May	46.6 (59%)	Sept	11.1 (89%)
Feb	29.6 (65%)	June	21.0 (102%)	Oct	24.1 (72%)
Mar	47.9 (46%)	July	10.7 (83%)	Nov	45.2 (49%)
Apr	65.4 (30%)	Aug	14.8 (110%)	Dec	50.0 (37%)


Pugwash Harbour
Coastline
3 Fm. contour
5 Fm. contour
Low Water
open boundary
Port Philip
Pugwash Harbour
N
0
5 km

PUGWASH HARBOUR / PORT PHILIP Zone 4Th Chart 4498
Bay ID..CS

Area (CD)	6.7 km^2	Area (HW)	19.7 km^2
Perimeter	32.1 km	Volume (CD)	16.0 $10^6 m^3$
Axis Length	8.5 km	Maximum Depth	10.7 m
Section Width	2.8 km	Section Area	8015.7 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.90 m	2.80 m	25.2 $10^6 m^3$	0.14 m/s	0.22 m/s

Flushing time 13.1 hr
Tidal/Freshwater volume ratio 42.96

Watershed Area 893.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	28.0 (57%)	May	42.3 (62%)	Sept	7.9 (90%)
Feb	23.9 (64%)	June	16.1 (62%)	Oct	18.1 (87%)
Mar	35.4 (48%)	July	8.9 (63%)	Nov	31.2 (61%)
Apr	56.6 (33%)	Aug	8.5 (101%)	Dec	38.1 (36%)

PUGWASH HARBOUR Zone 4Th Chart 4498
Bay ID..CSa

Area (CD)	3.3 km^2	Area (HW)	9.6 km^2
Perimeter	15.7 km	Volume (CD)	9.0 $10^6 m^3$
Axis Length	8.1 km	Maximum Depth	10.7 m
Section Width	1.9 km	Section Area	5089.1 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.90 m	2.80 m	12.3 $10^6 m^3$	0.11 m/s	0.17 m/s

Flushing time 14.3 hr
Tidal/Freshwater volume ratio 98.00

Watershed Area 191.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	6.0 (57%)	May	9.1 (62%)	Sept	1.7 (90%)
Feb	5.1 (64%)	June	3.4 (62%)	Oct	3.9 (87%)
Mar	7.6 (48%)	July	1.9 (63%)	Nov	6.7 (61%)
Apr	12.1 (33%)	Aug	1.8 (101%)	Dec	8.2 (36%)

PORT PHILIP Zone 4Th Chart 4498
Bay ID..CSb

Area (CD)	1.1 km^2	Area (HW)	7.4 km^2
Perimeter	13.8 km	Volume (CD)	2.0 $10^6 m^3$
Axis Length	9.3 km	Maximum Depth	8.2 m
Section Width	0.6 km	Section Area	967.8 m^2

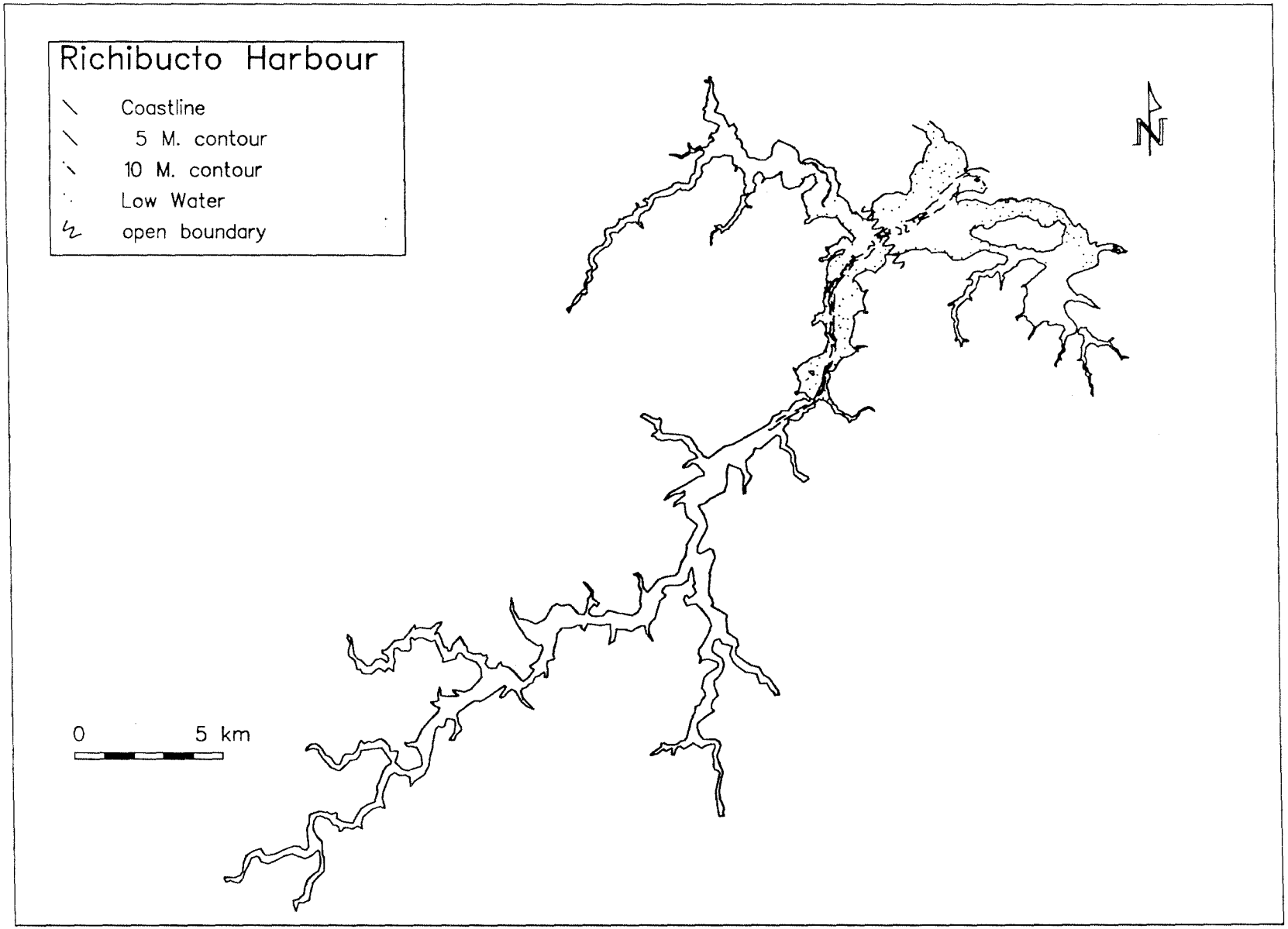
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.90 m	2.80 m	8.1 $10^6 m^3$	0.38 m/s	0.59 m/s

Flushing time 7.6 hr
Tidal/Freshwater volume ratio 17.76

Watershed Area 702.2 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	22.0 (57%)	May	33.2 (62%)	Sept	6.2 (90%)
Feb	18.8 (64%)	June	12.7 (62%)	Oct	14.2 (87%)
Mar	27.8 (48%)	July	7.0 (63%)	Nov	24.5 (61%)
Apr	44.5 (33%)	Aug	6.7 (101%)	Dec	29.9 (36%)


Richibucto Harbour
Coastline
5 M. contour
10 M. contour
Low Water
open boundary
0
5 km
N

RICHIBUCTO HARBOUR Zone 4T1 Chart 4905
Bay ID..DM

Area (CD)	35.4 km^2	Area (HW)	38.2 km^2
Perimeter	220.4 km	Volume (CD)	49.0 $10^6 m^3$
Axis Length	12.1 km	Maximum Depth	14.6 m
Section Width	1.0 km	Section Area	3149.3 m^2

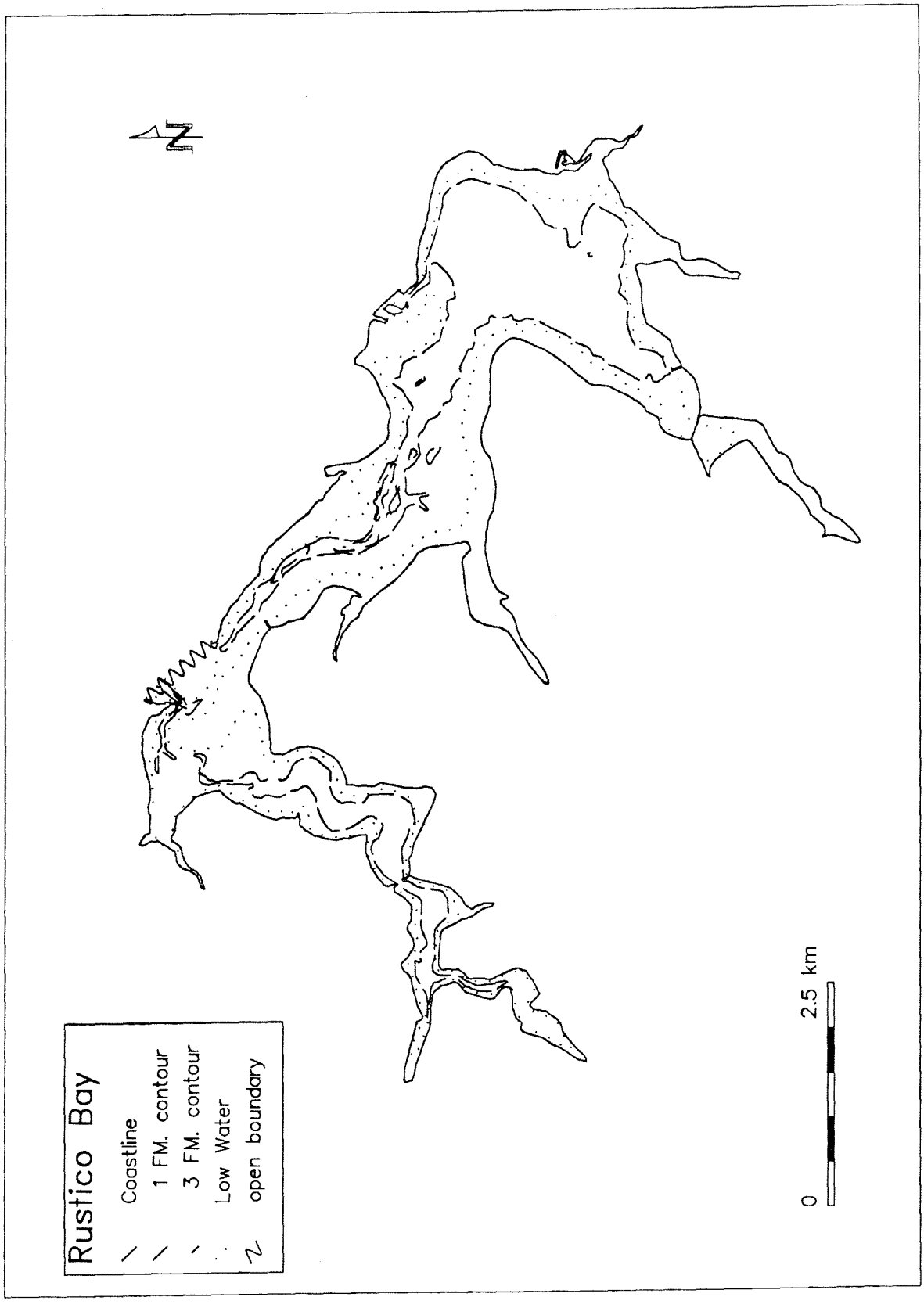
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.70 m	1.10 m	25.8 $10^6 m^3$	0.37 m/s	0.58 m/s

Flushing time 29.3 hr
Tidal/Freshwater volume ratio 41.41

Watershed Area 1088.5 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	15.0 (92%)	May	57.6 (66%)	Sept	7.3 (90%)
Feb	15.0 (79%)	June	22.8 (70%)	Oct	18.2 (114%)
Mar	28.6 (63%)	July	15.0 (97%)	Nov	26.0 (63%)
Apr	91.5 (36%)	Aug	10.0 (91%)	Dec	27.4 (65%)


Rustico Bay
Coastline
1 FM. contour
3 FM. contour
Low Water
open boundary
N
0
2.5 km

RUSTICO BAY Zone 4Tj Chart 4667
Bay ID..DF

Area (CD)	10.7 km^2	Area (HW)	17.0 km^2
Perimeter	46.5 km	Volume (CD)	23.0 $10^6 m^3$
Axis Length	12.0 km	Maximum Depth	7.6 m
Section Width	0.2 km	Section Area	451.9 m^2

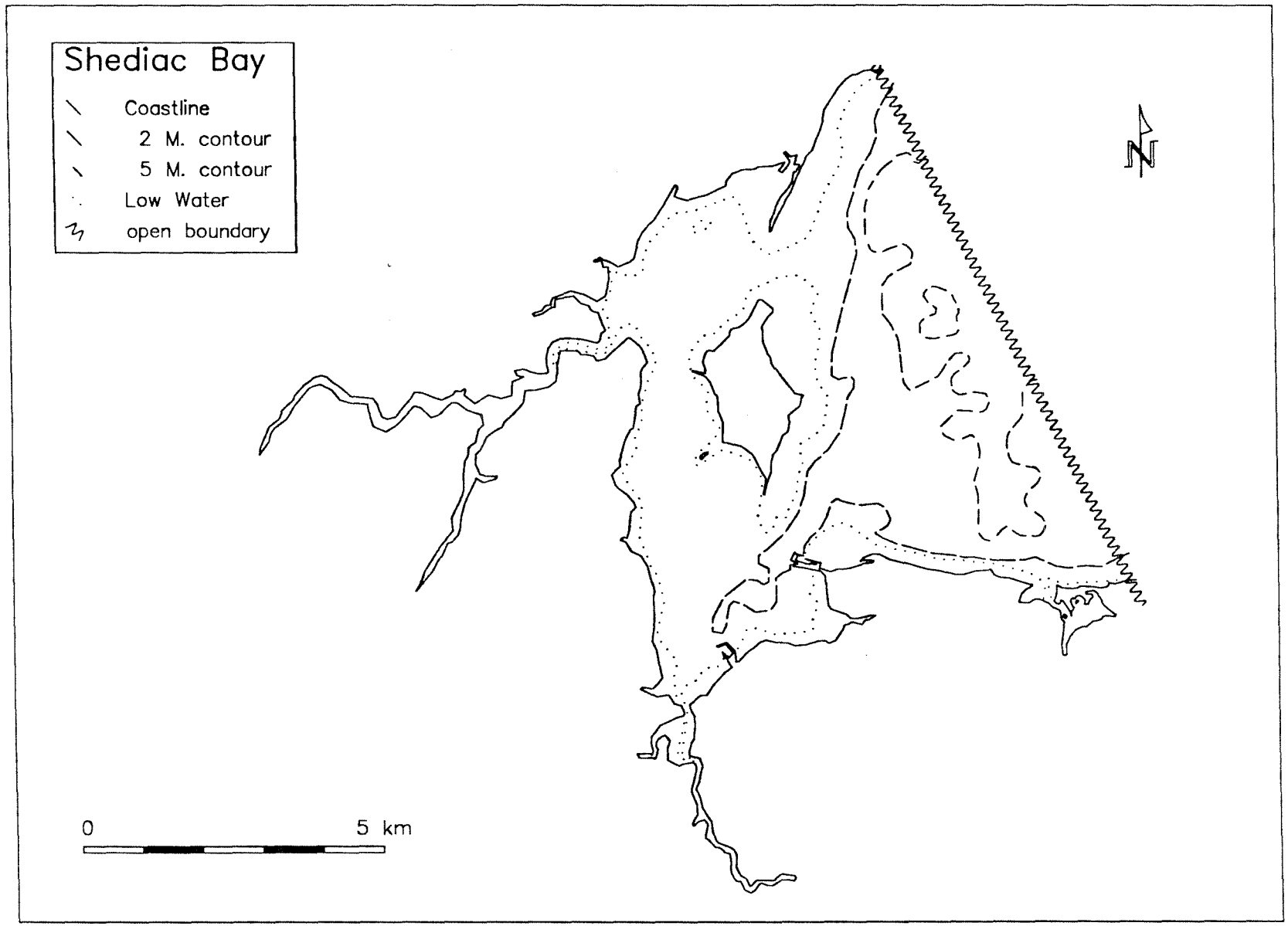
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.70 m	1.10 m	9.7 $10^6 m^3$	0.96 m/s	1.51 m/s

Flushing time 35.2 hr
Tidal/Freshwater volume ratio 95.42

Watershed Area 203.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.2 (57%)	May	7.9 (77%)	Sept	1.1 (65%)
Feb	3.2 (62%)	June	2.7 (67%)	Oct	3.1 (91%)
Mar	8.0 (52%)	July	1.1 (52%)	Nov	4.0 (50%)
Apr	14.3 (49%)	Aug	1.0 (84%)	Dec	5.1 (41%)


Shediac Bay
Coastline
2 M. contour
5 M. contour
Low Water
open boundary
0
5 km
N

SHEDIAC BAY Zone 4Th Chart 4905
Bay ID..DK

Area (CD)	38.0 km^2	Area (HW)	50.6 km^2
Perimeter	34.4 km	Volume (CD)	101.0 $10^6 m^3$
Axis Length	13.0 km	Maximum Depth	6.7 m
Section Width	9.2 km	Section Area	36689.4 m^2

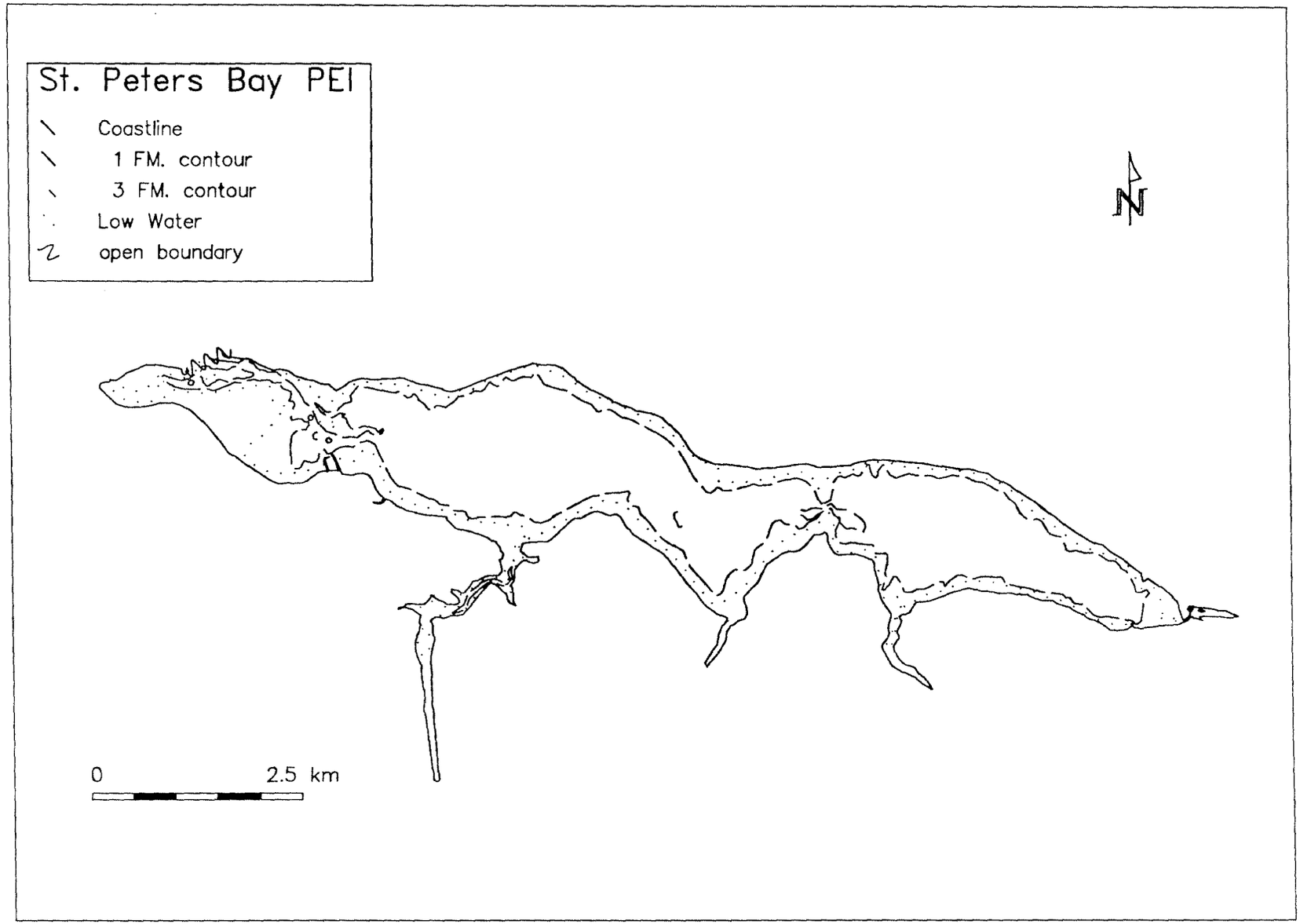
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.80 m	1.40 m	35.4 $10^6 m^3$	0.04 m/s	0.07 m/s

Flushing time 41.2 hr
Tidal/Freshwater volume ratio 167.95

Watershed Area 419.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	5.1 (92%)	May	19.5 (66%)	Sept	2.4 (90%)
Feb	5.1 (79%)	June	7.7 (70%)	Oct	6.2 (114%)
Mar	9.7 (63%)	July	5.1 (97%)	Nov	8.8 (63%)
Apr	31.1 (36%)	Aug	3.4 (91%)	Dec	9.3 (65%)


St. Peters Bay PEI
Coastline
1 FM. contour
3 FM. contour
Low Water
open boundary
N
0
2.5 km

ST PETERS BAY PEI Zone 4Tg Chart 4425
Bay ID..DC

Area (CD)	13.3 km^2	Area (HW)	16.7 km^2
Perimeter	40.0 km	Volume (CD)	40.0 $10^6 m^3$
Axis Length	16.3 km	Maximum Depth	9.4 m
Section Width	0.3 km	Section Area	790.8 m^2

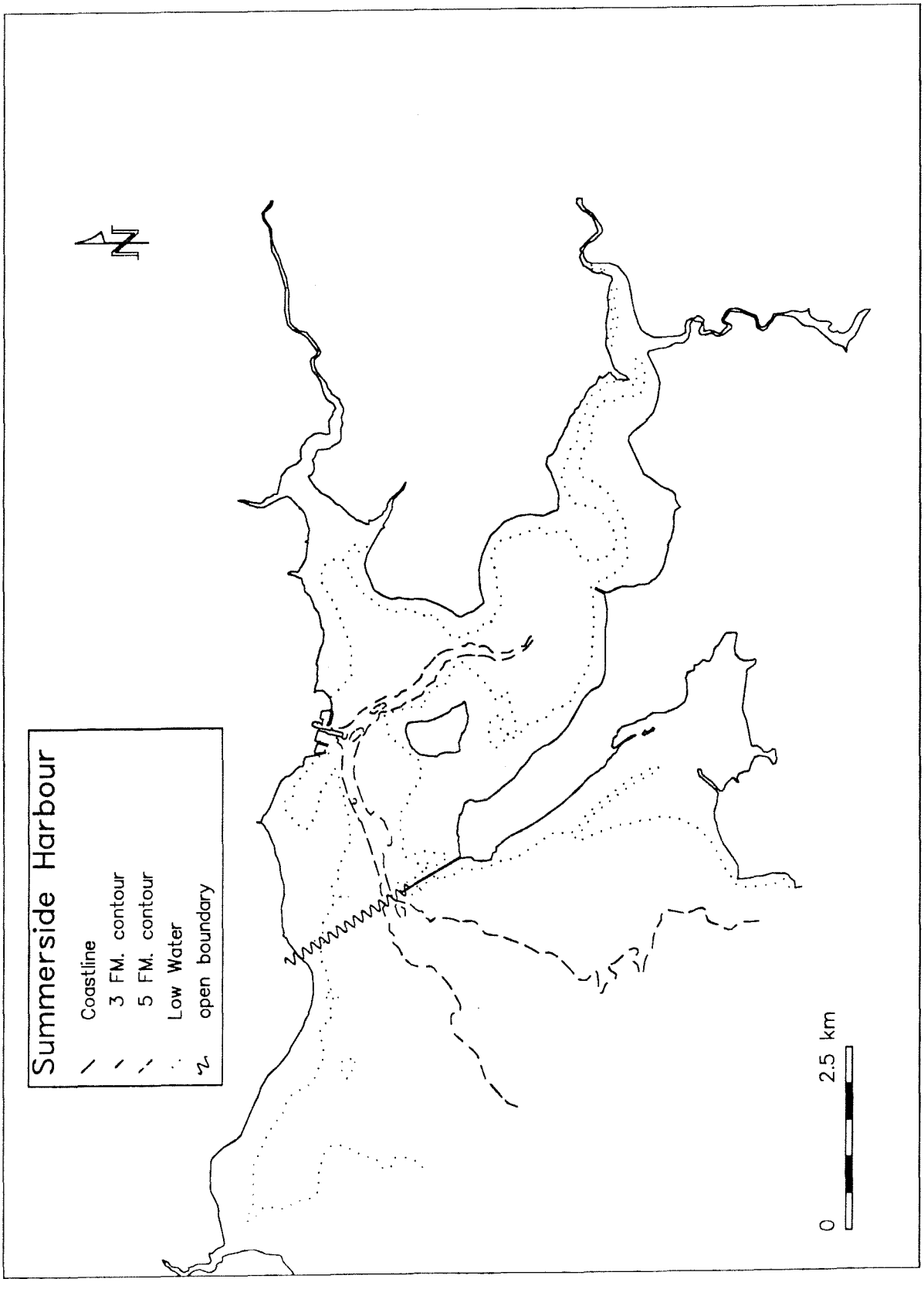
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.60 m	0.90 m	9.0 $10^6 m^3$	0.51 m/s	0.80 m/s

Flushing time 60.9 hr
Tidal/Freshwater volume ratio 53.74

Watershed Area 325.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	6.6 (60%)	May	13.0 (76%)	Sept	2.3 (61%)
Feb	6.0 (59%)	June	5.3 (59%)	Oct	4.8 (84%)
Mar	10.6 (48%)	July	2.9 (49%)	Nov	7.3 (52%)
Apr	20.1 (50%)	Aug	2.5 (80%)	Dec	8.8 (47%)


Summerside Harbour
Coastline
3 FM. contour
5 FM. contour
Low Water
open boundary
N
0
2.5 km

SUMMERSIDE HARBOUR Zone 4Th Chart 4459
Bay ID..CZ

Area (CD)	9.4 km^2	Area (HW)	20.6 km^2
Perimeter	35.4 km	Volume (CD)	20.0 $10^6 m^3$
Axis Length	11.1 km	Maximum Depth	10.7 m
Section Width	1.3 km	Section Area	4661.3 m^2

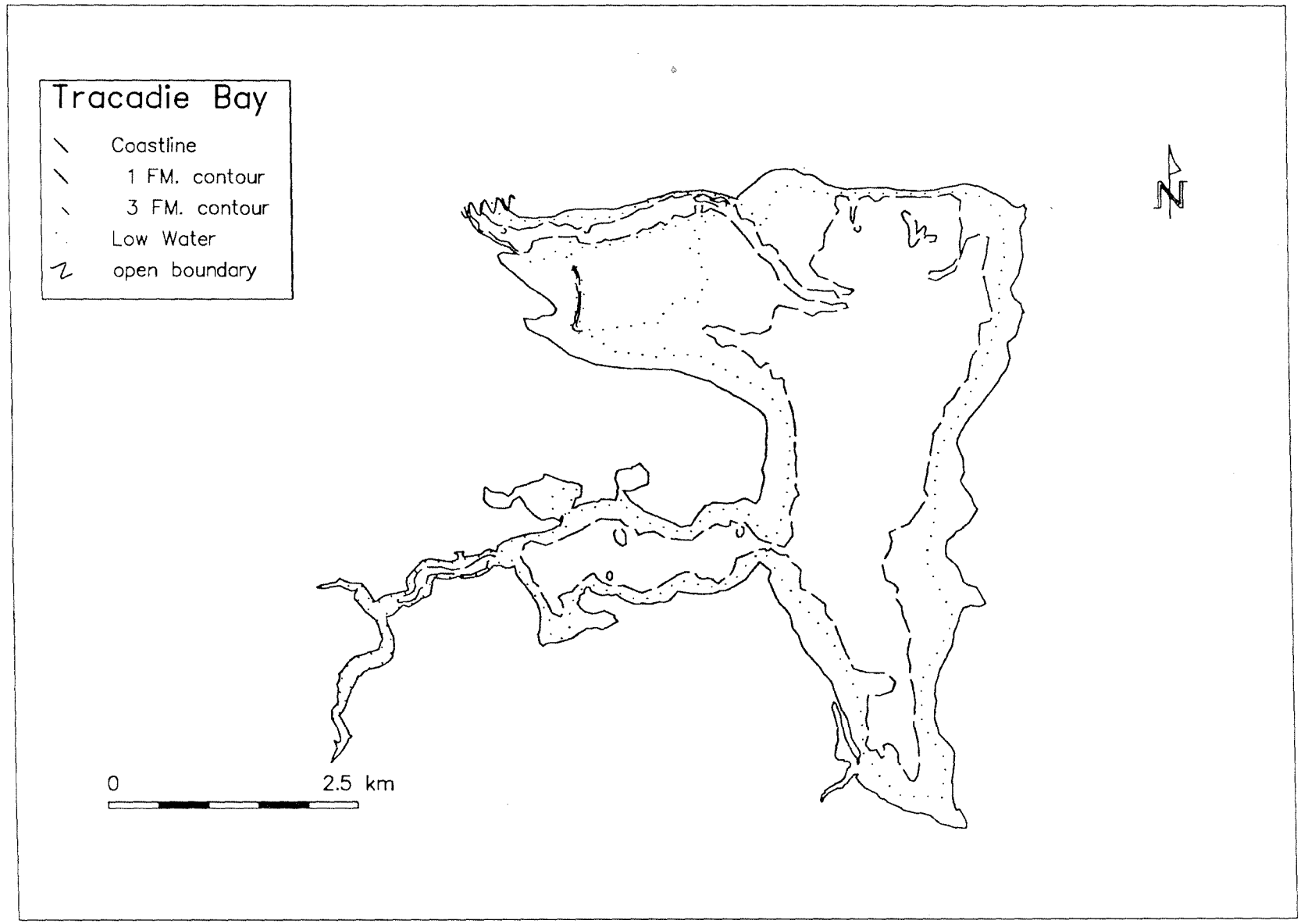
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.20 m	22.5 $10^6 m^3$	0.22 m/s	0.34 m/s

Flushing time 16.4 hr
Tidal/Freshwater volume ratio 145.19

Watershed Area 323.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	8.2 (55%)	May	9.8 (61%)	Sept	3.3 (23%)
Feb	7.2 (58%)	June	5.8 (31%)	Oct	4.0 (42%)
Mar	11.2 (34%)	July	4.3 (24%)	Nov	5.1 (54%)
Apr	13.7 (43%)	Aug	3.8 (26%)	Dec	6.9 (50%)


Tracadie Bay
Coastline
1 FM. contour
3 FM. contour
Low Water
open boundary
0
2.5 km
N

TRACADIE BAY Zone 4Tg Chart 4425
Bay ID..DD

Area (CD)	13.8 km^2	Area (HW)	19.0 km^2
Perimeter	35.3 km	Volume (CD)	36.0 $10^6 m^3$
Axis Length	12.0 km	Maximum Depth	7.0 m
Section Width	0.2 km	Section Area	559.4 m^2

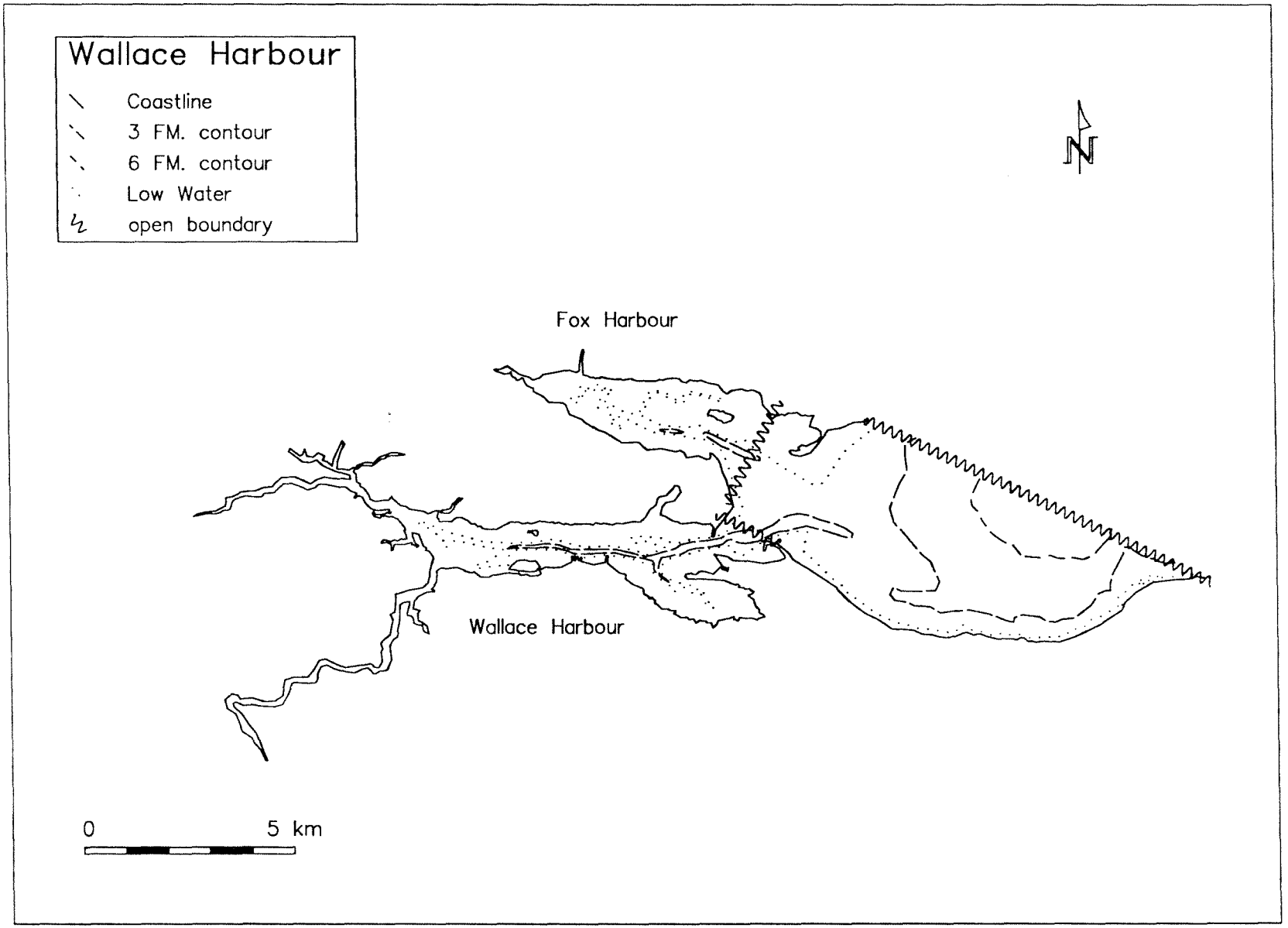
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.60 m	0.90 m	9.8 $10^6 m^3$	0.79 m/s	1.24 m/s

Flushing time 51.2 hr
Tidal/Freshwater volume ratio 177.54

Watershed Area 117.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	2.0 (62%)	May	4.4 (76%)	Sept	0.7 (64%)
Feb	2.0 (61%)	June	1.8 (63%)	Oct	1.5 (91%)
Mar	3.6 (49%)	July	1.0 (52%)	Nov	2.2 (54%)
Apr	7.2 (53%)	Aug	0.7 (80%)	Dec	2.8 (50%)


Wallace Harbour
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
N
Fox Harbour
Wallace Harbour
0
5 km

WALLACE HARBOUR AND VICINITY Zone 4Th Chart 4405
Bay ID..CN

Area (CD)	32.5 km^2	Area (HW)	55.2 km^2
Perimeter	60.2 km	Volume (CD)	183.0 $10^6 m^3$
Axis Length	20.4 km	Maximum Depth	13.7 m
Section Width	8.3 km	Section Area	69436.3 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.70 m	2.60 m	74.6 $10^6 m^3$	0.05 m/s	0.08 m/s

Flushing time 36.3 hr
Tidal/Freshwater volume ratio 217.74

Watershed Area 521.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	16.2 (57%)	May	24.6 (62%)	Sept	4.6 (90%)
Feb	13.7 (64%)	June	9.4 (62%)	Oct	10.6 (87%)
Mar	20.8 (48%)	July	5.4 (63%)	Nov	18.2 (61%)
Apr	33.2 (33%)	Aug	5.0 (101%)	Dec	22.2 (36%)

FOX HARBOUR Zone 4Th Chart 4405
Bay ID..CNa

Area (CD)	2.0 km^2	Area (HW)	9.6 km^2
Perimeter	18.6 km	Volume (CD)	6.0 $10^6 m^3$
Axis Length	6.5 km	Maximum Depth	7.0 m
Section Width	1.2 km	Section Area	3439.7 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.70 m	2.60 m	9.9 $10^6 m^3$	0.13 m/s	0.20 m/s

Flushing time 12.6 hr
Tidal/Freshwater volume ratio 948.02

Watershed Area 14.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	0.3 (57%)	May	0.7 (62%)	Sept	0.2 (90%)
Feb	0.2 (64%)	June	0.3 (62%)	Oct	0.4 (87%)
Mar	0.8 (48%)	July	0.3 (63%)	Nov	0.5 (61%)
Apr	1.1 (33%)	Aug	0.2 (101%)	Dec	0.6 (36%)

WALLACE HARBOUR Zone 4Th Chart 4405
Bay ID..CNb

Area (CD)	2.1 km^2	Area (HW)	13.5 km^2
Perimeter	22.6 km	Volume (CD)	7.0 $10^6 m^3$
Axis Length	14.0 km	Maximum Depth	9.4 m
Section Width	0.2 km	Section Area	1196.4 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.70 m	2.60 m	13.3 $10^6 m^3$	0.50 m/s	0.78 m/s

Flushing time 11.6 hr
Tidal/Freshwater volume ratio 40.04

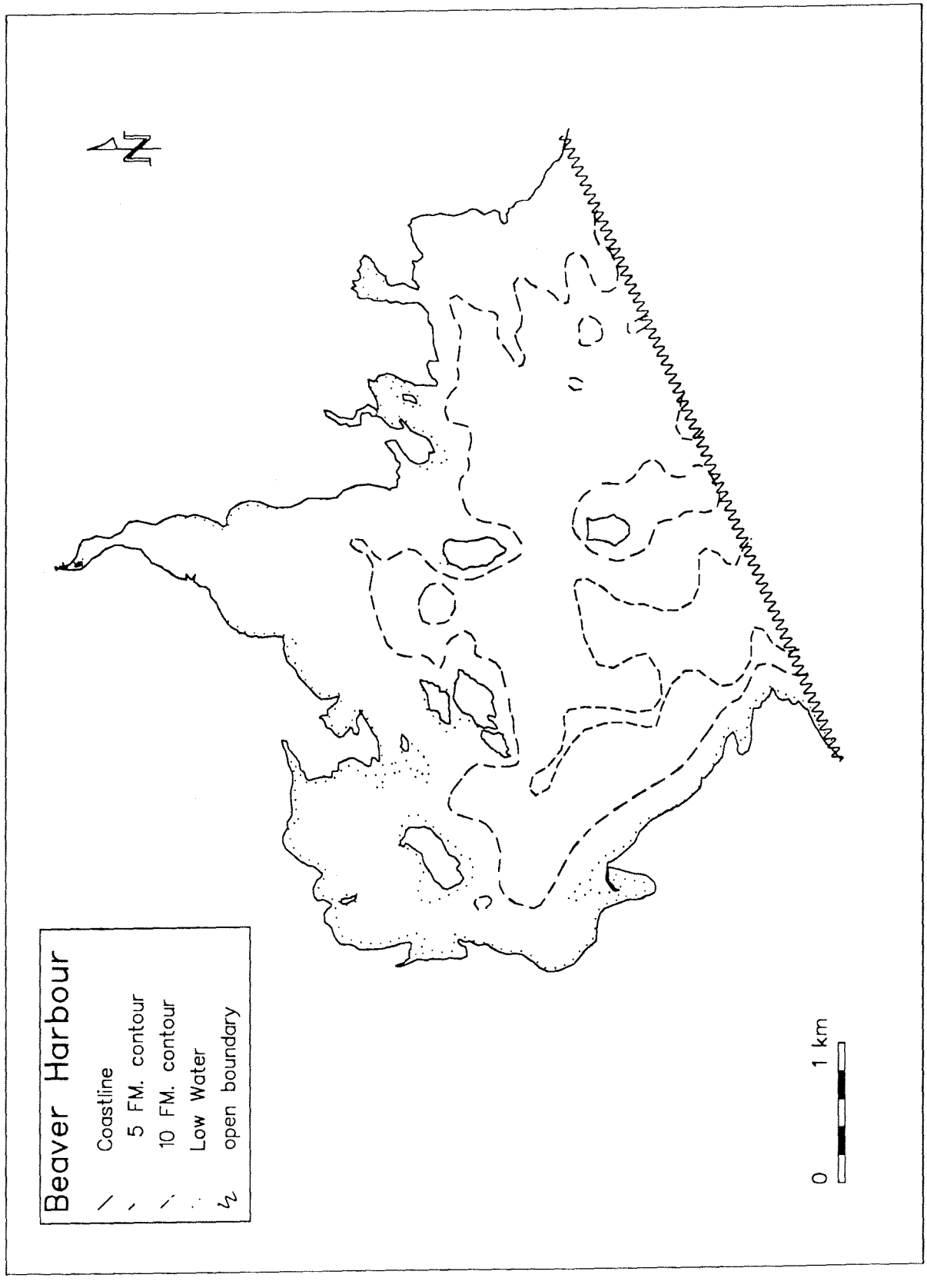
Watershed Area 506.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	15.9 (57%)	May	23.9 (62%)	Sept	4.4 (90%)
Feb	13.5 (64%)	June	9.1 (62%)	Oct	10.2 (87%)
Mar	20.0 (48%)	July	5.1 (63%)	Nov	17.7 (61%)
Apr	32.1 (33%)	Aug	4.8 (101%)	Dec	21.6 (36%)

APPENDIX A(ii)

Eastern Nova Scotia


Beaver Harbour
Coastline
5 FM. contour
10 FM. contour
Low Water
open boundary
N
0
1 km

BEAVER HARBOUR Zone 4Wk Chart 4364
Bay ID..BZ

Area (CD)	12.8 km^2	Area (HW)	13.5 km^2
Perimeter	22.1 km	Volume (CD)	121.7 $10^6 m^3$
Axis Length	5.1 km	Maximum Depth	21.3 m
Section Width	4.6 km	Section Area	58900.8 m^2

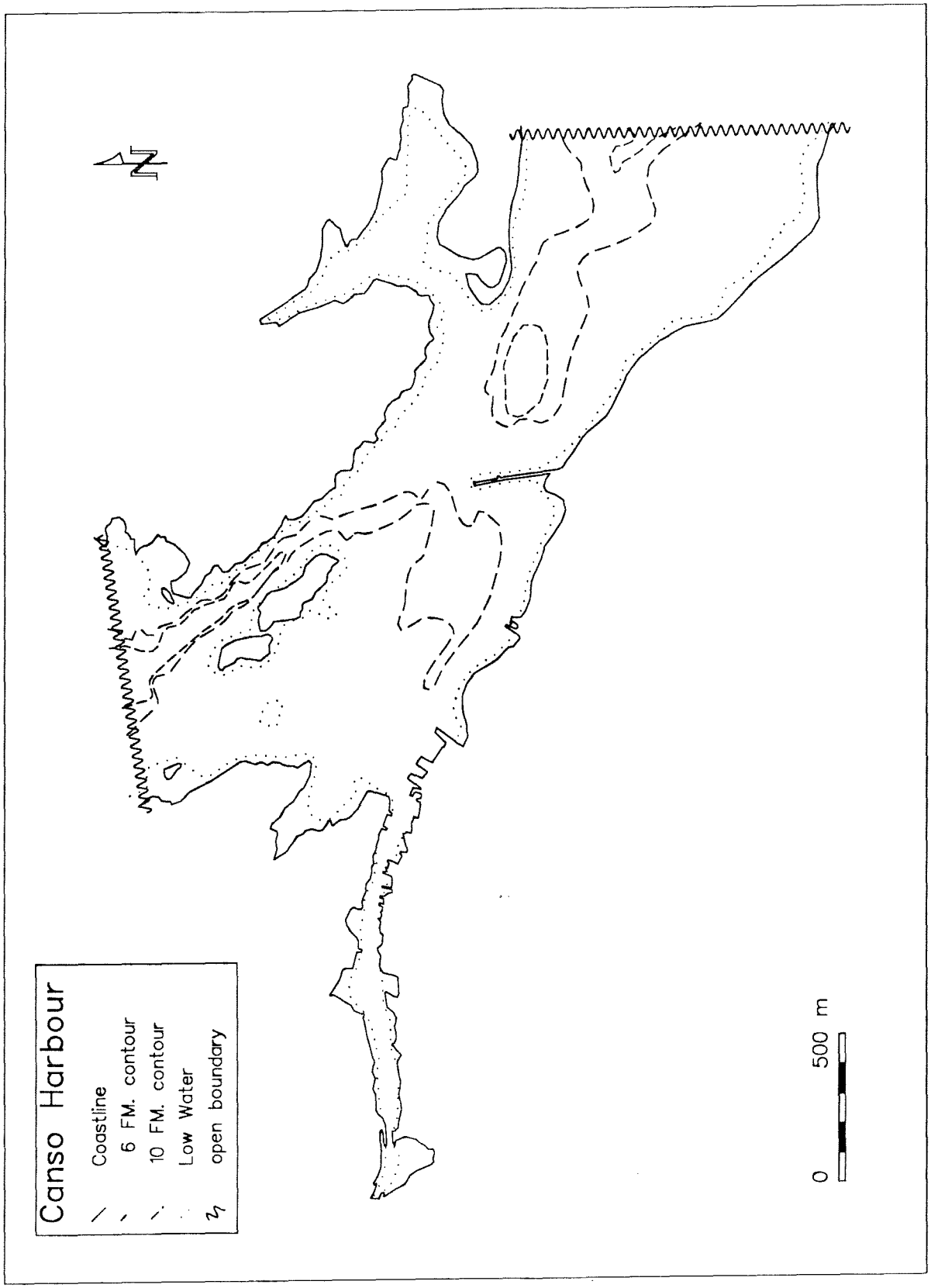
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.10 m	18.4 $10^6 m^3$	0.01 m/s	0.02 m/s

Flushing time 88.1 hr
Tidal/Freshwater volume ratio 723.12

Watershed Area 34.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.4 (52%)	May	1.5 (43%)	Sept	0.4 (79%)
Feb	1.1 (60%)	June	0.4 (33%)	Oct	0.8 (50%)
Mar	1.6 (41%)	July	0.6 (80%)	Nov	1.2 (36%)
Apr	2.6 (18%)	Aug	0.6 (66%)	Dec	1.5 (32%)


Canso Harbour
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
N
0
500 m

CANSO HARBOUR Zone 4Wd Chart 4281
Bay ID..BA

Area (CD)	2.1 km^2	Area (HW)	2.5 km^2
Perimeter	11.1 km	Volume (CD)	14.0 $10^6 m^3$
Axis Length	2.3 km	Maximum Depth	27.4 m
Section Width	1.8 km	Section Area	15864.8 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	1.90 m	3.5 $10^6 m^3$	0.01 m/s	0.02 m/s

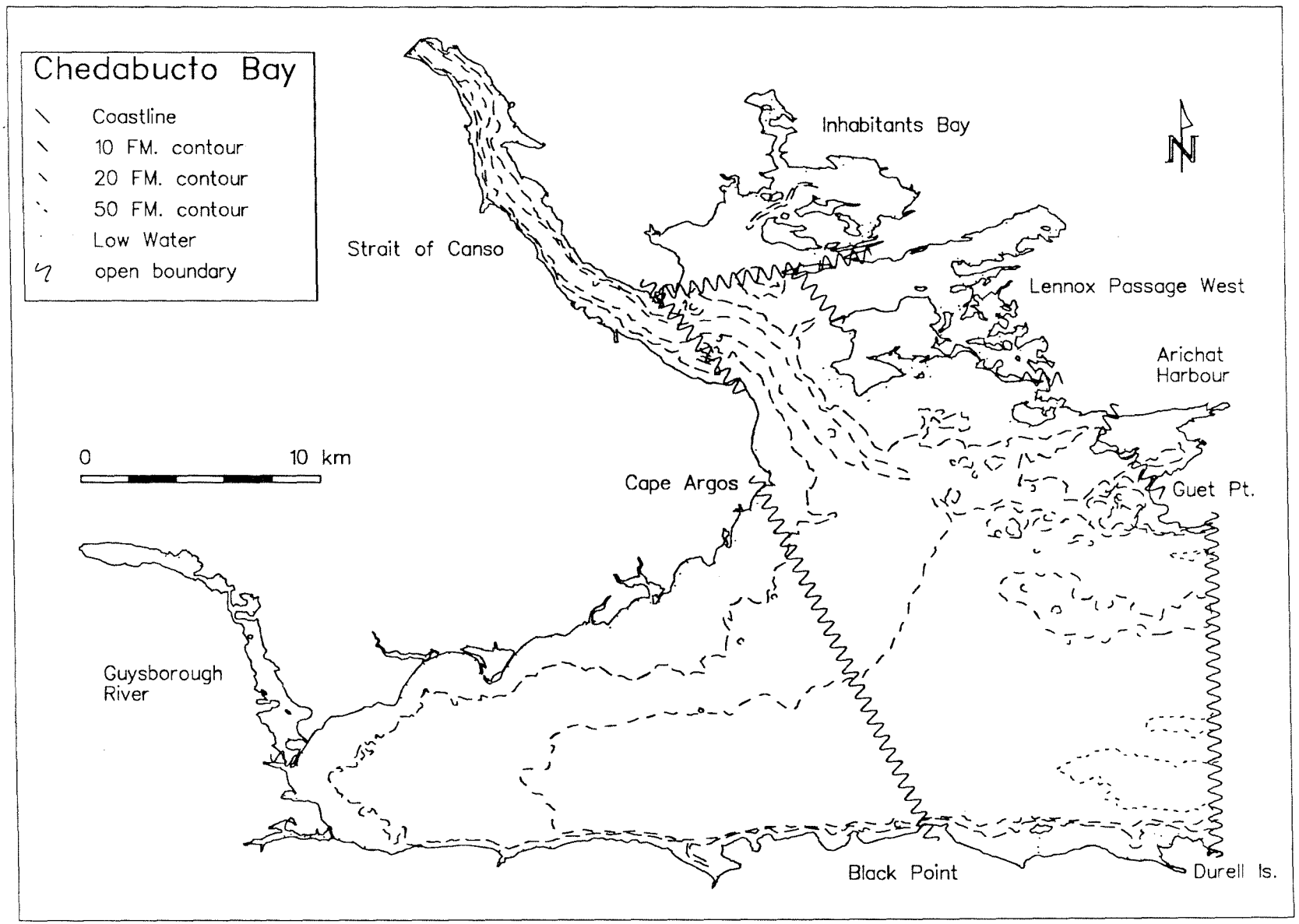
Flushing time 55.7 hr
Tidal/Freshwater volume ratio 473.74

Watershed Area 9.5 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	0.4 (55%)	May	0.4 (80%)	Sept	0.1 (77%)
Feb	0.3 (60%)	June	0.2 (66%)	Oct	0.3 (56%)
Mar	0.4 (47%)	July	0.1 (95%)	Nov	0.5 (55%)
Apr	0.7 (38%)	Aug	0.1 (82%)	Dec	0.5 (42%)

Coastline closed at bridge in Tickle Channel


Chedabucto Bay
Coastline
10 FM. contour
20 FM. contour
50 FM. contour
Low Water
open boundary
Strait of Canso
Inhabitants Bay
N
Lennox Passage West
Arichat Harbour
0
10 km
Cape Argos
Guet Pt.
Guysborough River
Black Point
Durell Is.

CHEDABUCTO BAY Zone 4Wd Chart 4335
(DURELL IS. to GUET PT.) Bay ID..BR

Area (CD)	614.6 km^2	Area (HW)	632.4 km^2
Perimeter	297.7 km	Volume (CD)	20324.0 $10^6 m^3$
Axis Length	53.7 km	Maximum Depth	107.9 m
Section Width	13.3 km	Section Area	817702.5 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	1.90 m	872.9 $10^6 m^3$	0.05 m/s	0.08 m/s

Flushing time 295.3 hr
Tidal/Freshwater volume ratio 500.37

Watershed Area 2148.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	87.4 (49%)	May	101.4 (64%)	Sept	33.3 (71%)
Feb	63.7 (53%)	June	45.4 (58%)	Oct	63.8 (55%)
Mar	96.8 (45%)	July	24.3 (72%)	Nov	118.9 (49%)
Apr	155.3 (35%)	Aug	29.7 (86%)	Dec	116.5 (38%)

CHEDABUCTO BAY Zone 4Wd Chart 4335
(BLACK PT. to CAPE ARGOS) Bay ID..BRa

Area (CD)	224.3 km^2	Area (HW)	230.0 km^2
Perimeter	115.2 km	Volume (CD)	6458.0 $10^6 m^3$
Axis Length	42.2 km	Maximum Depth	80.5 m
Section Width	15.2 km	Section Area	526684.1 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	1.90 m	318.0 $10^6 m^3$	0.03 m/s	0.04 m/s

Flushing time 258.3 hr
Tidal/Freshwater volume ratio 352.80

Watershed Area 1110.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	45.2 (50%)	May	52.4 (68%)	Sept	17.2 (65%)
Feb	32.9 (54%)	June	23.4 (57%)	Oct	33.0 (48%)
Mar	50.1 (45%)	July	12.6 (71%)	Nov	61.4 (47%)
Apr	80.3 (38%)	Aug	15.3 (79%)	Dec	60.2 (37%)

GUYSBOROUGH RIVER Zone 4Wd Chart 4335
Bay ID..BRb

Area (CD)	9.4 km^2	Area (HW)	10.0 km^2
Perimeter	36.8 km	Volume (CD)	68.0 $10^6 m^3$
Axis Length	14.8 km	Maximum Depth	17.9 m
Section Width	0.5 km	Section Area	4754.0 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	1.90 m	13.6 $10^6 m^3$	0.13 m/s	0.20 m/s

Flushing time 67.7 hr
Tidal/Freshwater volume ratio 73.71

Watershed Area 230.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	9.4 (55%)	May	10.7 (80%)	Sept	3.2 (77%)
Feb	6.7 (60%)	June	4.7 (66%)	Oct	6.7 (56%)
Mar	10.3 (47%)	July	2.3 (95%)	Nov	13.2 (55%)
Apr	17.0 (38%)	Aug	3.0 (82%)	Dec	12.4 (42%)

STRAIT OF CANSO Zone 4Wd Chart 4335
Bay ID..BRc

Area (CD)	29.5 km^2	Area (HW)	30.1 km^2
Perimeter	43.9 km	Volume (CD)	672.0 $10^6 m^3$
Axis Length	17.6 km	Maximum Depth	64.0 m
Section Width	4.2 km	Section Area	93002.3 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	41.7 $10^6 m^3$	0.02 m/s	0.03 m/s

Flushing time 205.9 hr
Tidal/Freshwater volume ratio 271.55

Watershed Area 188.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	7.6 (49%)	May	9.0 (65%)	Sept	3.3 (62%)
Feb	5.6 (53%)	June	4.1 (55%)	Oct	5.6 (46%)
Mar	8.8 (44%)	July	2.4 (65%)	Nov	9.9 (45%)
Apr	13.2 (38%)	Aug	2.8 (78%)	Dec	10.2 (35%)

Strait of Canso closed at causeway

ARICHAT HARBOUR Zone 4Wd Chart 4335
Bay ID..BRd

Area (CD)	8.1 km^2	Area (HW)	8.2 km^2
Perimeter	16.0 km	Volume (CD)	92.0 $10^6 m^3$
Axis Length	42.2 km	Maximum Depth	23.8 m
Section Width	2.0 km	Section Area	23685.4 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	1.90 m	11.5 $10^6 m^3$	0.02 m/s	0.03 m/s

Flushing time 105.1 hr
Tidal/Freshwater volume ratio 586.17

Watershed Area 24.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.2 (48%)	May	1.3 (53%)	Sept	0.4 (86%)
Feb	0.8 (50%)	June	0.6 (59%)	Oct	0.6 (70%)
Mar	1.0 (46%)	July	0.4 (73%)	Nov	1.1 (55%)
Apr	1.7 (29%)	Aug	0.3 (104%)	Dec	1.2 (39%)

INHABITANTS BAY Zone 4Wd Chart 4335
Bay ID..BRe

Area (CD)	28.9 km^2	Area (HW)	33.3 km^2
Perimeter	50.2 km	Volume (CD)	197.0 $10^6 m^3$
Axis Length	11.1 km	Maximum Depth	27.4 m
Section Width	5.8 km	Section Area	68086.3 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	43.6 $10^6 m^3$	0.03 m/s	0.05 m/s

Flushing time 62.0 hr
Tidal/Freshwater volume ratio 112.06

Watershed Area 476.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	19.3 (49%)	May	22.9 (65%)	Sept	8.3 (62%)
Feb	14.3 (53%)	June	10.6 (55%)	Oct	14.4 (46%)
Mar	21.7 (44%)	July	6.2 (65%)	Nov	25.2 (45%)
Apr	33.4 (35%)	Aug	7.0 (78%)	Dec	25.9 (35%)

LENNOX PASSAGE WEST Zone 4Wd Chart 4335
Bay ID..BRf

Area (CD)	23.0 km^2	Area (HW)	27.6 km^2
Perimeter	52.0 km	Volume (CD)	170.0 $10^6 m^3$
Axis Length	11.1 km	Maximum Depth	14.9 m
Section Width	3.6 km	Section Area	10410.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	35.4 $10^6 m^3$	0.15 m/s	0.24 m/s

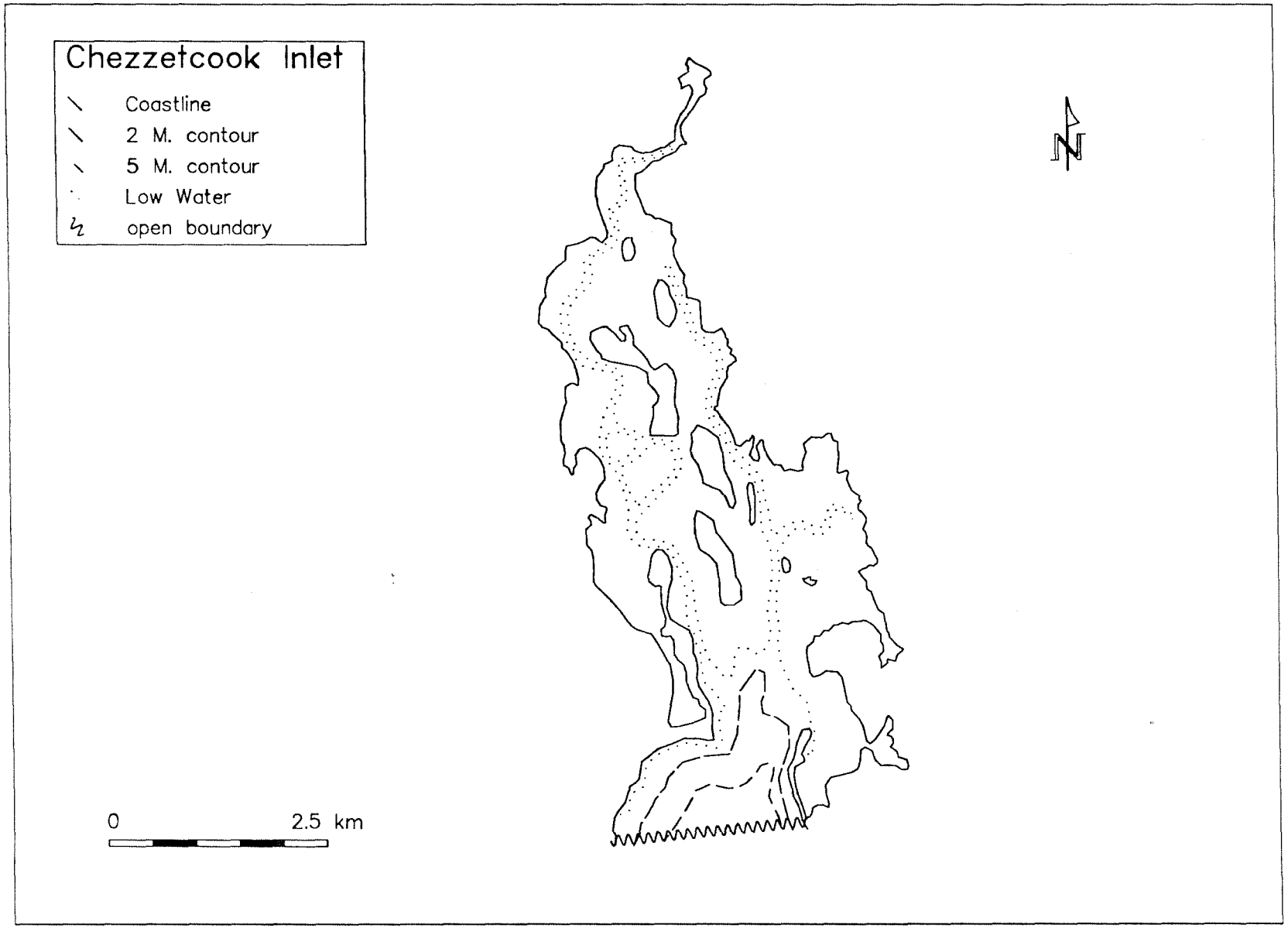
Flushing time 65.5 hr
Tidal/Freshwater volume ratio 1456.04

Watershed Area 127.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.4 (48%)	May	1.6 (53%)	Sept	0.5 (86%)
Feb	1.0 (50%)	June	0.7 (59%)	Oct	0.8 (70%)
Mar	1.3 (46%)	July	0.4 (73%)	Nov	1.4 (55%)
Apr	2.1 (29%)	Aug	0.4 (104%)	Dec	1.5 (39%)

Lennox Passage closed at eastern entance


Chezzetcook Inlet
Coastline
2 M. contour
5 M. contour
Low Water
open boundary
0
2.5 km
N

CHEZZETCOOK INLET Zone 4Wk Chart 4236
Bay ID..AB

Area (CD)	3.8 km^2	Area (HW)	14.4 km^2
Perimeter	35.0 km	Volume (CD)	9.0 $10^6 m^3$
Axis Length	9.7 km	Maximum Depth	5.5 m
Section Width	2.1 km	Section Area	8557.9 m^2

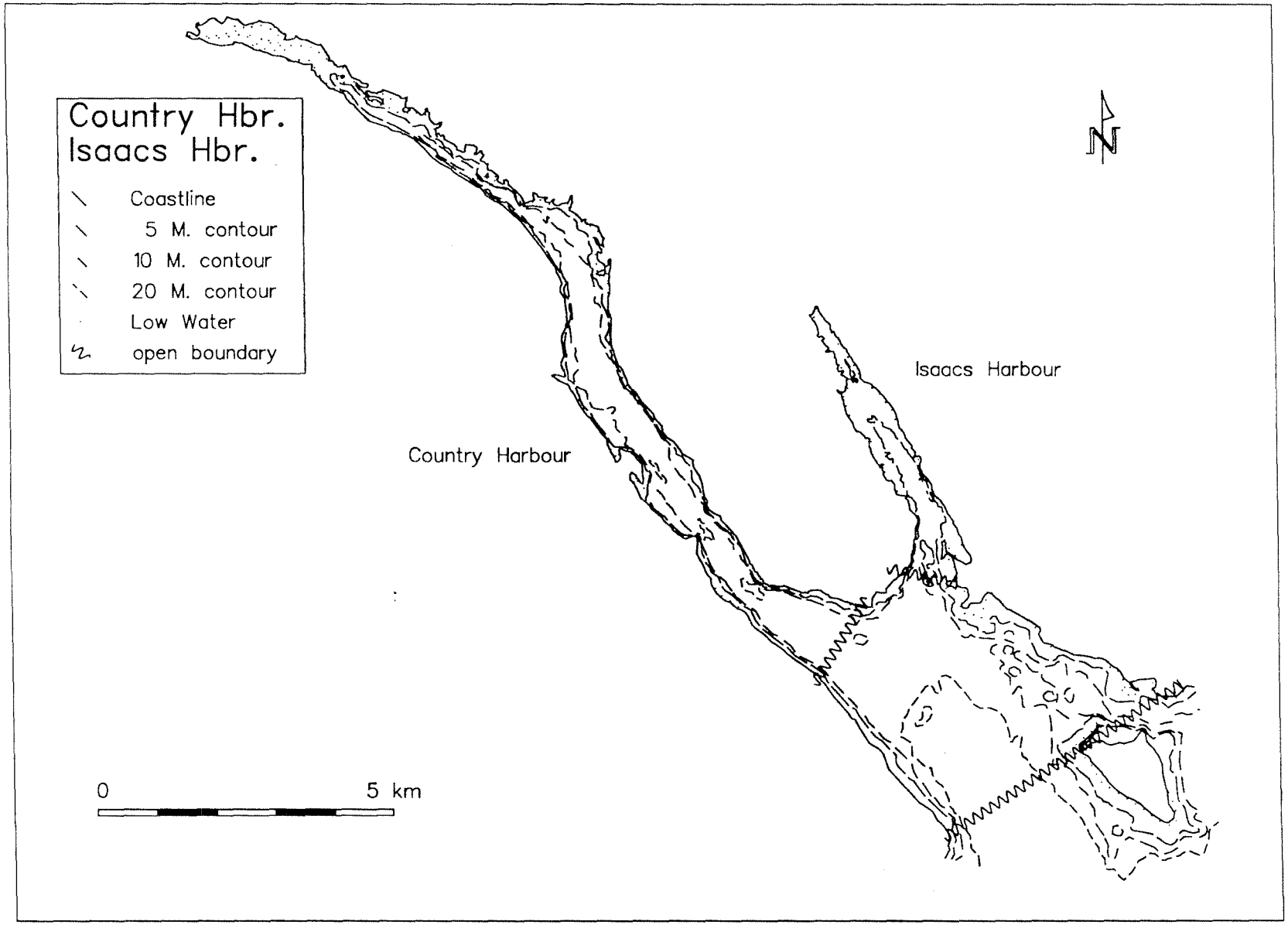
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	1.80 m	12.8 $10^6 m^3$	0.07 m/s	0.11 m/s

Flushing time 14.0 hr
Tidal/Freshwater volume ratio 165.17

Watershed Area 115.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	4.6 (60%)	May	4.0 (53%)	Sept	1.4 (102%)
Feb	3.3 (70%)	June	2.0 (69%)	Oct	2.7 (67%)
Mar	4.8 (46%)	July	1.2 (97%)	Nov	4.6 (51%)
Apr	7.1 (35%)	Aug	1.2 (110%)	Dec	4.7 (40%)


Country Hbr.
Isaacs Hbr.
Coastline
5 M. contour
10 M. contour
20 M. contour
Low Water
open boundary
Isaacs Harbour
Country Harbour
0
5 km

COUNTRY HBR / ISAACS HBR Zone 4Wd Chart 4234
Bay ID..AR

Area (CD)	25.6 km^2	Area (HW)	27.0 km^2
Perimeter	62.4 km	Volume (CD)	286.0 $10^6 m^3$
Axis Length	21.0 km	Maximum Depth	21.9 m
Section Width	3.8 km	Section Area	49824.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.20 m	1.70 m	31.6 $10^6 m^3$	0.03 m/s	0.04 m/s

Flushing time 118.3 hr
Tidal/Freshwater volume ratio 78.44

Watershed Area 442.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	21.2 (48%)	May	22.4 (65%)	Sept	7.2 (63%)
Feb	16.2 (56%)	June	11.1 (66%)	Oct	14.1 (59%)
Mar	24.3 (42%)	July	8.0 (73%)	Nov	23.7 (56%)
Apr	33.5 (31%)	Aug	8.4 (64%)	Dec	26.4 (36%)

COUNTRY HARBOUR Zone 4Wd Chart 4234
Bay ID..ARa

Area (CD)	8.9 km^2	Area (HW)	9.9 km^2
Perimeter	36.8 km	Volume (CD)	89.0 $10^6 m^3$
Axis Length	19.1 km	Maximum Depth	21.9 m
Section Width	1.4 km	Section Area	17643.4 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.20 m	1.70 m	11.2 $10^6 m^3$	0.03 m/s	0.04 m/s

Flushing time 104.0 hr
Tidal/Freshwater volume ratio 39.50

Watershed Area 313.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	15.0 (48%)	May	15.8 (65%)	Sept	5.2 (63%)
Feb	11.5 (56%)	June	7.9 (66%)	Oct	10.0 (59%)
Mar	17.1 (42%)	July	5.7 (73%)	Nov	16.8 (56%)
Apr	23.6 (31%)	Aug	6.0 (64%)	Dec	18.7 (36%)

ISAACS HARBOUR Zone 4Wd Chart 4234
Bay ID..ARb

Area (CD)	2.5 km^2	Area (HW)	2.7 km^2
Perimeter	13.5 km	Volume (CD)	12.0 $10^6 m^3$
Axis Length	5.2 km	Maximum Depth	12.9 m
Section Width	1.0 km	Section Area	6882.7 m^2

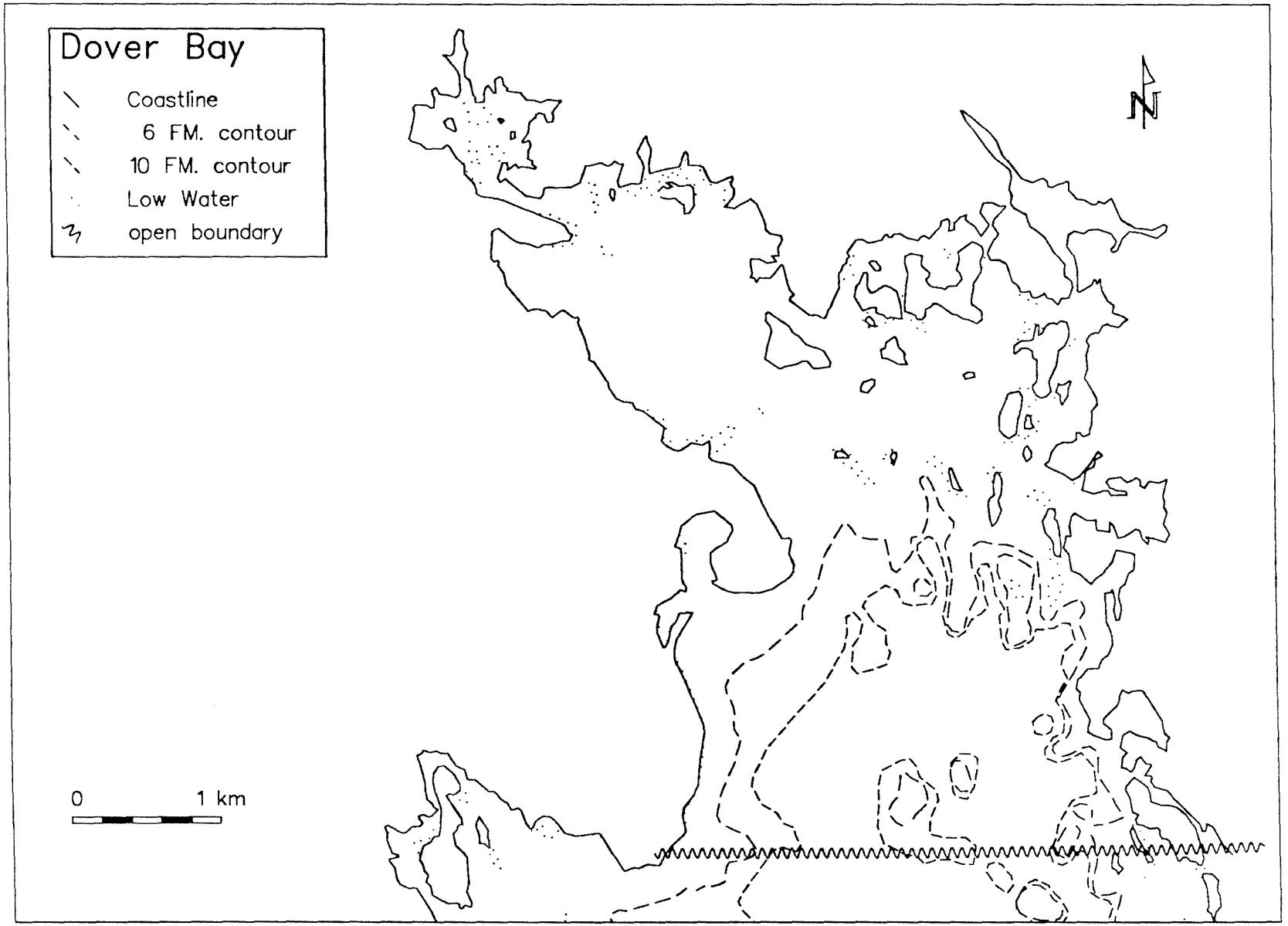
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.20 m	1.70 m	3.1 $10^6 m^3$	0.02 m/s	0.03 m/s

Flushing time 52.6 hr
Tidal/Freshwater volume ratio 43.56

Watershed Area 80.5 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.9 (48%)	May	4.1 (65%)	Sept	1.3 (63%)
Feb	3.0 (56%)	June	2.0 (66%)	Oct	2.6 (59%)
Mar	4.4 (42%)	July	1.4 (73%)	Nov	4.3 (56%)
Apr	6.1 (31%)	Aug	1.5 (64%)	Dec	4.8 (36%)


Dover Bay
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
0
1 km
N

DOVER BAY Zone 4Wd Chart 4280
Bay ID..CD

Area (CD)	12.1 km^2	Area (HW)	13.0 km^2
Perimeter	43.1 km	Volume (CD)	104.0 $10^6 m^3$
Axis Length	8.3 km	Maximum Depth	31.0 m
Section Width	3.4 km	Section Area	44436.6 m^2

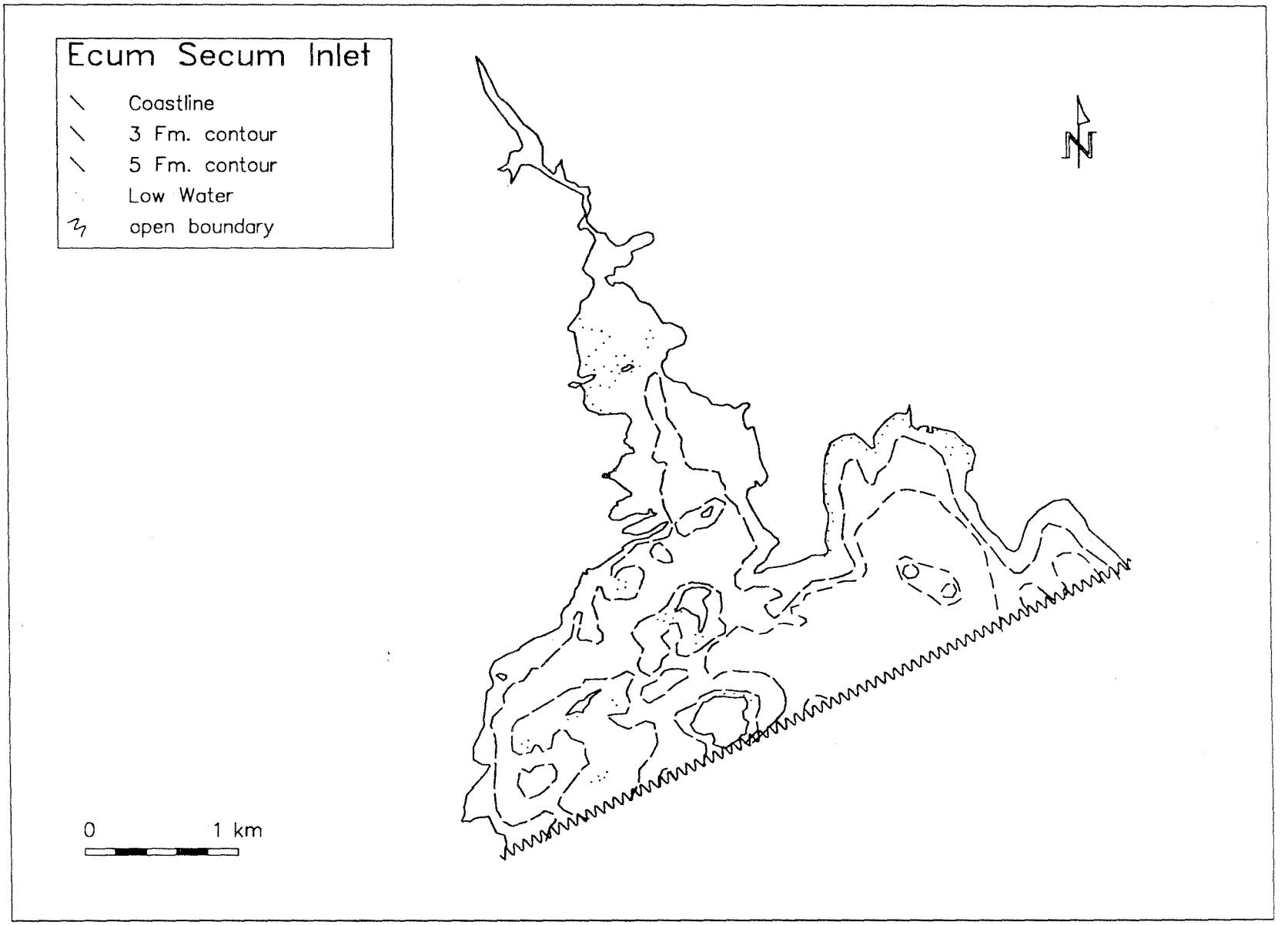
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	1.90 m	18.8 $10^6 m^3$	0.02 m/s	0.03 m/s

Flushing time 74.5 hr
Tidal/Freshwater volume ratio 498.91

Watershed Area 41.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	2.0 (48%)	May	2.1 (65%)	Sept	0.7 (63%)
Feb	1.5 (56%)	June	1.1 (66%)	Oct	1.3 (59%)
Mar	2.3 (42%)	July	0.8 (73%)	Nov	2.2 (56%)
Apr	3.1 (31%)	Aug	0.8 (64%)	Dec	2.4 (36%)


Ecum Secum Inlet
Coastline
3 Fm. contour
5 Fm. contour
Low Water
open boundary
N
0
1 km

ECUM SECUM INLET Zone 4Wk Chart 4355
Bay ID..CI

Area (CD)	6.1 km^2	Area (HW)	6.3 km^2
Perimeter	19.6 km	Volume (CD)	35.0 $10^6 m^3$
Axis Length	5.0 km	Maximum Depth	12.2 m
Section Width	4.5 km	Section Area	31977.8 m^2

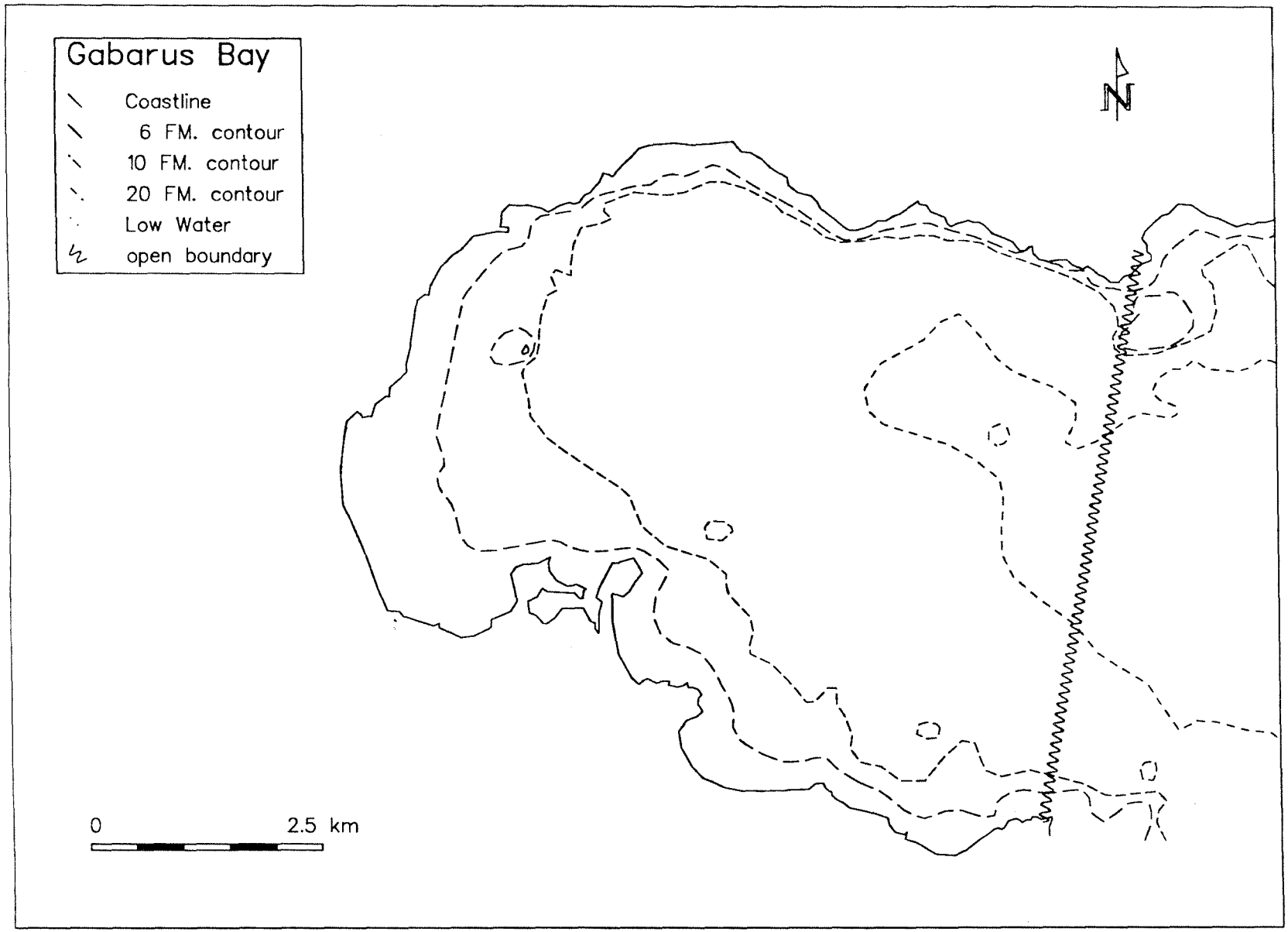
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	2.00 m	8.1 $10^6 m^3$	0.01 m/s	0.02 m/s

Flushing time 59.5 hr
Tidal/Freshwater volume ratio 93.59

Watershed Area 95.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	4.6 (48%)	May	4.8 (65%)	Sept	1.6 (63%)
Feb	3.4 (56%)	June	2.4 (66%)	Oct	3.0 (59%)
Mar	5.2 (42%)	July	1.7 (73%)	Nov	5.1 (56%)
Apr	7.2 (31%)	Aug	1.8 (64%)	Dec	5.7 (36%)


Gabarus Bay
Coastline
6 FM. contour
10 FM. contour
20 FM. contour
Low Water
open boundary
N
0
2.5 km

GABARUS BAY Zone 4Vn Chart 4375
Bay ID..BH

Area (CD)	38.8 km^2	Area (HW)	42.6 km^2
Perimeter	28.1 km	Volume (CD)	922.0 $10^6 m^3$
Axis Length	8.3 km	Maximum Depth	36.6 m
Section Width	5.6 km	Section Area	157696.2 m^2

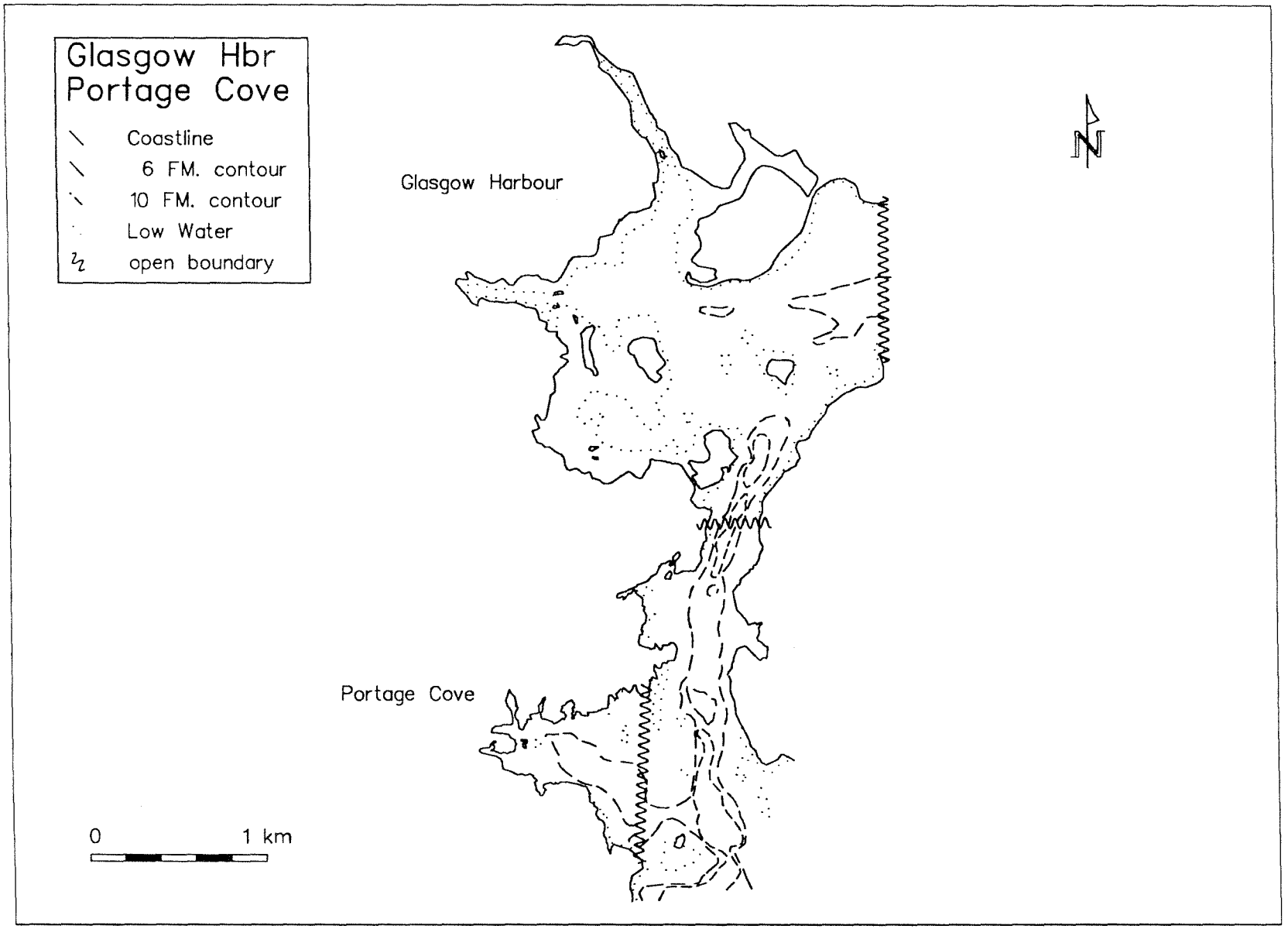
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.10 m	1.70 m	44.8 $10^6 m^3$	0.01 m/s	0.02 m/s

Flushing time 261.6 hr
Tidal/Freshwater volume ratio 564.76

Watershed Area 84.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.8 (54%)	May	4.1 (68%)	Sept	1.9 (57%)
Feb	3.0 (66%)	June	2.2 (67%)	Oct	3.4 (50%)
Mar	4.2 (44%)	July	1.4 (62%)	Nov	5.3 (44%)
Apr	6.5 (45%)	Aug	1.5 (85%)	Dec	5.3 (37%)


Glasgow Hbr
Portage Cove
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
Glasgow Harbour
Portage Cove
N
0
1 km

GLASGOW HARBOUR Zone 4Wd Chart 4282
Bay ID..AZa

Area (CD)	1.7 km^2	Area (HW)	2.6 km^2
Perimeter	11.8 km	Volume (CD)	9.0 $10^6 m^3$
Axis Length	2.4 km	Maximum Depth	13.7 m
Section Width	1.0 km	Section Area	9131.6 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.90 m	2.8 $10^6 m^3$	0.01 m/s	0.02 m/s

Flushing time 44.9 hr
Tidal/Freshwater volume ratio 533.65

Watershed Area 6.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	0.3 (55%)	May	0.3 (80%)	Sept	0.1 (77%)
Feb	0.2 (60%)	June	0.1 (66%)	Oct	0.2 (56%)
Mar	0.3 (47%)	July	0.1 (95%)	Nov	0.4 (55%)
Apr	0.4 (38%)	Aug	0.1 (82%)	Dec	0.4 (42%)

PORTAGE COVE Zone 4Wd Chart 4282
Bay ID..AZc

Area (CD)	0.3 km^2	Area (HW)	0.3 km^2
Perimeter	4.1 km	Volume (CD)	2.0 $10^6 m^3$
Axis Length	1.8 km	Maximum Depth	21.9 m
Section Width	0.8 km	Section Area	5877.2 m^2

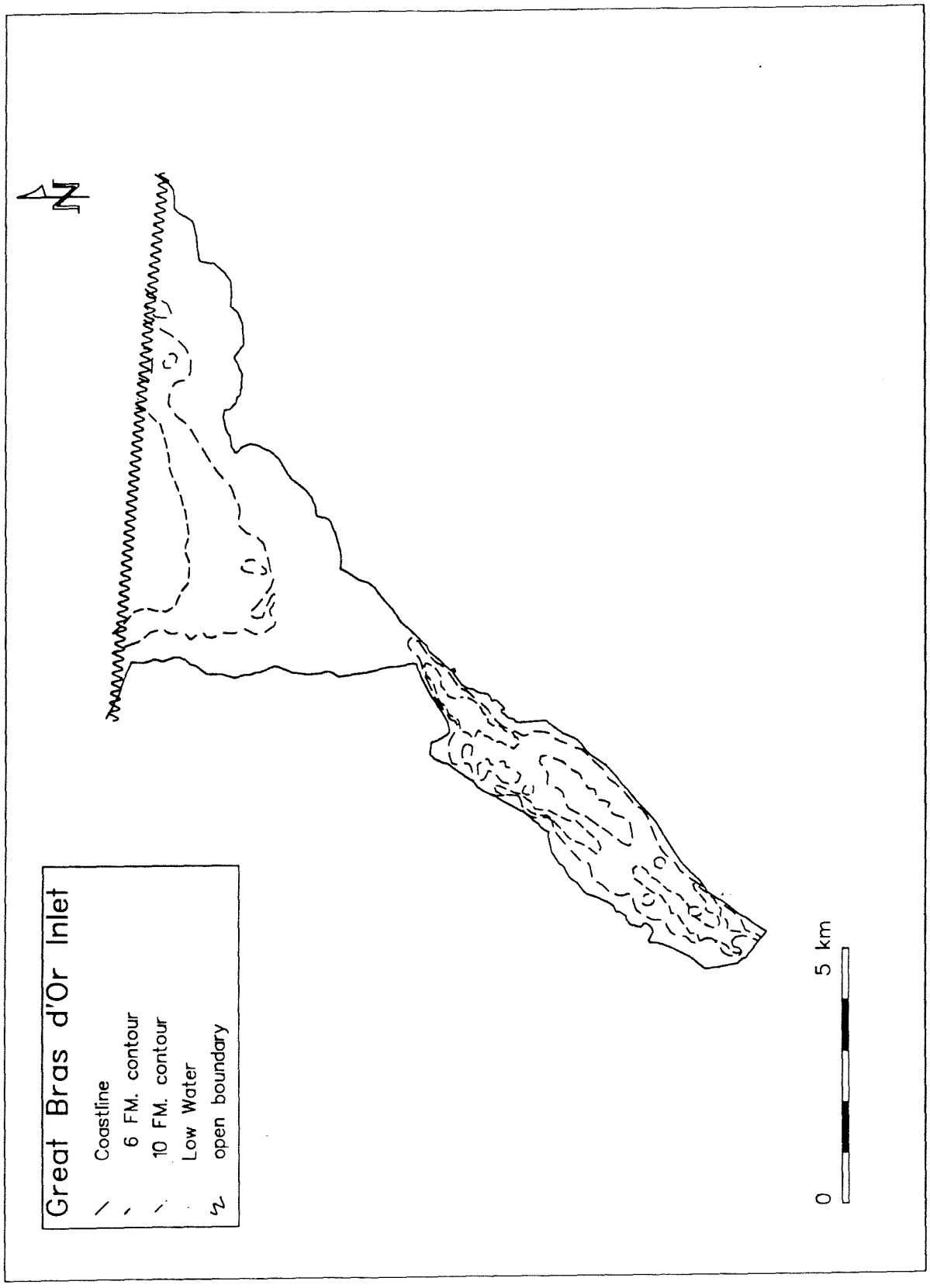
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.90 m	0.4 $10^6 m^3$	0.00 m/s	0.01 m/s

Flushing time 59.0 hr
Tidal/Freshwater volume ratio 139.56

Watershed Area 3.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	0.1 (55%)	May	0.2 (80%)	Sept	0.1 (77%)
Feb	0.1 (60%)	June	0.1 (66%)	Oct	0.1 (56%)
Mar	0.2 (47%)	July	0.1 (95%)	Nov	0.2 (55%)
Apr	0.3 (38%)	Aug	0.1 (82%)	Dec	0.2 (42%)


Great Bras d'Or Inlet
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
N
0
5 km

GREAT BRAS D'OR INLET Zone 4Vn Chart 4367
Bay ID..CL

Area (CD)	38.9 km^2	Area (HW)	38.9 km^2
Perimeter	39.7 km	Volume (CD)	409.0 $10^6 m^3$
Axis Length	15.0 km	Maximum Depth	21.9 m
Section Width	10.4 km	Section Area	133653.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.00 m	1.50 m	38.9 $10^6 m^3$	0.01 m/s	0.02 m/s

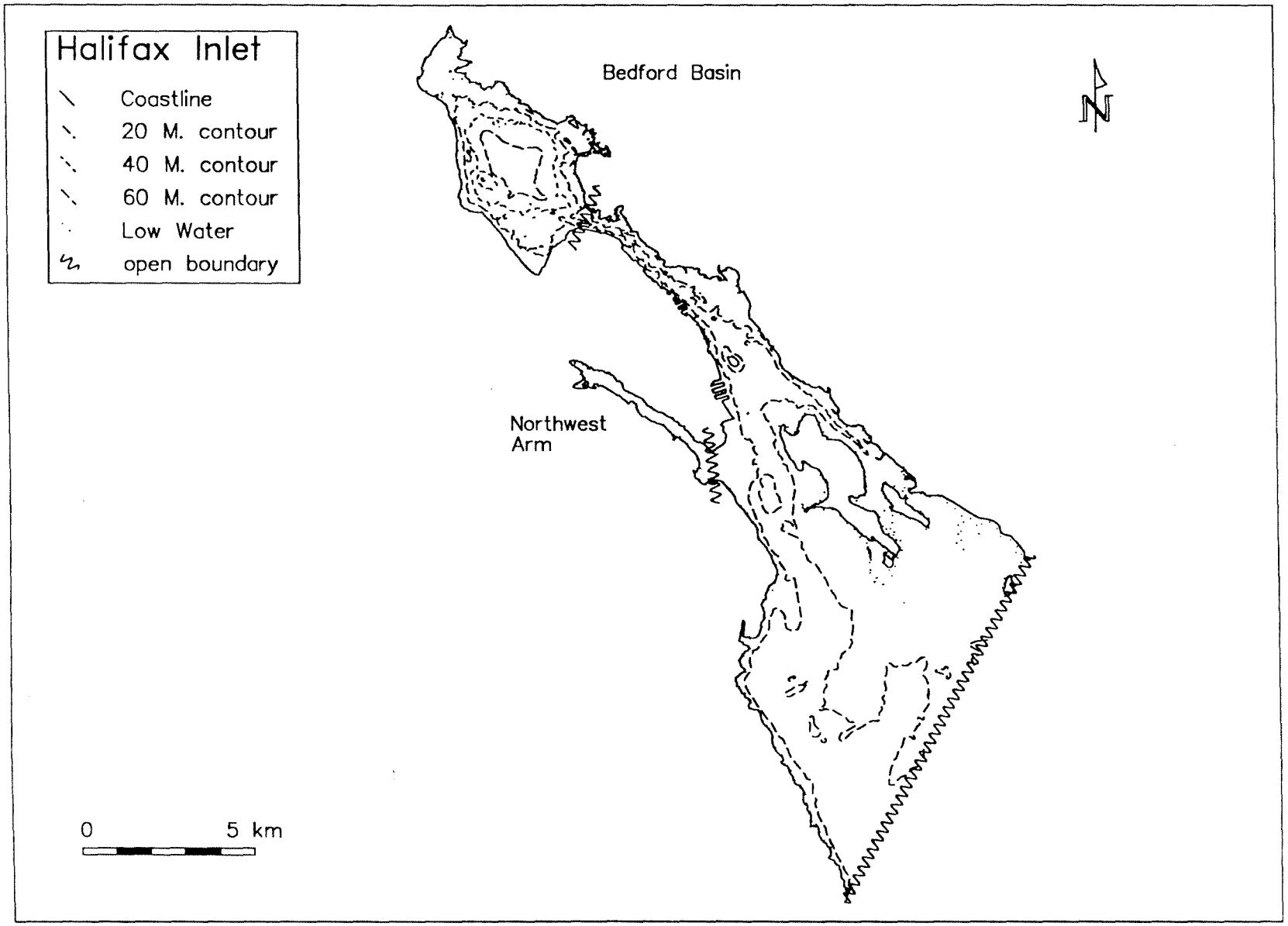
Flushing time 136.7 hr
Tidal/Freshwater volume ratio 666.68

Watershed Area 75.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.4 (43%)	May	4.9 (46%)	Sept	0.9 (67%)
Feb	2.9 (47%)	June	2.7 (50%)	Oct	1.5 (59%)
Mar	2.8 (40%)	July	1.3 (54%)	Nov	2.7 (48%)
Apr	3.9 (32%)	Aug	0.9 (77%)	Dec	3.4 (36%)

Coastline closed at McNeil Beach. The tidal volume and watershed drainage area is much greater than indicated.


Halifax Inlet
Coastline
20 M. contour
40 M. contour
60 M. contour
Low Water
open boundary
Bedford Basin
Northwest Arm
N
0
5 km

HALIFAX INLET Zone 4Wk Chart 4202
Bay ID..CJ

Area (CD)	89.9 km^2	Area (HW)	93.0 km^2
Perimeter	103.4 km	Volume (CD)	1759.0 $10^6 m^3$
Axis Length	24.9 km	Maximum Depth	71.0 m
Section Width	10.3 km	Section Area	198294.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.10 m	146.4 $10^6 m^3$	0.03 m/s	0.05 m/s

Flushing time 155.3 hr
Tidal/Freshwater volume ratio 373.01

Watershed Area 480.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	23.0 (46%)	May	21.0 (58%)	Sept	5.3 (72%)
Feb	19.0 (67%)	June	12.0 (77%)	Oct	11.0 (70%)
Mar	28.0 (37%)	July	6.4 (78%)	Nov	21.0 (59%)
Apr	31.0 (29%)	Aug	8.0 (108%)	Dec	25.0 (46%)

NORTHWEST ARM (HALIFAX HARBOUR) Zone 4Wk Chart 4202
Bay ID..CJa

Area (CD)	1.4 km^2	Area (HW)	1.6 km^2
Perimeter	12.3 km	Volume (CD)	11.0 $10^6 m^3$
Axis Length	4.8 km	Maximum Depth	17.7 m
Section Width	0.4 km	Section Area	3712.0 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.10 m	2.3 $10^6 m^3$	0.03 m/s	0.04 m/s

Flushing time 65.2 hr
Tidal/Freshwater volume ratio 109.82

Watershed Area 25.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.2 (46%)	May	1.1 (58%)	Sept	0.3 (72%)
Feb	1.0 (67%)	June	0.7 (77%)	Oct	0.6 (70%)
Mar	1.5 (37%)	July	0.3 (78%)	Nov	1.1 (59%)
Apr	1.7 (29%)	Aug	0.4 (108%)	Dec	1.4 (46%)

BEDFORD BASIN Zone 4Wk Chart 4202
Bay ID..CJb

Area (CD)	16.2 km^2	Area (HW)	16.8 km^2
Perimeter	26.5 km	Volume (CD)	510.0 $10^6 m^3$
Axis Length	5.9 km	Maximum Depth	71.0 m
Section Width	0.4 km	Section Area	7626.8 m^2

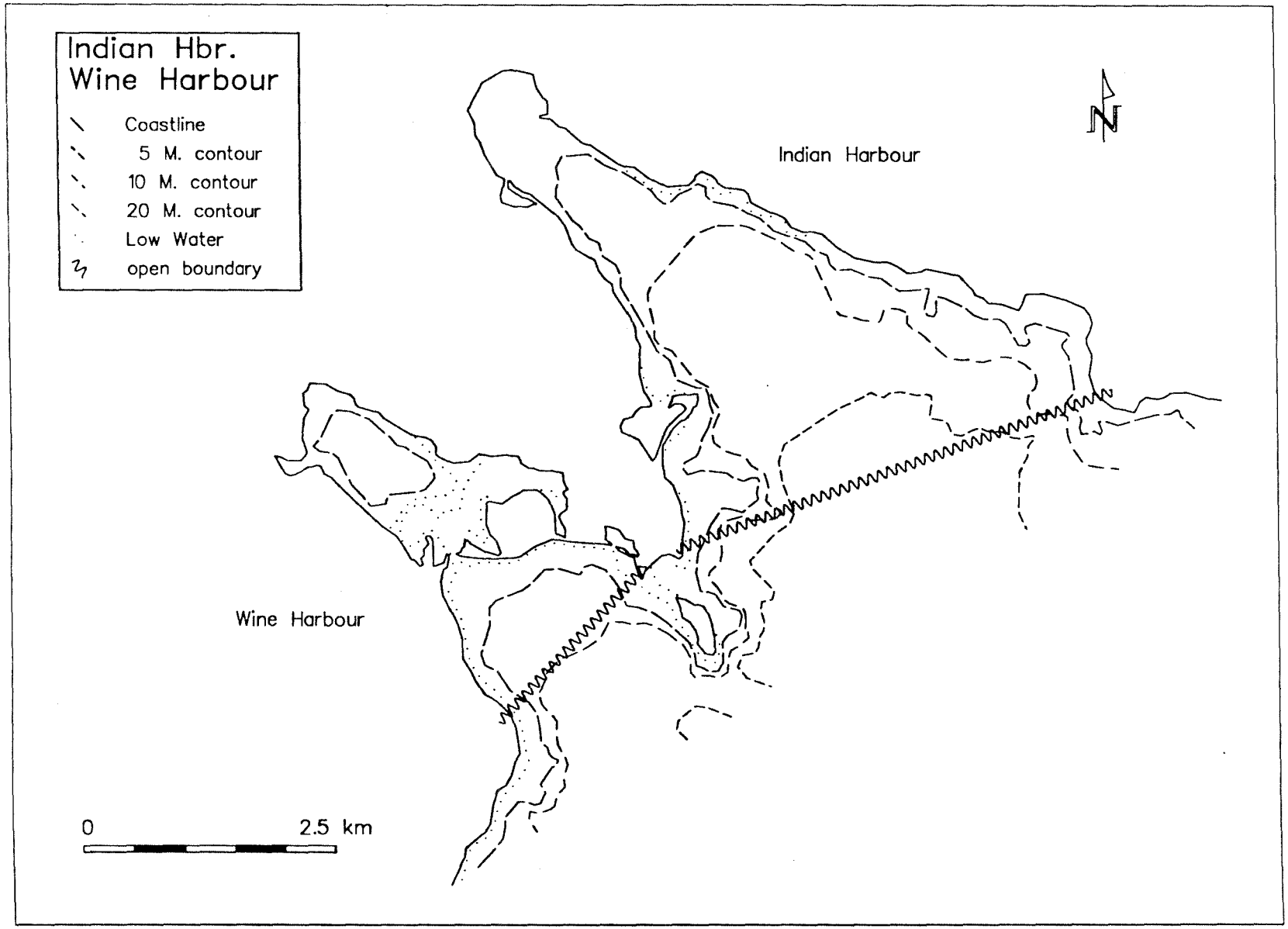
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.10 m	24.8 $10^6 m^3$	0.15 m/s	0.23 m/s

Flushing time 261.3 hr
Tidal/Freshwater volume ratio 109.38

Watershed Area 281.5 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	13.3 (46%)	May	12.1 (58%)	Sept	2.8 (72%)
Feb	11.0 (67%)	June	7.3 (77%)	Oct	6.4 (70%)
Mar	16.4 (37%)	July	3.4 (78%)	Nov	12.4 (59%)
Apr	18.0 (29%)	Aug	4.0 (108%)	Dec	14.7 (46%)


Indian Hbr.
Wine Harbour
Coastline
5 M. contour
10 M. contour
20 M. contour
Low Water
open boundary
Indian Harbour
Wine Harbour
N
0
2.5 km

INDIAN HARBOUR Zone 4Wk Chart 4234
Bay ID..APa

Area (CD)	9.8 km^2	Area (HW)	11.3 km^2
Perimeter	15.4 km	Volume (CD)	116.0 $10^6 m^3$
Axis Length	6.1 km	Maximum Depth	20.7 m
Section Width	4.3 km	Section Area	61325.2 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	14.8 $10^6 m^3$	0.01 m/s	0.02 m/s

Flushing time 102.8 hr
Tidal/Freshwater volume ratio 299.86

Watershed Area 63.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	2.1 (52%)	May	3.3 (59%)	Sept	1.0 (87%)
Feb	1.4 (37%)	June	1.2 (34%)	Oct	2.1 (45%)
Mar	3.4 (36%)	July	1.3 (96%)	Nov	2.3 (35%)
Apr	4.4 (20%)	Aug	1.5 (72%)	Dec	2.6 (49%)

WINE HARBOUR Zone 4Wk Chart 4234
Bay ID..APb

Area (CD)	3.6 km^2	Area (HW)	4.1 km^2
Perimeter	10.3 km	Volume (CD)	16.0 $10^6 m^3$
Axis Length	4.5 km	Maximum Depth	15.0 m
Section Width	1.8 km	Section Area	13256.6 m^2

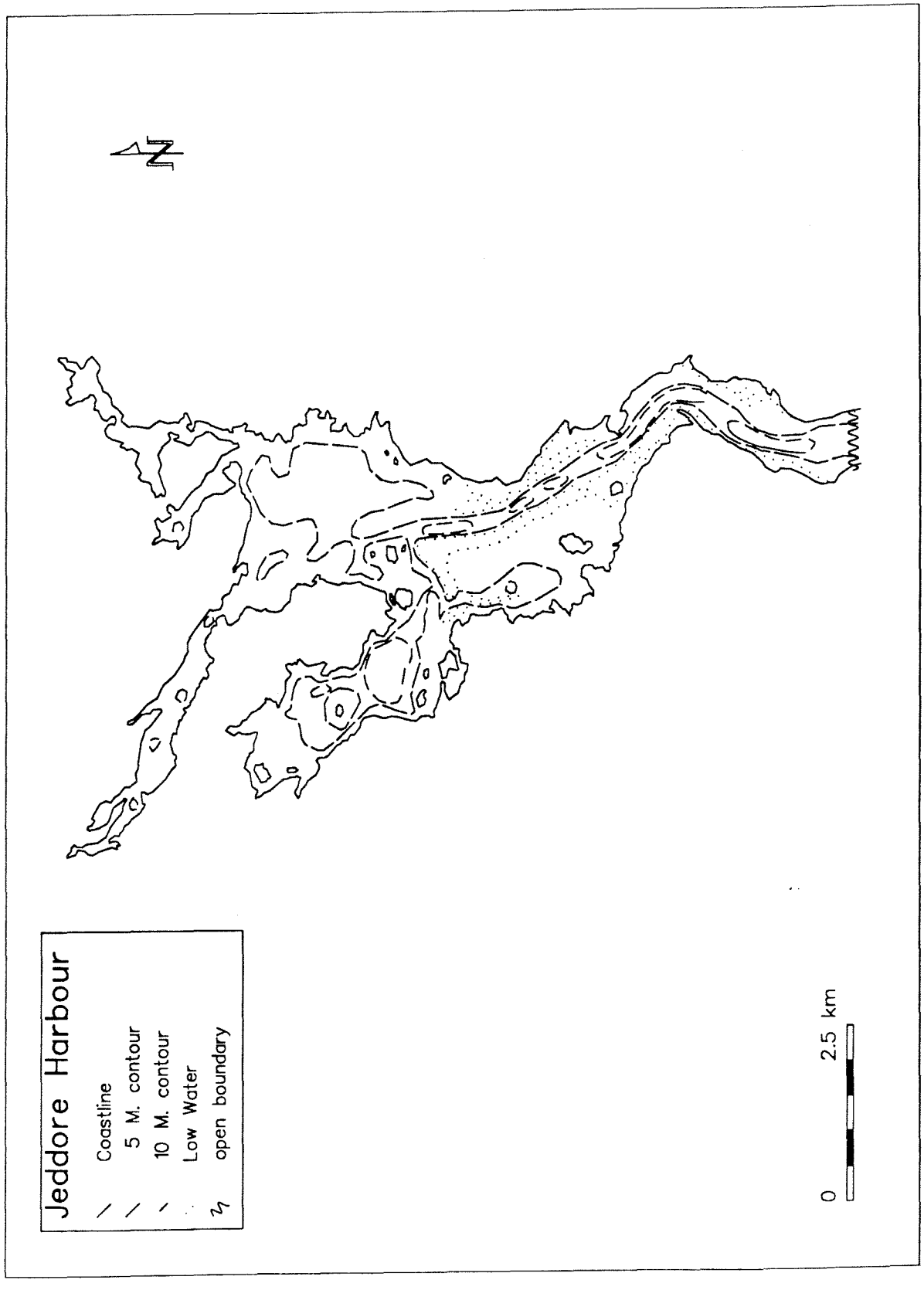
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	5.4 $10^6 m^3$	0.02 m/s	0.03 m/s

Flushing time 42.4 hr
Tidal/Freshwater volume ratio 286.41

Watershed Area 20.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.0 (48%)	May	1.1 (65%)	Sept	0.3 (63%)
Feb	0.8 (56%)	June	0.5 (66%)	Oct	0.7 (59%)
Mar	1.1 (42%)	July	0.4 (73%)	Nov	1.1 (56%)
Apr	1.6 (31%)	Aug	0.4 (64%)	Dec	1.2 (36%)


Jeddore Harbour
Coastline
5 M. contour
10 M. contour
Low Water
open boundary
0
2.5 km
N

JEDDORE HARBOUR Zone 4Wk Chart 4236
Bay ID..AL

Area (CD)	19.3 km^2	Area (HW)	21.1 km^2
Perimeter	72.7 km	Volume (CD)	83.0 $10^6 m^3$
Axis Length	11.5 km	Maximum Depth	18.3 m
Section Width	0.7 km	Section Area	4261.9 m^2

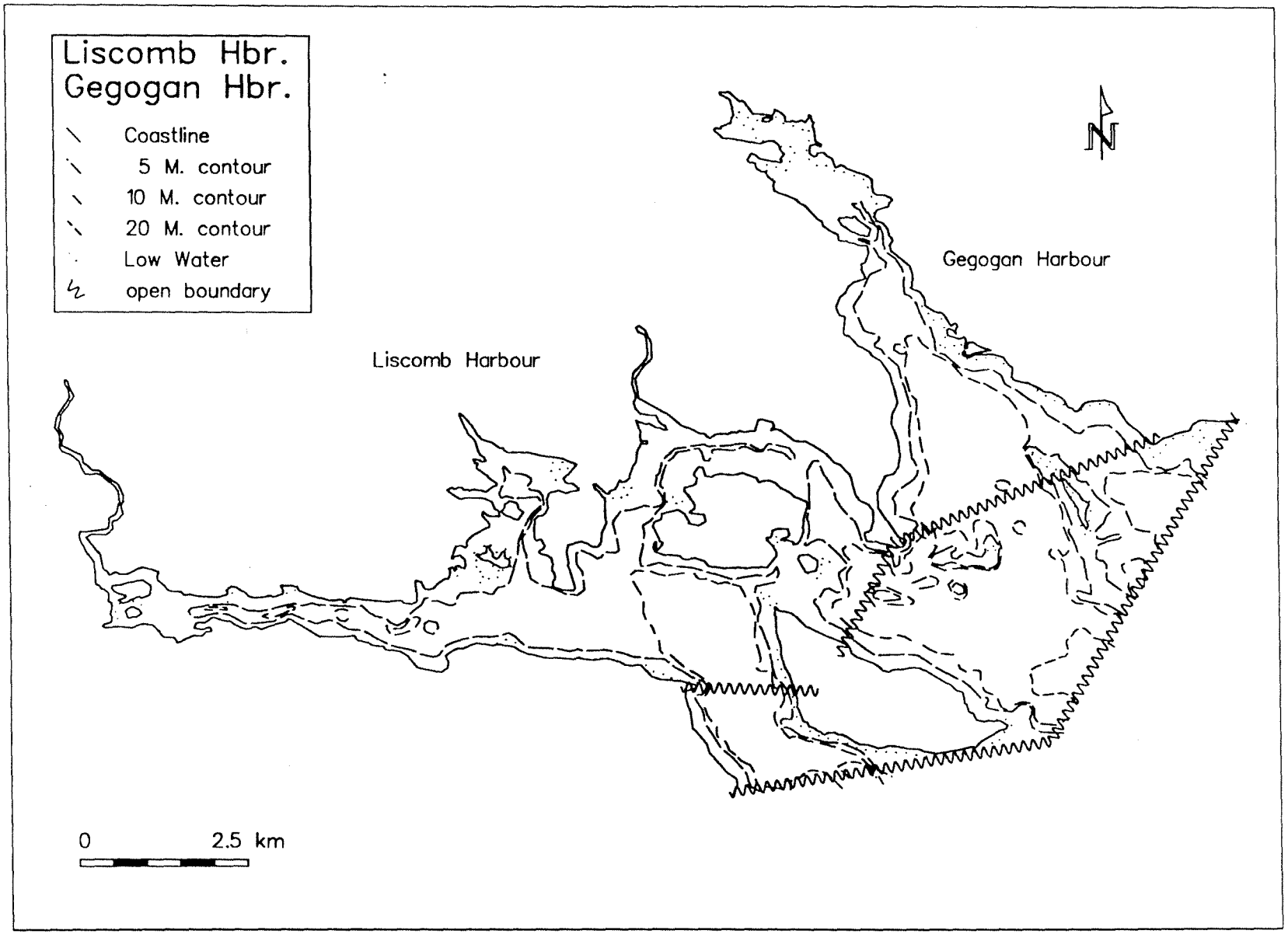
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	1.80 m	28.3 $10^6 m^3$	0.30 m/s	0.47 m/s

Flushing time 42.2 hr
Tidal/Freshwater volume ratio 177.55

Watershed Area 175.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	8.4 (48%)	May	8.9 (65%)	Sept	2.9 (63%)
Feb	6.4 (56%)	June	4.4 (66%)	Oct	5.6 (59%)
Mar	9.6 (42%)	July	3.2 (73%)	Nov	9.4 (56%)
Apr	13.2 (31%)	Aug	3.3 (64%)	Dec	10.4 (36%)


Liscomb Hbr.
Gegogan Hbr.
Coastline
5 M. contour
10 M. contour
20 M. contour
Low Water
open boundary
Gegogan Harbour
Liscomb Harbour
N
0
2.5 km

LISCOMB HARBOUR/GEGOGAN HARBOUR Zone 4Wk Chart 4234
Bay ID..AQ

Area (CD)	42.6 km^2	Area (HW)	44.6 km^2
Perimeter	72.9 km	Volume (CD)	356.0 $10^6 m^3$
Axis Length	16.7 km	Maximum Depth	17.9 m
Section Width	9.5 km	Section Area	92461.3 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	61.1 $10^6 m^3$	0.03 m/s	0.05 m/s

Flushing time 78.4 hr
Tidal/Freshwater volume ratio 109.30

Watershed Area 634.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	29.5 (50%)	May	31.0 (62%)	Sept	10.2 (75%)
Feb	22.5 (47%)	June	15.6 (50%)	Oct	19.5 (52%)
Mar	33.5 (39%)	July	11.2 (85%)	Nov	32.9 (46%)
Apr	46.1 (26%)	Aug	11.6 (68%)	Dec	36.5 (43%)

LISCOMB HARBOUR Zone 4Wk Chart 4234
Bay ID..AQa

Area (CD)	19.2 km^2	Area (HW)	19.8 km^2
Perimeter	52.6 km	Volume (CD)	106.0 $10^6 m^3$
Axis Length	13.0 km	Maximum Depth	14.3 m
Section Width	2.9 km	Section Area	24108.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	27.3 $10^6 m^3$	0.05 m/s	0.08 m/s

Flushing time 54.1 hr
Tidal/Freshwater volume ratio 53.55

Watershed Area 558.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	26.9 (52%)	May	28.3 (59%)	Sept	9.3 (63%)
Feb	20.5 (37%)	June	14.2 (34%)	Oct	17.8 (59%)
Mar	30.6 (36%)	July	10.2 (96%)	Nov	30.0 (56%)
Apr	42.1 (20%)	Aug	10.6 (72%)	Dec	33.3 (36%)

GEGOGAN HARBOUR Zone 4Wk Chart 4234
Bay ID..AQb

Area (CD)	6.9 km^2	Area (HW)	7.7 km^2
Perimeter	17.4 km	Volume (CD)	43.0 $10^6 m^3$
Axis Length	7.1 km	Maximum Depth	13.1 m
Section Width	3.1 km	Section Area	26521.3 m^2

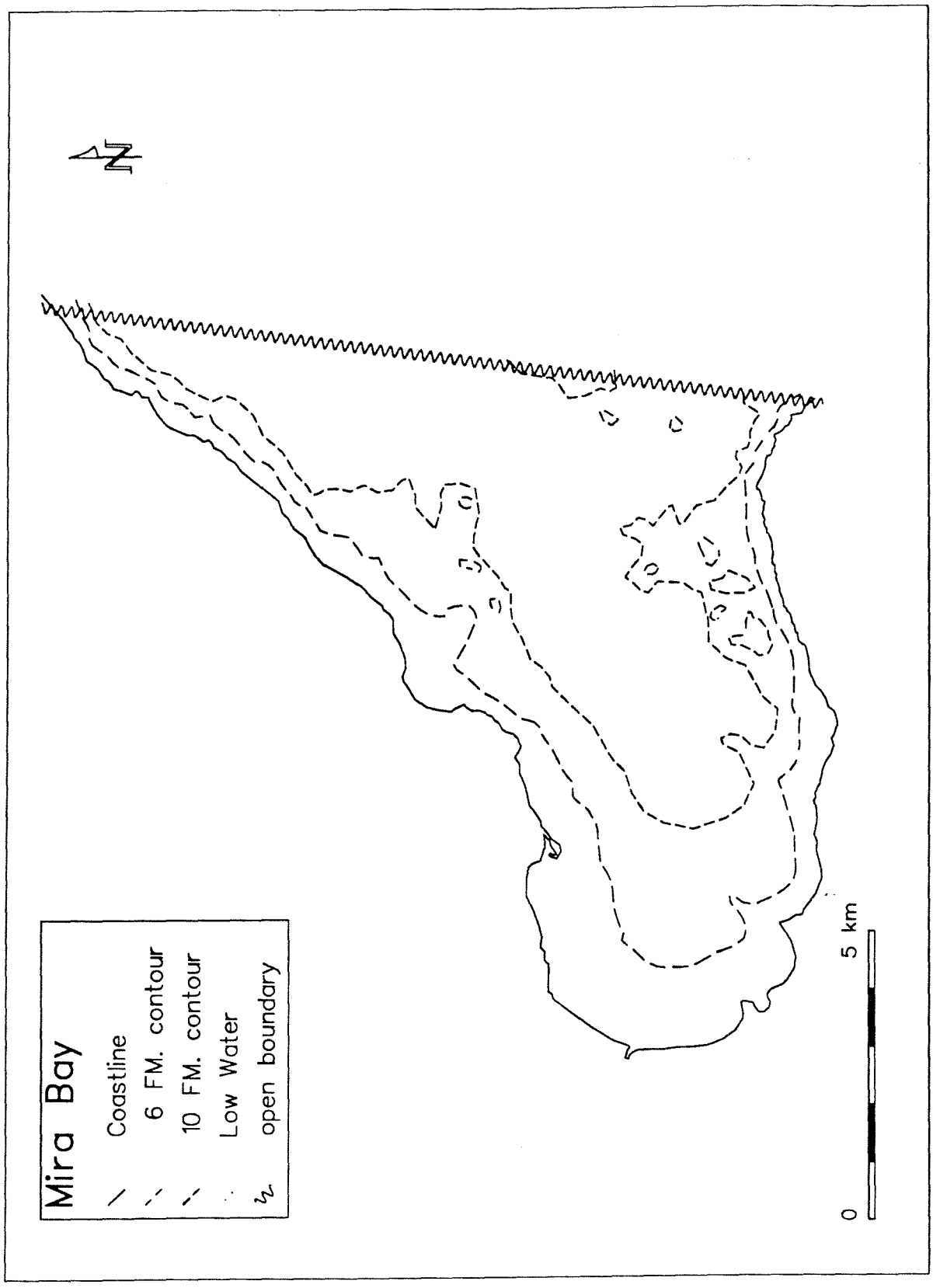
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	10.2 $10^6 m^3$	0.02 m/s	0.03 m/s

Flushing time 57.9 hr
Tidal/Freshwater volume ratio 210.06

Watershed Area 53.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	2.6 (48%)	May	2.7 (65%)	Sept	0.9 (63%)
Feb	2.0 (56%)	June	1.4 (66%)	Oct	1.7 (59%)
Mar	2.9 (42%)	July	1.0 (73%)	Nov	2.9 (56%)
Apr	4.0 (31%)	Aug	1.0 (64%)	Dec	3.2 (36%)


Mira Bay
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
N
0
5 km

MIRA BAY Zone 4Vn · Chart 4375
Bay ID..BI

Area (CD)	78.6 km^2	Area (HW)	78.7 km^2
Perimeter	34.7 km	Volume (CD)	1115.0 $10^6 m^3$
Axis Length	12.8 km	Maximum Depth	27.4 m
Section Width	13.1 km	Section Area	225139.0 m^2

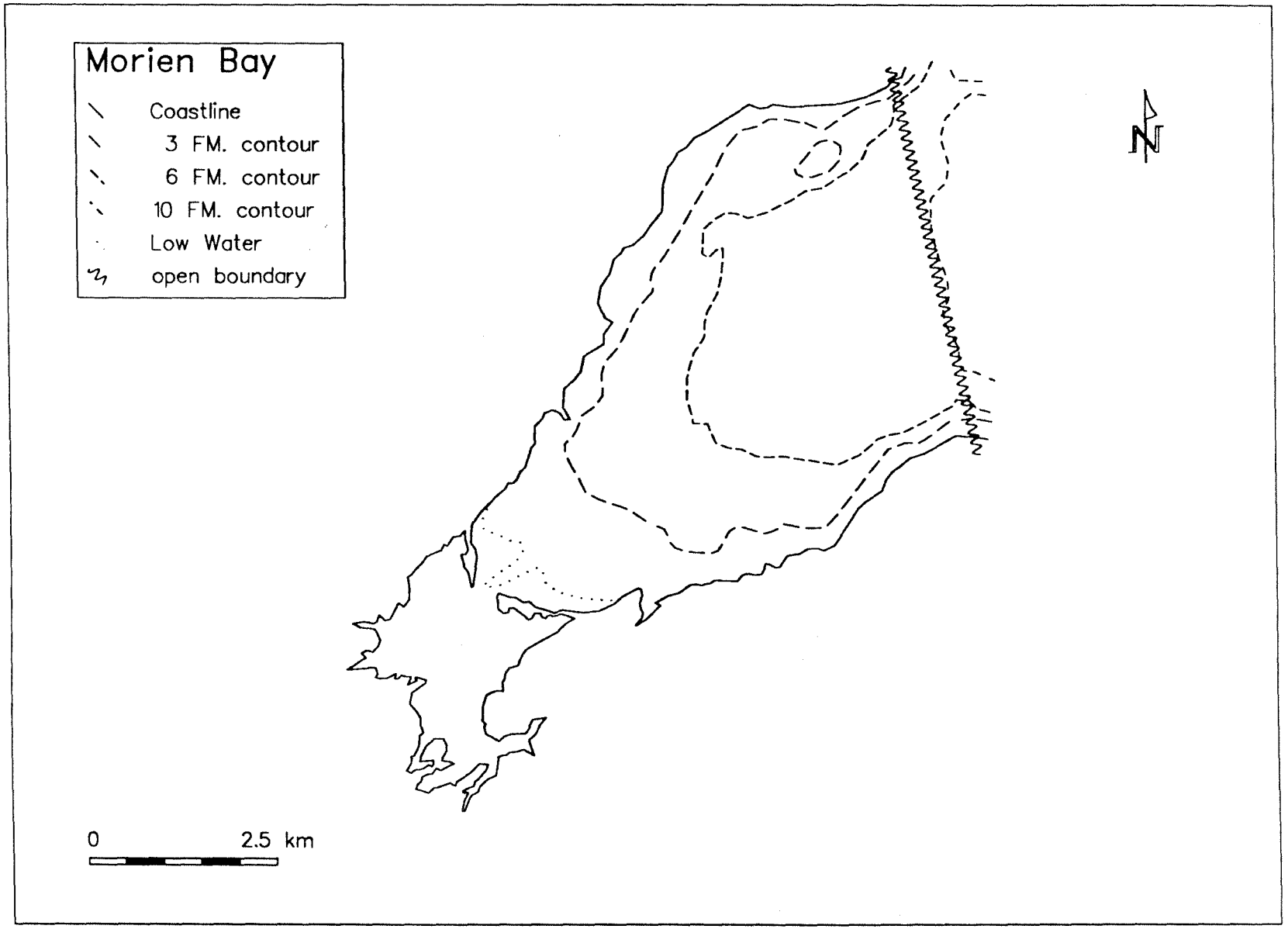
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.00 m	1.50 m	78.6 $10^6 m^3$	0.02 m/s	0.02 m/s

Flushing time 182.1 hr
Tidal/Freshwater volume ratio 59.18

Watershed Area 1415.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	63.7 (54%)	May	67.8 (68%)	Sept	31.1 (57%)
Feb	50.0 (66%)	June	36.9 (67%)	Oct	56.3 (50%)
Mar	70.4 (44%)	July	24.7 (62%)	Nov	88.9 (44%)
Apr	109.4 (45%)	Aug	25.5 (85%)	Dec	88.9 (37%)


Morien Bay
Coastline
3 FM. contour
6 FM. contour
10 FM. contour
Low Water
open boundary
N
0
2.5 km

MORIEN BAY Zone 4Vn Chart 4375
Bay ID..BO

Area (CD)	26.7 km^2	Area (HW)	31.4 km^2
Perimeter	19.5 km	Volume (CD)	210.0 $10^6 m^3$
Axis Length	9.3 km	Maximum Depth	18.2 m
Section Width	4.7 km	Section Area	47205.3 m^2

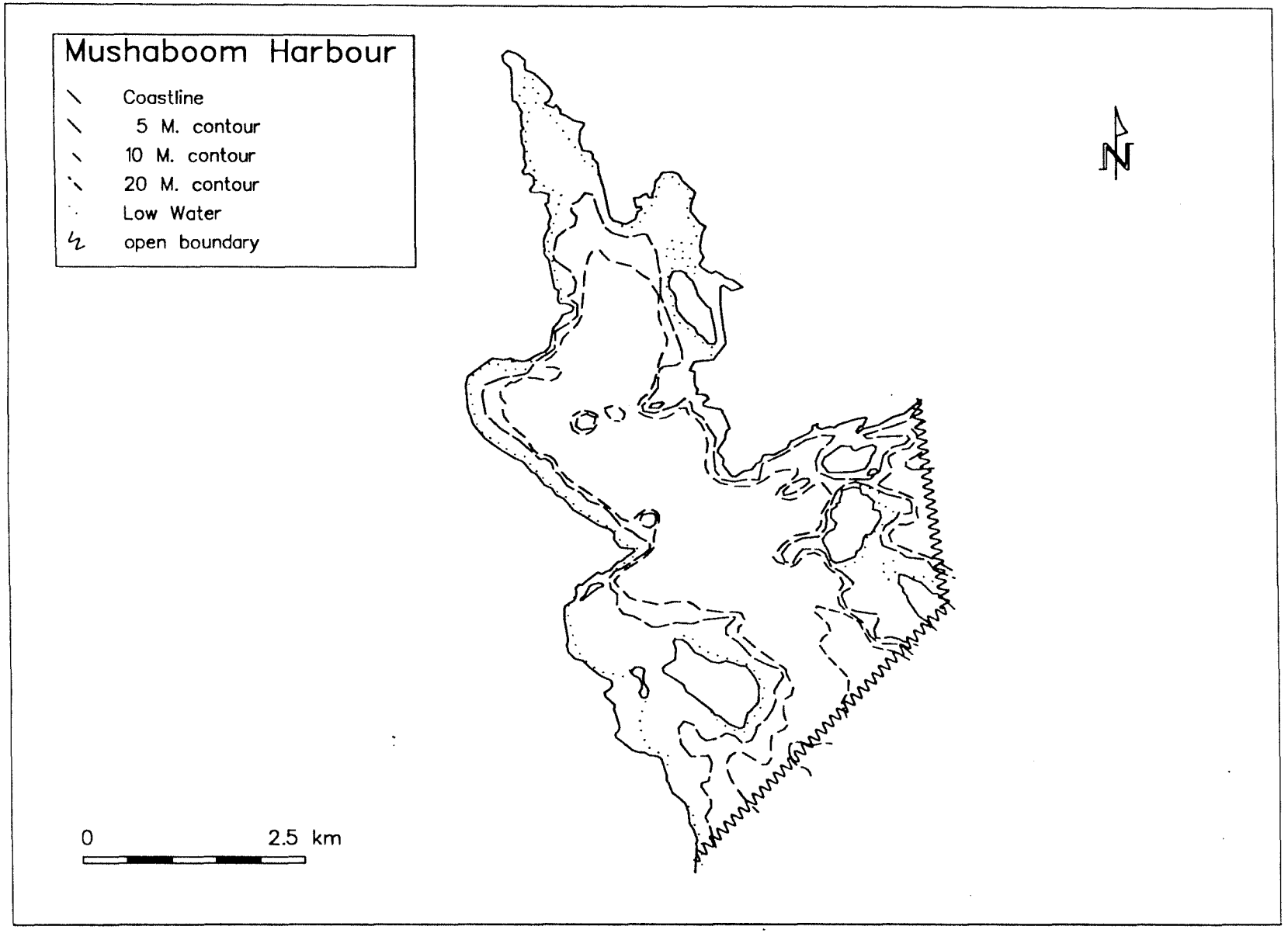
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.00 m	1.50 m	29.0 $10^6 m^3$	0.03 m/s	0.04 m/s

Flushing time 95.7 hr
Tidal/Freshwater volume ratio 360.49

Watershed Area 92.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	4.8 (45%)	May	3.9 (50%)	Sept	1.8 (93%)
Feb	2.7 (73%)	June	1.8 (63%)	Oct	2.7 (57%)
Mar	4.6 (53%)	July	1.3 (87%)	Nov	4.0 (45%)
Apr	9.6 (53%)	Aug	1.3 (87%)	Dec	4.8 (32%)


Mushaboom Harbour
Coastline
5 M. contour
10 M. contour
20 M. contour
Low Water
open boundary
N
0
2.5 km

MUSHABOOM HARBOUR Zone 4Wk Chart 4236
Bay ID..AM

Area (CD)	17.2 km^2	Area (HW)	19.0 km^2
Perimeter	24.5 km	Volume (CD)	108.0 $10^6 m^3$
Axis Length	8.5 km	Maximum Depth	14.9 m
Section Width	5.7 km	Section Area	53513.3 m^2

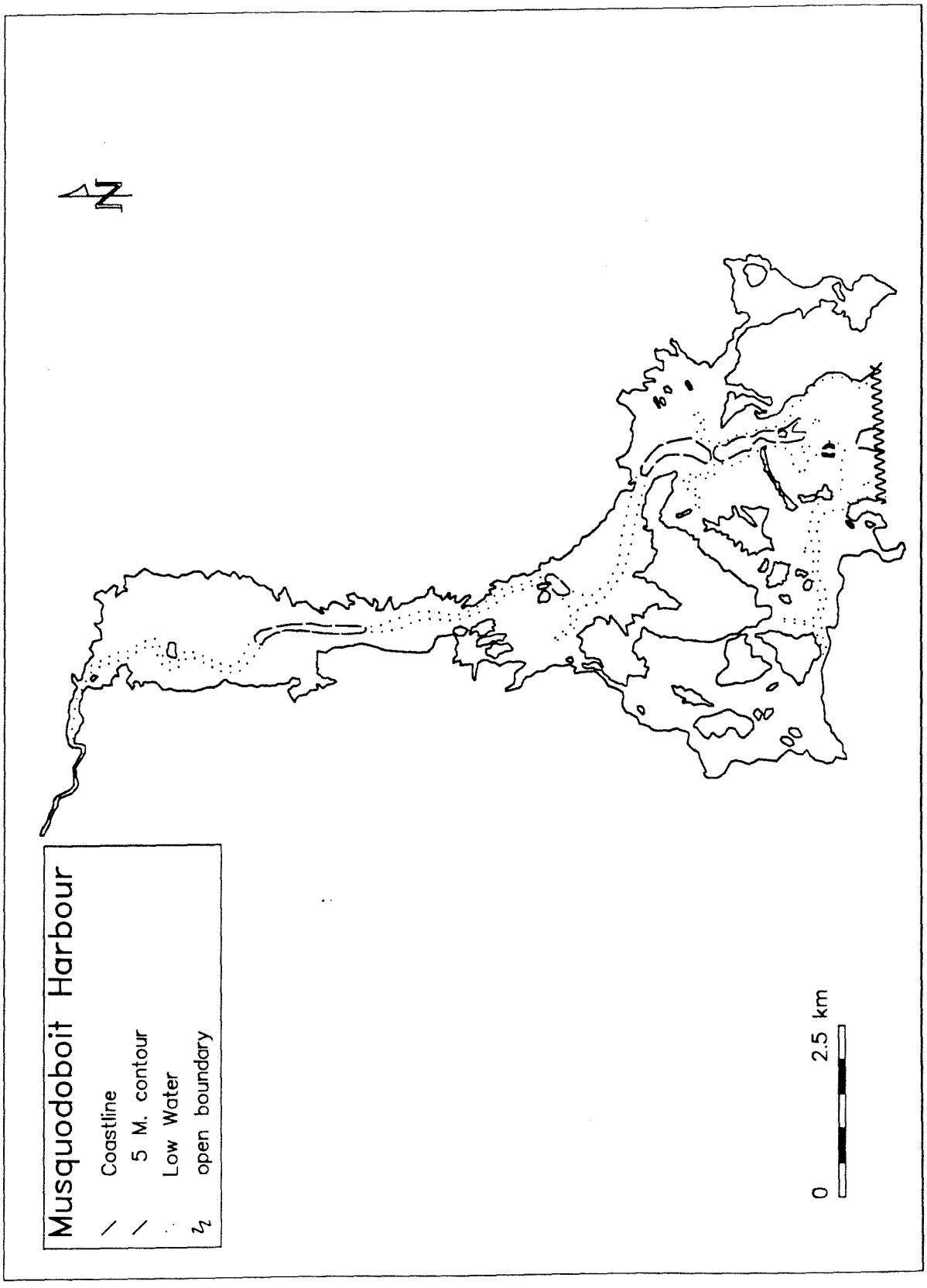
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.00 m	27.2 $10^6 m^3$	0.02 m/s	0.04 m/s

Flushing time 55.2 hr
Tidal/Freshwater volume ratio 522.18

Watershed Area 57.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	2.8 (48%)	May	2.9 (65%)	Sept	1.0 (63%)
Feb	2.1 (56%)	June	1.4 (66%)	Oct	1.8 (59%)
Mar	3.1 (42%)	July	1.0 (73%)	Nov	3.1 (56%)
Apr	4.3 (31%)	Aug	1.1 (64%)	Dec	3.4 (36%)


Musquodoboit Harbour
Coastline
5 M. contour
Low Water
open boundary
N
0
2.5 km

MUSQUODOBOIT HARBOUR Zone 4Wk Chart 4236
Bay ID..AK

Area (CD)	4.2 km^2	Area (HW)	25.0 km^2
Perimeter	46.7 km	Volume (CD)	12.0 $10^6 m^3$
Axis Length	13.9 km	Maximum Depth	7.6 m
Section Width	1.7 km	Section Area	4380.3 m^2

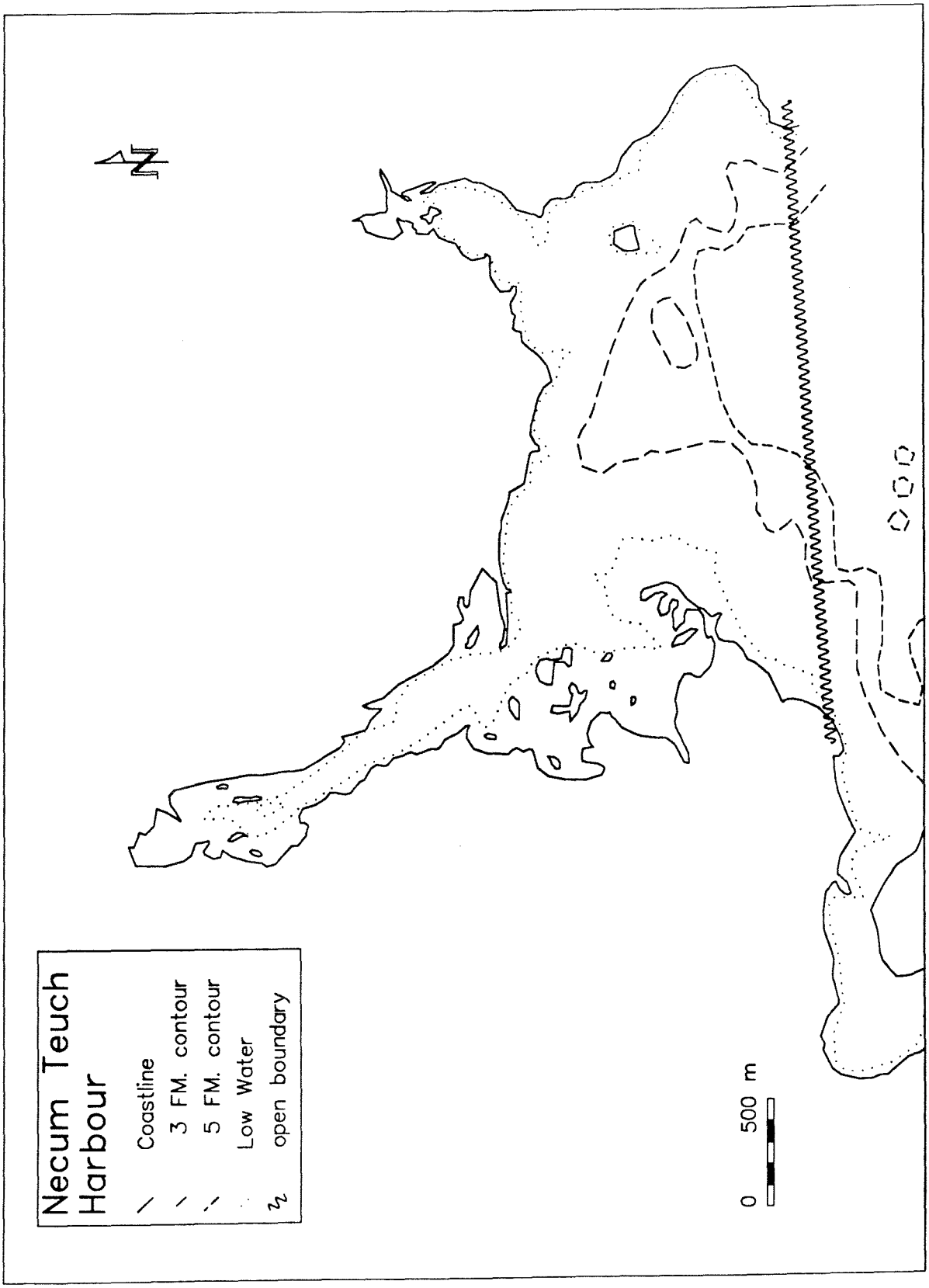
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	1.80 m	20.5 $10^6 m^3$	0.21 m/s	0.33 m/s

Flushing time 12.4 hr
Tidal/Freshwater volume ratio 39.75

Watershed Area 765.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	30.5 (43%)	May	27.0 (45%)	Sept	9.4 (67%)
Feb	22.8 (66%)	June	13.9 (75%)	Oct	13.3 (79%)
Mar	33.3 (36%)	July	8.3 (64%)	Nov	30.8 (54%)
Apr	46.0 (28%)	Aug	8.9 (90%)	Dec	33.1 (37%)


Necum Teuch Harbour
Coastline
3 FM. contour
5 FM. contour
Low Water
open boundary
0
500 m
N

NECUM TEUCH HARBOUR Zone 4Wk Chart 4355
Bay ID..CH

Area (CD)	3.0 km^2	Area (HW)	4.1 km^2
Perimeter	11.5 km	Volume (CD)	12.0 $10^6 m^3$
Axis Length	3.8 km	Maximum Depth	14.6 m
Section Width	2.4 km	Section Area	16603.7 m^2

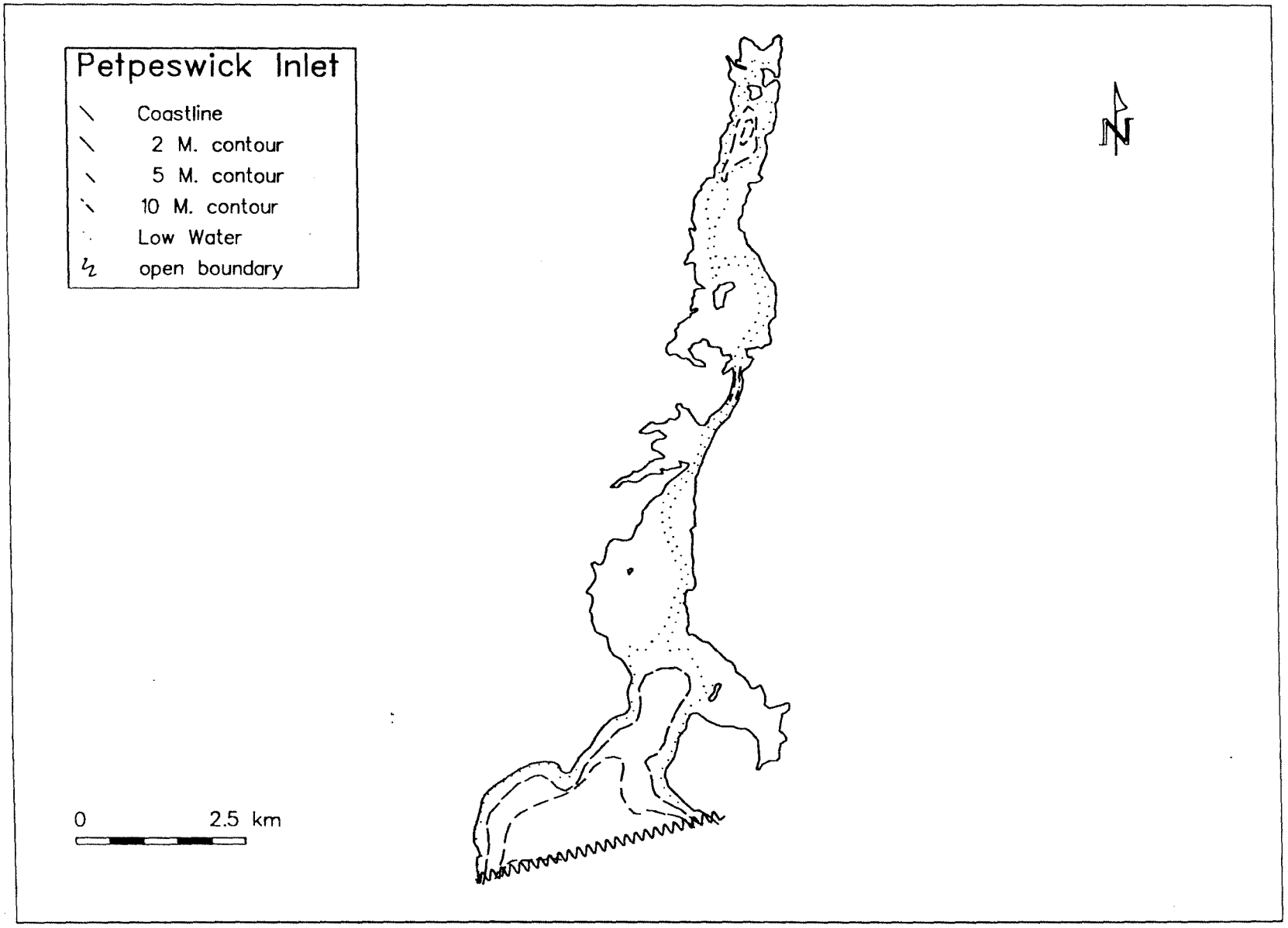
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	2.00 m	4.7 $10^6 m^3$	0.01 m/s	0.02 m/s

Flushing time 37.5 hr
Tidal/Freshwater volume ratio 29.07

Watershed Area 177.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	8.5 (48%)	May	9.0 (65%)	Sept	2.9 (63%)
Feb	6.5 (56%)	June	4.4 (66%)	Oct	5.7 (59%)
Mar	9.7 (42%)	July	3.2 (73%)	Nov	9.5 (56%)
Apr	13.4 (31%)	Aug	3.4 (64%)	Dec	10.6 (36%)


Petpeswick Inlet
Coastline
2 M. contour
5 M. contour
10 M. contour
Low Water
open boundary
0
2.5 km
N

PETPESWICK INLET Zone 4Wk Chart 4236
Bay ID..AC

Area (CD)	6.7 km^2	Area (HW)	14.0 km^2
Perimeter	30.7 km	Volume (CD)	30.0 $10^6 m^3$
Axis Length	12.9 km	Maximum Depth	11.0 m
Section Width	3.4 km	Section Area	25650.9 m^2

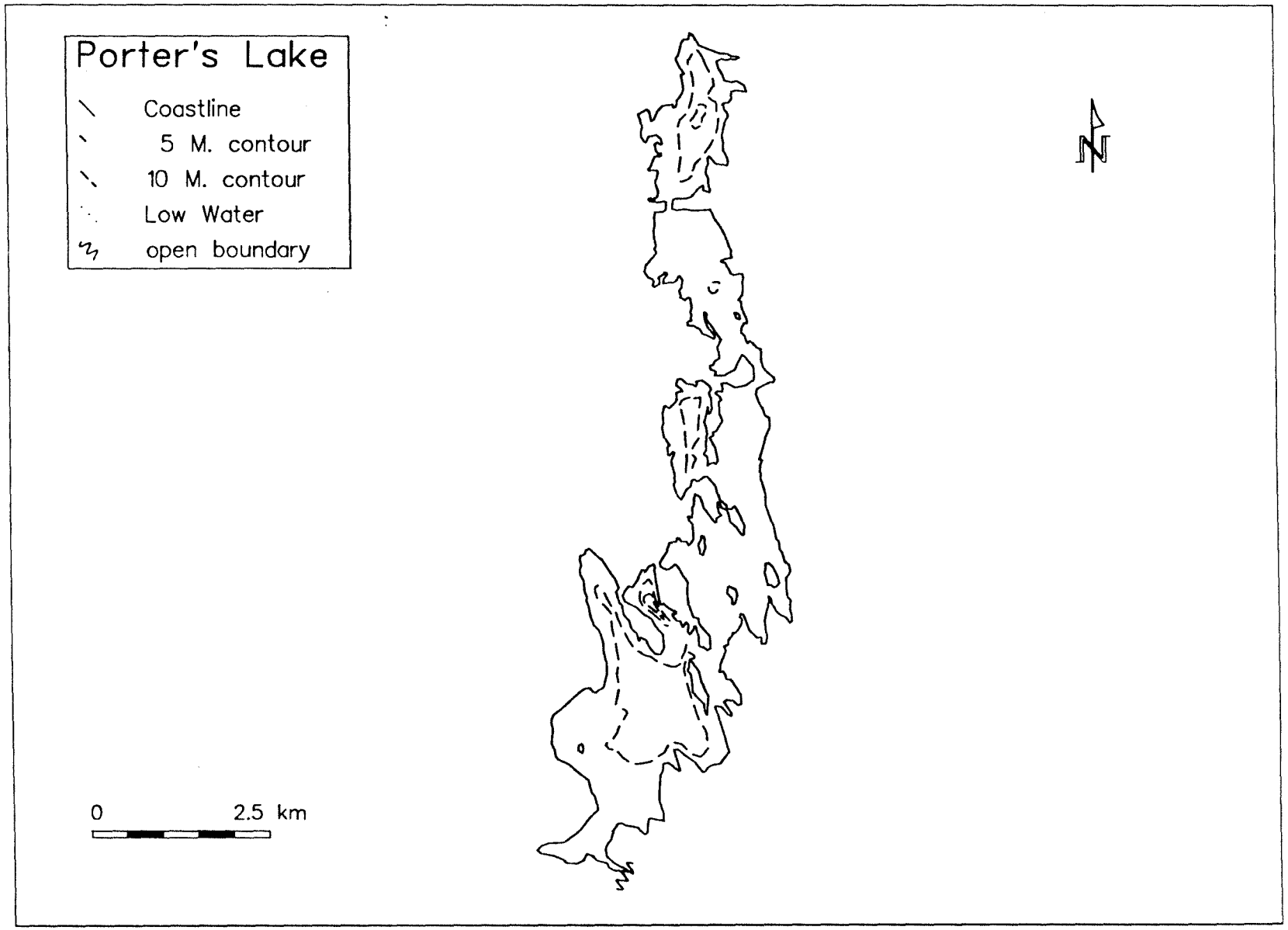
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	1.80 m	14.5 $10^6 m^3$	0.03 m/s	0.04 m/s

Flushing time 31.5 hr
Tidal/Freshwater volume ratio 186.32

Watershed Area 85.2 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	4.1 (48%)	May	4.3 (65%)	Sept	1.4 (63%)
Feb	3.1 (56%)	June	2.2 (66%)	Oct	2.7 (59%)
Mar	4.7 (42%)	July	1.6 (73%)	Nov	4.6 (56%)
Apr	6.4 (31%)	Aug	1.6 (64%)	Dec	5.1 (36%)


Porter's Lake
Coastline
5 M. contour
10 M. contour
Low Water
open boundary
0
2.5 km
N

PORTER'S LAKE Zone 4Wk Chart 4236
Bay ID..AA

Area (CD)	13.2 km^2	Area (HW)	13.3 km^2
Perimeter	57.5 km	Volume (CD)	40.0 $10^6 m^3$
Axis Length	12.9 km	Maximum Depth	11.9 m
Section Width	0.1 km	Section Area	86.8 m^2

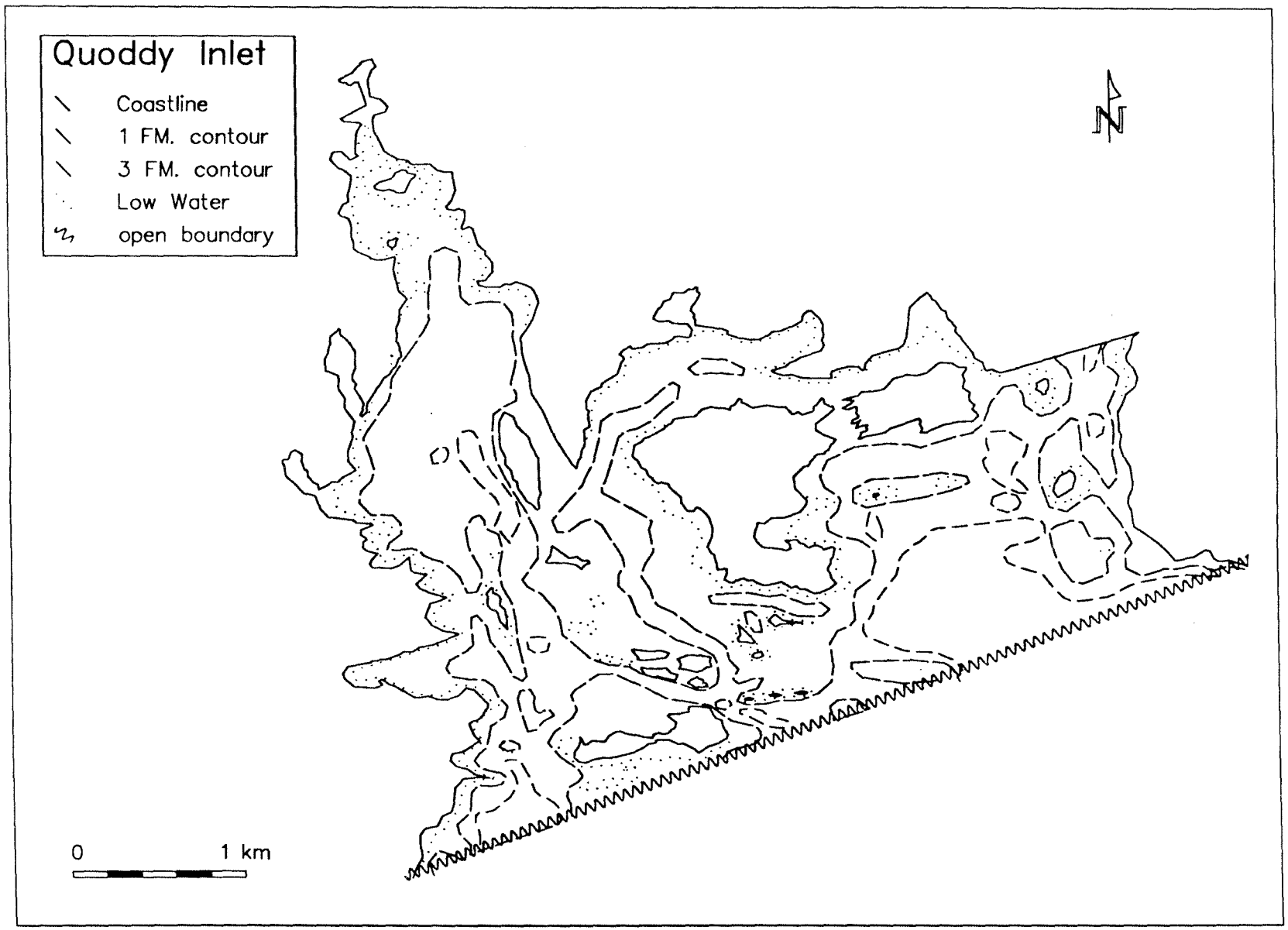
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.30 m	0.60 m	3.9 $10^6 m^3$	2.05 m/s	3.23 m/s

Flushing time 130.7 hr
Tidal/Freshwater volume ratio 22.69

Watershed Area 192.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	9.3 (48%)	May	9.8 (65%)	Sept	3.2 (63%)
Feb	7.1 (56%)	June	4.9 (66%)	Oct	6.1 (59%)
Mar	10.5 (42%)	July	3.5 (73%)	Nov	10.3 (56%)
Apr	14.5 (31%)	Aug	3.7 (64%)	Dec	11.4 (36%)


Quoddy Inlet
Coastline
1 FM. contour
3 FM. contour
Low Water
open boundary
N
0
1 km

QUODDY INLET Zone 4Wk Chart 4363
Bay ID..CA

Area (CD)	8.1 km^2	Area (HW)	9.4 km^2
Perimeter	17.7 km	Volume (CD)	12.0 $10^6 m^3$
Axis Length	4.6 km	Maximum Depth	11.0 m
Section Width	5.1 km	Section Area	14221.3 m^2

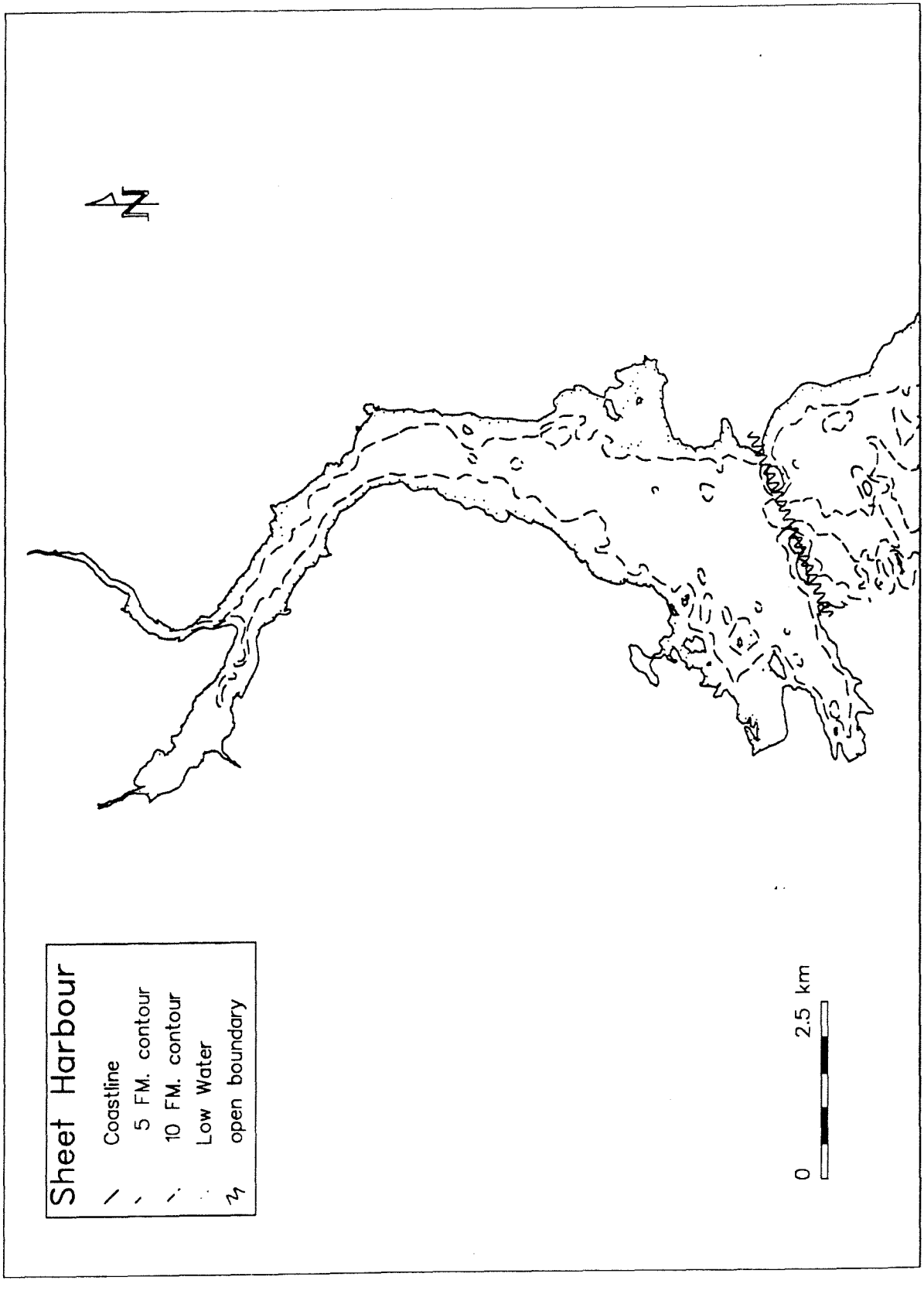
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.20 m	12.3 $10^6 m^3$	0.04 m/s	0.06 m/s

Flushing time 17.5 hr
Tidal/Freshwater volume ratio 270.75

Watershed Area 50.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	2.4 (48%)	May	2.5 (65%)	Sept	0.8 (63%)
Feb	1.8 (56%)	June	1.3 (66%)	Oct	1.6 (59%)
Mar	2.7 (42%)	July	0.9 (73%)	Nov	2.7 (56%)
Apr	3.8 (31%)	Aug	1.0 (64%)	Dec	3.0 (36%)


Sheet Harbour
Coastline
5 FM. contour
10 FM. contour
Low Water
open boundary
0
2.5 km
N

SHEET HARBOUR Zone 4Wk Chart 4361
Bay ID..CG

Area (CD)	17.6 km^2	Area (HW)	18.8 km^2
Perimeter	48.4 km	Volume (CD)	106.0 $10^6 m^3$
Axis Length	12.0 km	Maximum Depth	22.9 m
Section Width	1.2 km	Section Area	10471.3 m^2

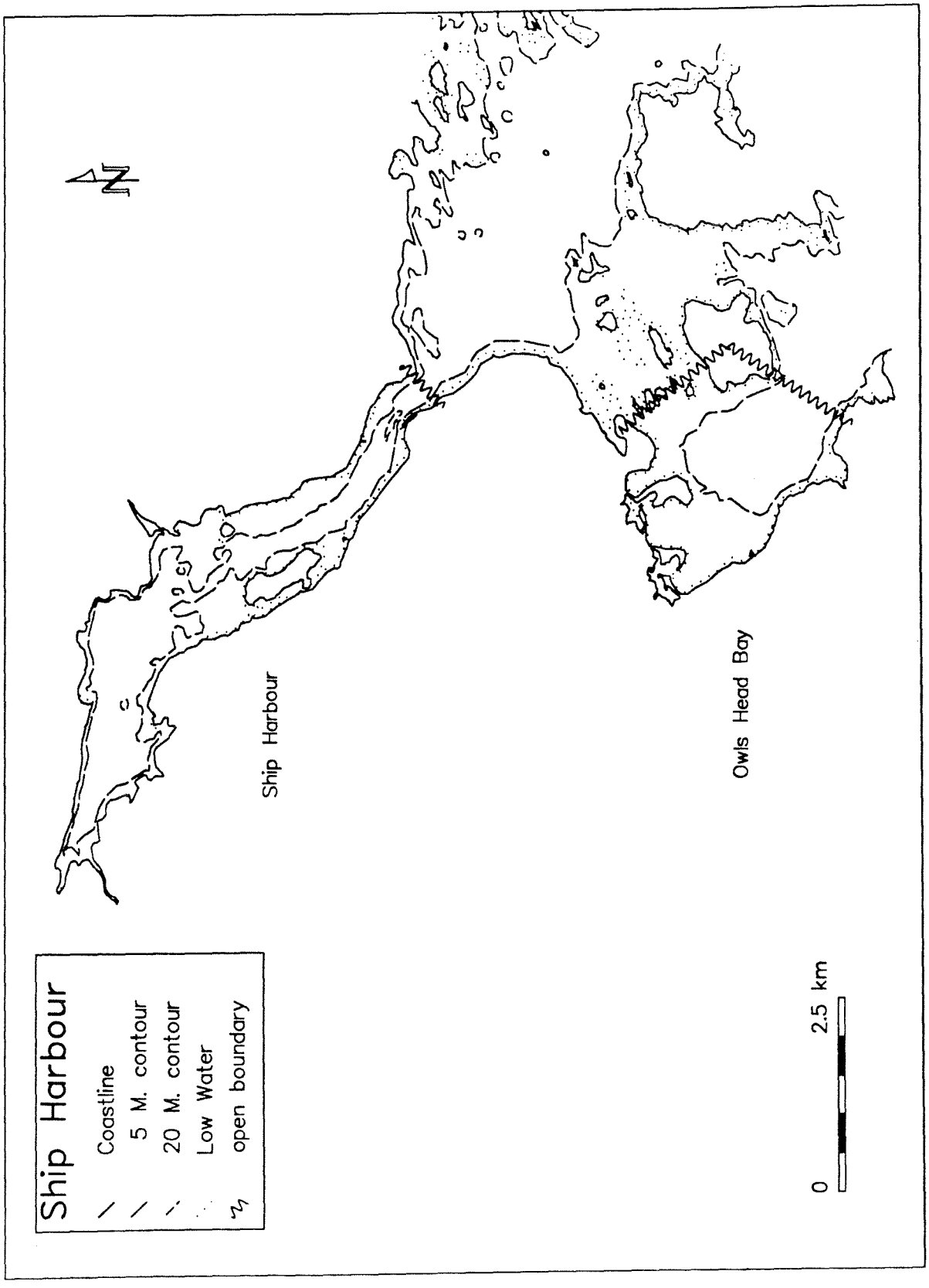
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.00 m	27.3 $10^6 m^3$	0.12 m/s	0.18 m/s

Flushing time 54.0 hr
Tidal/Freshwater volume ratio 35.15

Watershed Area 944.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	40.9 (50%)	May	44.6 (52%)	Sept	14.4 (72%)
Feb	31.6 (59%)	June	18.2 (47%)	Oct	25.8 (54%)
Mar	48.3 (41%)	July	16.3 (77%)	Nov	41.6 (45%)
Apr	71.3 (23%)	Aug	16.4 (65%)	Dec	48.4 (34%)


Ship Harbour
Coastline
5 M. contour
20 M. contour
Low Water
open boundary
N
Ship Harbour
Owls Head Bay
0
2.5 km

SHIP HARBOUR Zone 4Wk Chart 4236
Bay ID..ADa

Area (CD)	6.6 km^2	Area (HW)	7.1 km^2
Perimeter	25.9 km	Volume (CD)	47.0 $10^6 m^3$
Axis Length	8.3 km	Maximum Depth	25.0 m
Section Width	0.3 km	Section Area	3641.0 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	9.6 $10^6 m^3$	0.12 m/s	0.19 m/s

Flushing time 66.2 hr
Tidal/Freshwater volume ratio 23.87

Watershed Area 444.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	21.4 (48%)	May	22.5 (65%)	Sept	7.4 (63%)
Feb	16.3 (56%)	June	11.3 (66%)	Oct	14.2 (59%)
Mar	24.4 (42%)	July	8.1 (73%)	Nov	23.9 (56%)
Apr	33.4 (31%)	Aug	8.4 (64%)	Dec	26.5 (36%)

OWL'S HEAD Zone 4Wk Chart 4236
Bay ID..ADb

Area (CD)	3.9 km^2	Area (HW)	4.4 km^2
Perimeter	10.6 km	Volume (CD)	15.0 $10^6 m^3$
Axis Length	5.4 km	Maximum Depth	10.4 m
Section Width	2.4 km	Section Area	10652.6 m^2

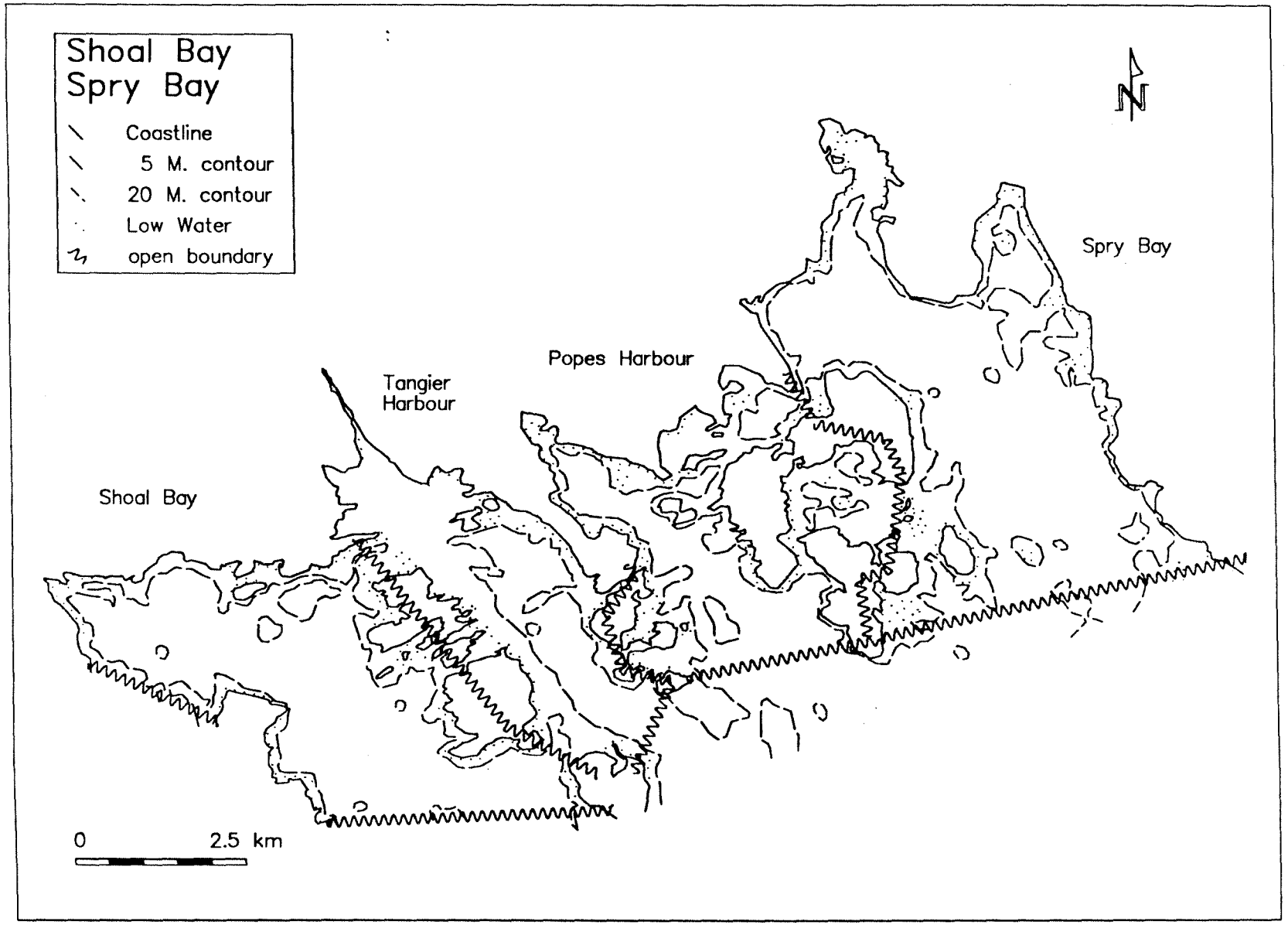
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	5.8 $10^6 m^3$	0.02 m/s	0.04 m/s

Flushing time 37.5 hr
Tidal/Freshwater volume ratio 233.01

Watershed Area 28.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.3 (48%)	May	1.4 (65%)	Sept	0.4 (63%)
Feb	1.0 (56%)	June	0.7 (66%)	Oct	0.9 (59%)
Mar	1.5 (42%)	July	0.5 (73%)	Nov	1.5 (56%)
Apr	2.1 (31%)	Aug	0.5 (64%)	Dec	1.7 (36%)


Shoal Bay
Spry Bay
Coastline
5 M. contour
20 M. contour
Low Water
open boundary
N
Spry Bay
Popes Harbour
Tangier Harbour
Shoal Bay
0
2.5 km

POPES HARBOUR Zone 4Wk Chart 4236
Bay ID..AOc

Area (CD)	10.4 km^2	Area (HW)	11.3 km^2
Perimeter	22.0 km	Volume (CD)	57.0 $10^6 m^3$
Axis Length	6.8 km	Maximum Depth	21.9 m
Section Width	3.4 km	Section Area	24357.8 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	15.2 $10^6 m^3$	0.03 m/s	0.04 m/s

Flushing time 52.4 hr
Tidal/Freshwater volume ratio 716.51

Watershed Area 23.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.1 (48%)	May	1.2 (65%)	Sept	0.4 (63%)
Feb	0.9 (56%)	June	0.6 (66%)	Oct	0.7 (59%)
Mar	1.3 (42%)	July	0.4 (73%)	Nov	1.2 (56%)
Apr	1.8 (31%)	Aug	0.4 (64%)	Dec	1.4 (36%)

SHOAL BAY Zone 4Wk Chart 4236
Bay ID..AOd

Area (CD)	14.5 km^2	Area (HW)	15.4 km^2
Perimeter	14.8 km	Volume (CD)	99.0 $10^6 m^3$
Axis Length	6.9 km	Maximum Depth	18.3 m
Section Width	6.9 km	Section Area	40926.3 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.00 m	22.4 $10^6 m^3$	0.02 m/s	0.04 m/s

Flushing time 60.7 hr
Tidal/Freshwater volume ratio 1897.24

Watershed Area 13.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	0.6 (48%)	May	0.7 (65%)	Sept	0.2 (63%)
Feb	0.5 (56%)	June	0.3 (66%)	Oct	0.4 (59%)
Mar	0.7 (42%)	July	0.2 (73%)	Nov	0.7 (56%)
Apr	1.0 (31%)	Aug	0.2 (64%)	Dec	0.8 (36%)

SPRY BAY Zone 4Wk Chart 4236
Bay ID..AOa

Area (CD)	20.4 km^2	Area (HW)	21.5 km^2
Perimeter	26.1 km	Volume (CD)	198.0 $10^6 m^3$
Axis Length	8.9 km	Maximum Depth	20.0 m
Section Width	5.8 km	Section Area	47751.3 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.00 m	31.4 $10^6 m^3$	0.03 m/s	0.05 m/s

Flushing time 84.1 hr
Tidal/Freshwater volume ratio 123.35

Watershed Area 279.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	13.4 (48%)	May	14.2 (65%)	Sept	4.6 (63%)
Feb	10.3 (56%)	June	7.1 (66%)	Oct	8.9 (59%)
Mar	15.3 (42%)	July	5.1 (73%)	Nov	15.0 (56%)
Apr	21.1 (31%)	Aug	5.3 (64%)	Dec	16.7 (36%)

TANGIER HARBOUR Zone 4Wk Chart 4236
Bay ID..AOb

Area (CD)	8.0 km^2	Area (HW)	8.9 km^2
Perimeter	17.5 km	Volume (CD)	37.0 $10^6 m^3$
Axis Length	7.3 km	Maximum Depth	11.9 m
Section Width	2.1 km	Section Area	12915.4 m^2

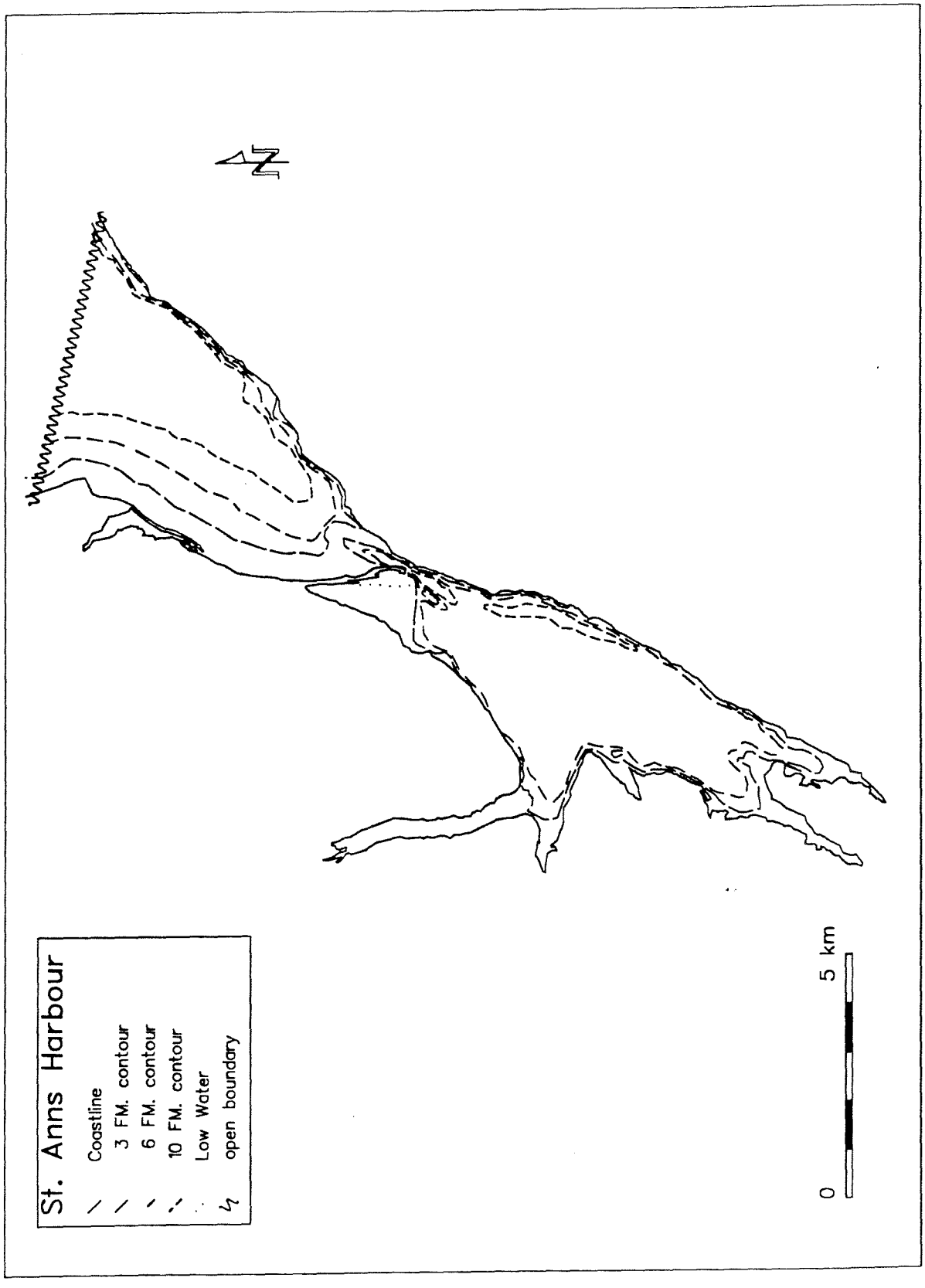
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.40 m	2.00 m	11.9 $10^6 m^3$	0.04 m/s	0.06 m/s

Flushing time 44.4 hr
Tidal/Freshwater volume ratio 186.65

Watershed Area 69.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.4 (48%)	May	3.5 (65%)	Sept	1.2 (63%)
Feb	2.6 (56%)	June	1.8 (66%)	Oct	2.2 (59%)
Mar	3.8 (42%)	July	1.3 (73%)	Nov	3.7 (56%)
Apr	5.3 (31%)	Aug	1.3 (64%)	Dec	4.2 (36%)


St. Anns Harbour
Coastline
3 FM. contour
6 FM. contour
10 FM. contour
Low Water
open boundary
0
5 km
N

ST. ANNS HARBOUR Zone 4Vn Chart 4367
Bay ID..BJ

Area (CD)	49.9 km^2	Area (HW)	50.2 km^2
Perimeter	77.2 km	Volume (CD)	590.3 $10^6 m^3$
Axis Length	19.1 km	Maximum Depth	27.4 m
Section Width	10.5 km	Section Area	86292.8 m^2

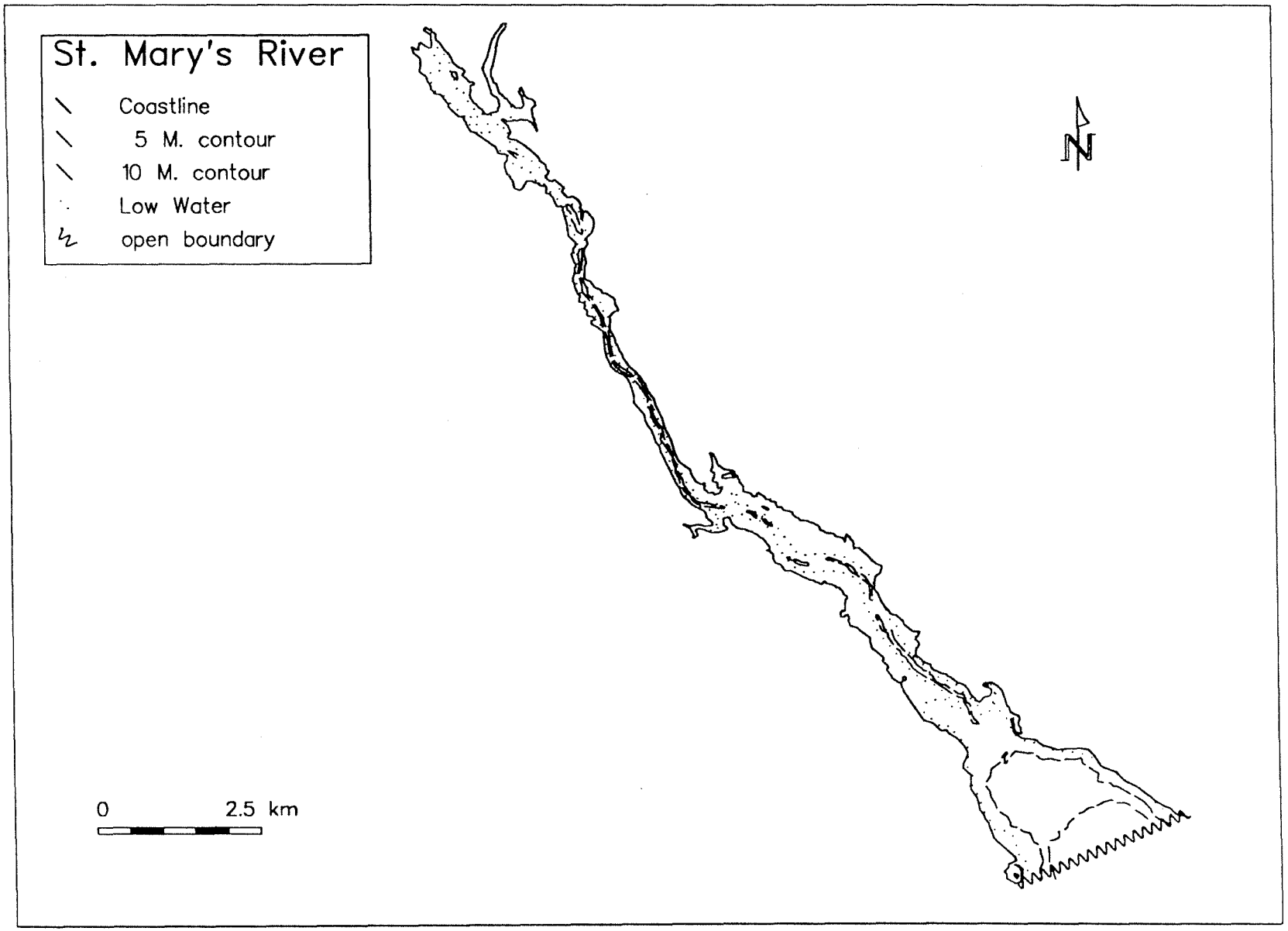
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.90 m	1.30 m	45.0 $10^6 m^3$	0.02 m/s	0.04 m/s

Flushing time 168.8 hr
Tidal/Freshwater volume ratio 49.77

Watershed Area 364.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	23.2 (45%)	May	109.1 (32%)	Sept	16.3 (76%)
Feb	23.4 (60%)	June	47.5 (62%)	Oct	35.7 (45%)
Mar	30.6 (71%)	July	15.1 (136%)	Nov	64.0 (45%)
Apr	53.4 (65%)	Aug	15.7 (76%)	Dec	52.0 (42%)


St. Mary's River
Coastline
5 M. contour
10 M. contour
Low Water
open boundary
0
2.5 km
N

ST. MARY'S RIVER Zone 4Wk Chart 4234
Bay ID..AN

Area (CD)	6.9 km^2	Area (HW)	11.0 km^2
Perimeter	42.7 km	Volume (CD)	34.0 $10^6 m^3$
Axis Length	16.7 km	Maximum Depth	15.2 m
Section Width	2.4 km	Section Area	20667.5 m^2

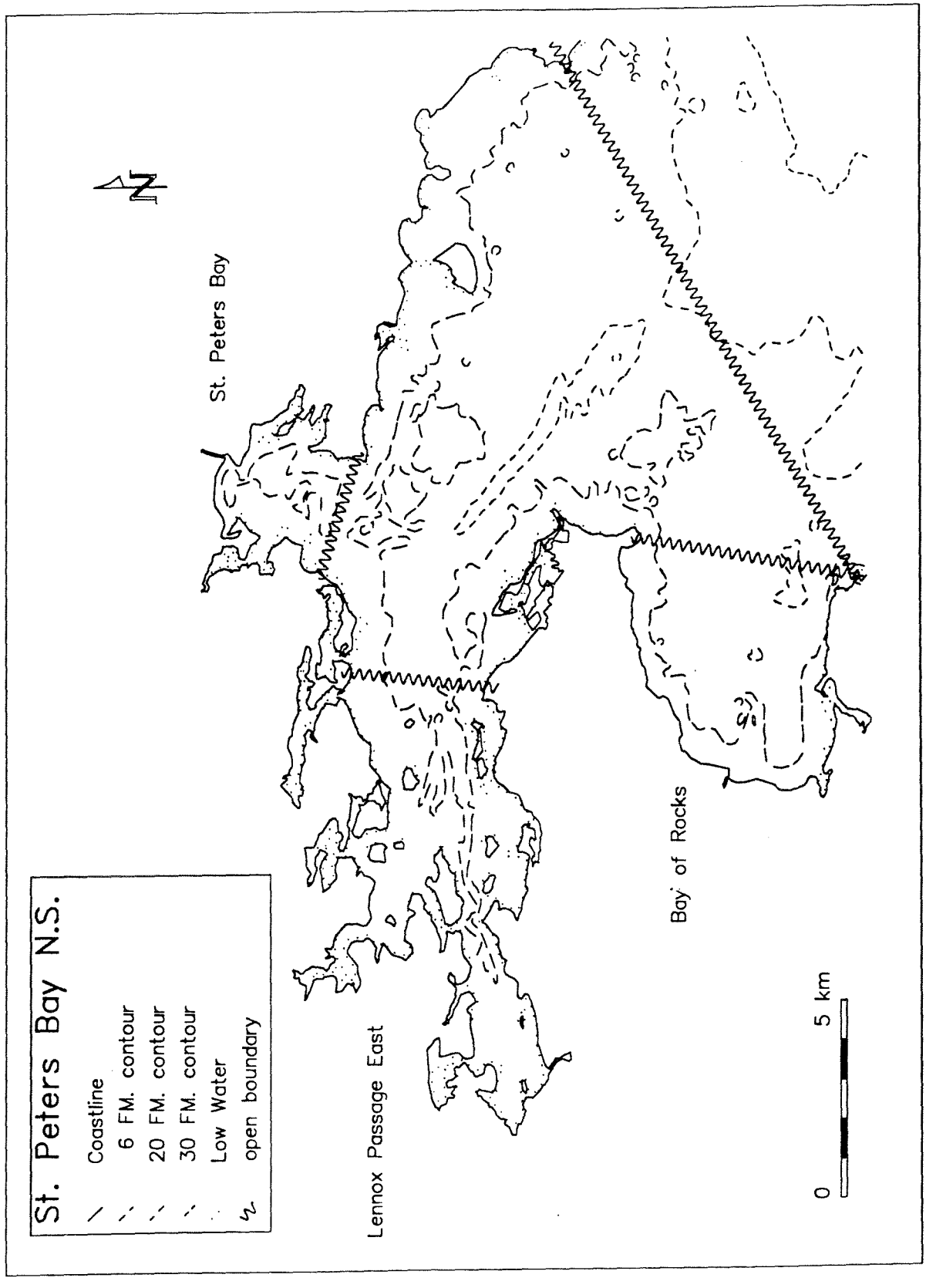
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.00 m	13.4 $10^6 m^3$	0.03 m/s	0.05 m/s

Flushing time 37.2 hr
Tidal/Freshwater volume ratio 12.53

Watershed Area 1512.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	58.7 (58%)	May	65.4 (48%)	Sept	18.6 (80%)
Feb	45.0 (66%)	June	27.0 (65%)	Oct	36.9 (68%)
Mar	60.8 (47%)	July	16.1 (89%)	Nov	64.1 (48%)
Apr	101.4 (31%)	Aug	16.0 (97%)	Dec	66.4 (39%)


St. Peters Bay N.S.
Coastline
6 FM. contour
20 FM. contour
30 FM. contour
Low Water
open boundary
N
St. Peters Bay
Lennox Passage East
Bay of Rocks
0
5 km

ST. PETERS BAY NS AND VICINITY Zone 4Wd Chart 4335
Bay ID..BS

Area (CD)	166.9 km^2	Area (HW)	178.7 km^2
Perimeter	156.2 km	Volume (CD)	2567.0 $10^6 m^3$
Axis Length	25.0 km	Maximum Depth	42.1 m
Section Width	14.9 km	Section Area	400977.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.90 m	224.6 $10^6 m^3$	0.03 m/s	0.04 m/s

Flushing time 148.0 hr
Tidal/Freshwater volume ratio 711.26

Watershed Area 392.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	19.1 (48%)	May	20.7 (53%)	Sept	6.6 (86%)
Feb	13.2 (50%)	June	8.9 (59%)	Oct	10.3 (70%)
Mar	16.0 (46%)	July	5.6 (73%)	Nov	17.9 (55%)
Apr	26.3 (29%)	Aug	5.2 (104%)	Dec	19.7 (39%)

ST. PETERS BAY NS Zone 4Wd Chart 4335
Bay ID..BSa

Area (CD)	8.3 km^2	Area (HW)	9.8 km^2
Perimeter	24.2 km	Volume (CD)	56.0 $10^6 m^3$
Axis Length	4.6 km	Maximum Depth	14.9 m
Section Width	2.7 km	Section Area	11451.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.90 m	11.8 $10^6 m^3$	0.05 m/s	0.07 m/s

Flushing time 64.8 hr
Tidal/Freshwater volume ratio 176.39

Watershed Area 82.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	4.0 (48%)	May	4.4 (53%)	Sept	1.4 (86%)
Feb	2.8 (50%)	June	1.9 (59%)	Oct	2.2 (70%)
Mar	3.4 (46%)	July	1.2 (73%)	Nov	3.8 (55%)
Apr	5.6 (29%)	Aug	1.1 (104%)	Dec	4.2 (39%)

BAY OF ROCKS Zone 4Wd Chart 4335
Bay ID..BSb

Area (CD)	23.9 km^2	Area (HW)	24.2 km^2
Perimeter	21.9 km	Volume (CD)	383.0 10^6m^3
Axis Length	5.9 km	Maximum Depth	36.6 m
Section Width	5.0 km	Section Area	114993.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.90 m	31.2 10^6m^3	0.01 m/s	0.02 m/s

Flushing time 158.1 hr
Tidal/Freshwater volume ratio 710.39

Watershed Area 54.2 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	2.7 (48%)	May	2.9 (53%)	Sept	0.9 (86%)
Feb	1.9 (50%)	June	1.2 (59%)	Oct	1.4 (70%)
Mar	2.3 (46%)	July	0.8 (73%)	Nov	2.4 (55%)
Apr	3.7 (29%)	Aug	0.7 (104%)	Dec	2.7 (39%)

LENNOX PASSAGE EAST Zone 4Wd Chart 4335
Bay ID..BSc

Area (CD)	27.1 km^2	Area (HW)	33.5 km^2
Perimeter	62.6 km	Volume (CD)	171.0 10^6m^3
Axis Length	11.7 km	Maximum Depth	21.9 m
Section Width	3.3 km	Section Area	37329.5 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.90 m	39.4 10^6m^3	0.05 m/s	0.07 m/s

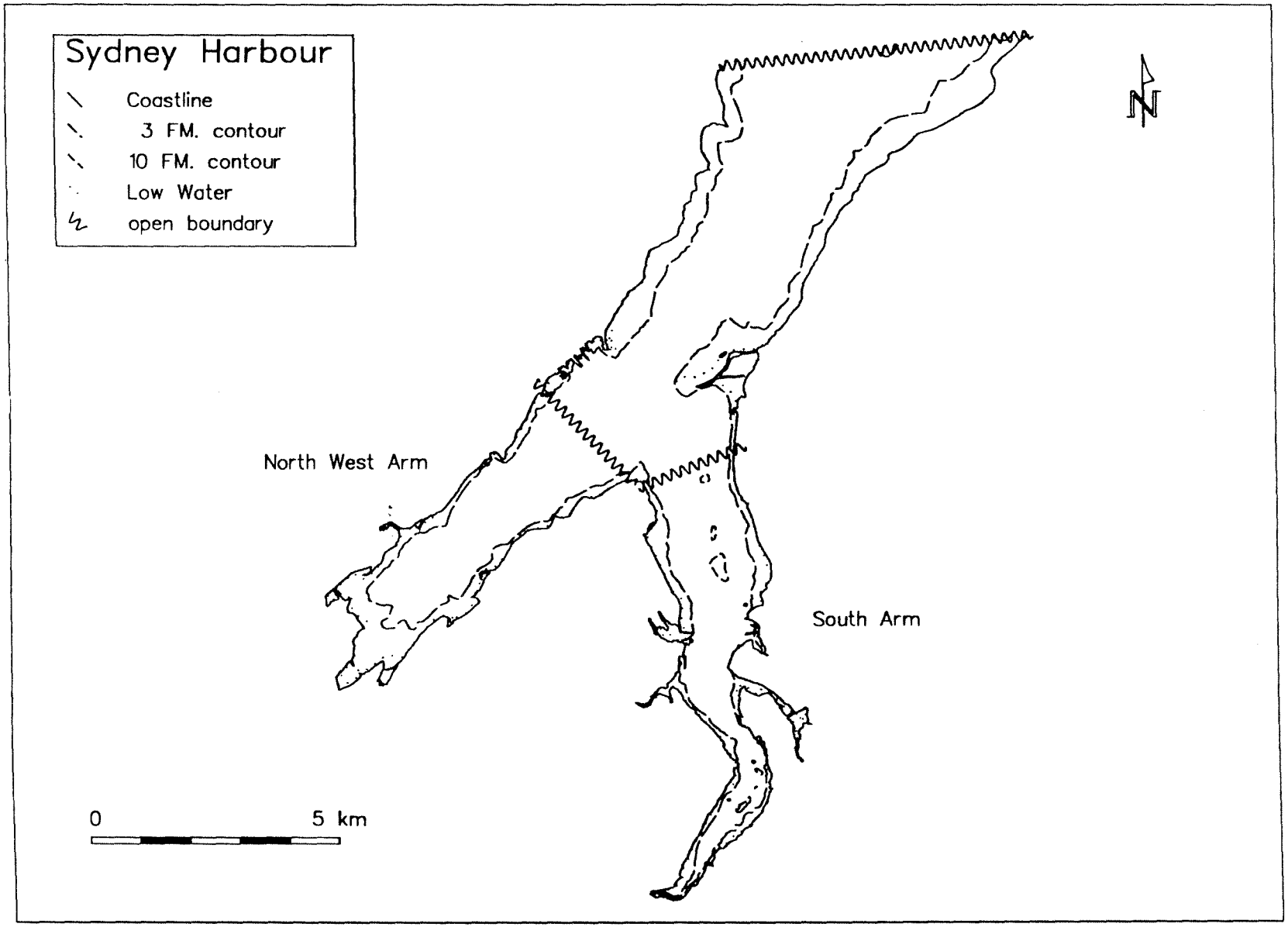
Flushing time 59.8 hr
Tidal/Freshwater volume ratio 381.16

Watershed Area 127.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	6.3 (48%)	May	6.8 (53%)	Sept	2.1 (86%)
Feb	4.4 (50%)	June	2.9 (59%)	Oct	3.4 (70%)
Mar	5.3 (46%)	July	1.8 (73%)	Nov	5.8 (55%)
Apr	8.7 (29%)	Aug	1.7 (104%)	Dec	6.4 (39%)

Lennox Passage closed at western entrance


Sydney Harbour
Coastline
3 FM. contour
10 FM. contour
Low Water
open boundary
North West Arm
South Arm
0
5 km
N

SYDNEY HARBOUR Zone 4Vn Chart 4315
Bay ID..CB

Area (CD)	52.0 km^2	Area (HW)	54.4 km^2
Perimeter	78.2 km	Volume (CD)	517.0 $10^6 m^3$
Axis Length	21.3 km	Maximum Depth	19.0 m
Section Width	6.2 km	Section Area	73021.8 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.90 m	1.40 m	47.9 $10^6 m^3$	0.03 m/s	0.05 m/s

Flushing time 140.1 hr
Tidal/Freshwater volume ratio 104.01

Watershed Area 490.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	22.1 (54%)	May	23.5 (68%)	Sept	10.8 (57%)
Feb	17.3 (66%)	June	12.8 (67%)	Oct	19.4 (50%)
Mar	24.4 (44%)	July	8.5 (62%)	Nov	30.8 (44%)
Apr	38.0 (45%)	Aug	8.9 (85%)	Dec	30.8 (37%)

SYDNEY HARBOUR SOUTH ARM Zone 4Vn Chart 4315
Bay ID..CBa

Area (CD)	11.1 km^2	Area (HW)	11.9 km^2
Perimeter	32.4 km	Volume (CD)	114.0 $10^6 m^3$
Axis Length	10.7 km	Maximum Depth	19.0 m
Section Width	2.2 km	Section Area	27264.6 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.90 m	1.40 m	10.3 $10^6 m^3$	0.02 m/s	0.03 m/s

Flushing time 142.4 hr
Tidal/Freshwater volume ratio 41.04

Watershed Area 269.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	12.1 (54%)	May	12.9 (68%)	Sept	5.9 (57%)
Feb	9.5 (66%)	June	7.0 (67%)	Oct	10.7 (50%)
Mar	13.4 (44%)	July	4.7 (62%)	Nov	16.9 (44%)
Apr	20.9 (45%)	Aug	4.9 (85%)	Dec	16.9 (37%)

SYDNEY HARBOUR NORTH WEST ARM Zone 4Vn Chart 4315
Bay ID..CBb

Area (CD)	12.8 km^2	Area (HW)	13.5 km^2
Perimeter	23.9 km	Volume (CD)	93.0 $10^6 m^3$
Axis Length	8.1 km	Maximum Depth	17.0 m
Section Width	2.6 km	Section Area	21767.4 m^2

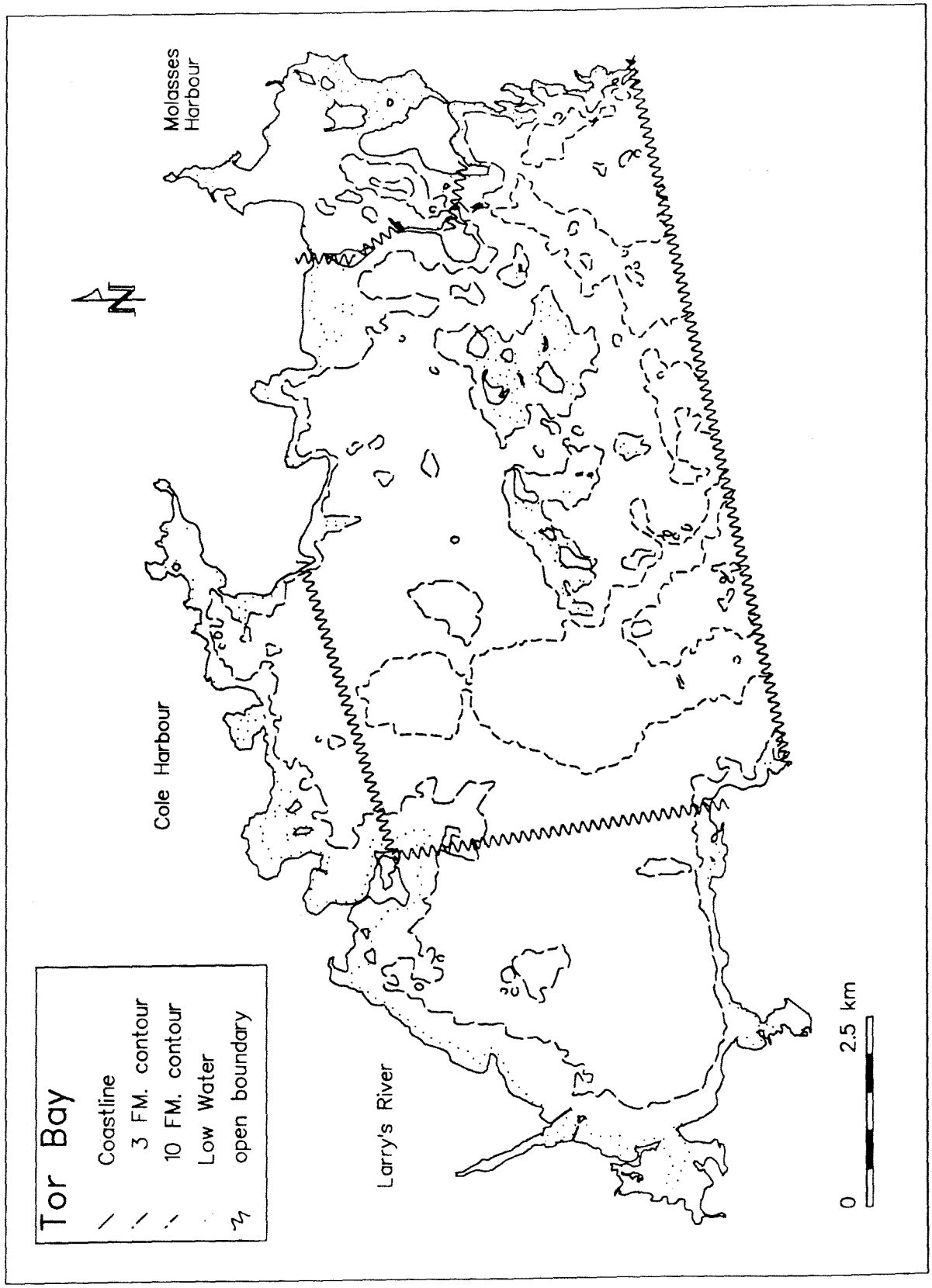
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
0.90 m	1.40 m	11.8 $10^6 m^3$	0.02 m/s	0.04 m/s

Flushing time 103.4 hr
Tidal/Freshwater volume ratio 83.80

Watershed Area 151.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	6.8 (54%)	May	7.2 (68%)	Sept	3.3 (57%)
Feb	5.3 (66%)	June	3.9 (67%)	Oct	6.0 (50%)
Mar	7.5 (44%)	July	2.6 (62%)	Nov	9.5 (44%)
Apr	11.7 (45%)	Aug	2.7 (85%)	Dec	9.5 (37%)


Tor Bay
Coastline
3 FM. contour
10 FM. contour
Low Water
open boundary
Molasses Harbour
Cole Harbour
Larry's River
N
0
2.5 km

TOR BAY Zone 4Wd · Chart 4282
Bay ID..AX

Area (CD)	69.4 km^2	Area (HW)	74.3 km^2
Perimeter	64.0 km	Volume (CD)	582.0 $10^6 m^3$
Axis Length	9.6 km	Maximum Depth	36.6 m
Section Width	9.4 km	Section Area	117683.5 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.90 m	93.4 $10^6 m^3$	0.04 m/s	0.06 m/s

Flushing time 83.3 hr
Tidal/Freshwater volume ratio 394.82

Watershed Area 269.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	12.9 (50%)	May	13.7 (70%)	Sept	4.5 (68%)
Feb	9.8 (58%)	June	6.7 (66%)	Oct	4.4 (58%)
Mar	14.7 (44%)	July	4.8 (81%)	Nov	14.4 (56%)
Apr	20.2 (33%)	Aug	5.0 (70%)	Dec	16.0 (38%)

LARRY'S RIVER Zone 4Wd Chart 4282
Bay ID..AXa

Area (CD)	14.7 km^2	Area (HW)	16.9 km^2
Perimeter	17.5 km	Volume (CD)	111.0 $10^6 m^3$
Axis Length	5.9 km	Maximum Depth	18.0 m
Section Width	3.8 km	Section Area	35769.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.90 m	20.6 $10^6 m^3$	0.03 m/s	0.04 m/s

Flushing time 72.8 hr
Tidal/Freshwater volume ratio 215.66

Watershed Area 104.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	5.0 (55%)	May	5.3 (80%)	Sept	1.7 (77%)
Feb	3.9 (60%)	June	2.7 (66%)	Oct	3.3 (56%)
Mar	5.7 (47%)	July	1.9 (95%)	Nov	5.6 (55%)
Apr	7.9 (38%)	Aug	2.0 (82%)	Dec	6.3 (42%)

COLE HARBOUR Zone 4Wd Chart 4282
Bay ID..AXb

Area (CD)	6.0 km^2	Area (HW)	6.8 km^2
Perimeter	16.3 km	Volume (CD)	40.0 $10^6 m^3$
Axis Length	4.6 km	Maximum Depth	17.0 m
Section Width	3.8 km	Section Area	36655.3 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.90 m	8.3 $10^6 m^3$	0.01 m/s	0.02 m/s

Flushing time 65.2 hr
Tidal/Freshwater volume ratio 73.12

Watershed Area 125.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	6.0 (48%)	May	6.4 (65%)	Sept	2.1 (63%)
Feb	4.6 (56%)	June	3.2 (66%)	Oct	4.0 (59%)
Mar	6.9 (42%)	July	2.3 (73%)	Nov	6.8 (56%)
Apr	9.4 (31%)	Aug	2.4 (64%)	Dec	7.5 (36%)

MOLASSES COVE Zone 4Wd Chart 4282
Bay ID..AXc

Area (CD)	4.1 km^2	Area (HW)	4.6 km^2
Perimeter	15.2 km	Volume (CD)	13.0 $10^6 m^3$
Axis Length	4.1 km	Maximum Depth	10.4 m
Section Width	1.2 km	Section Area	3620.8 m^2

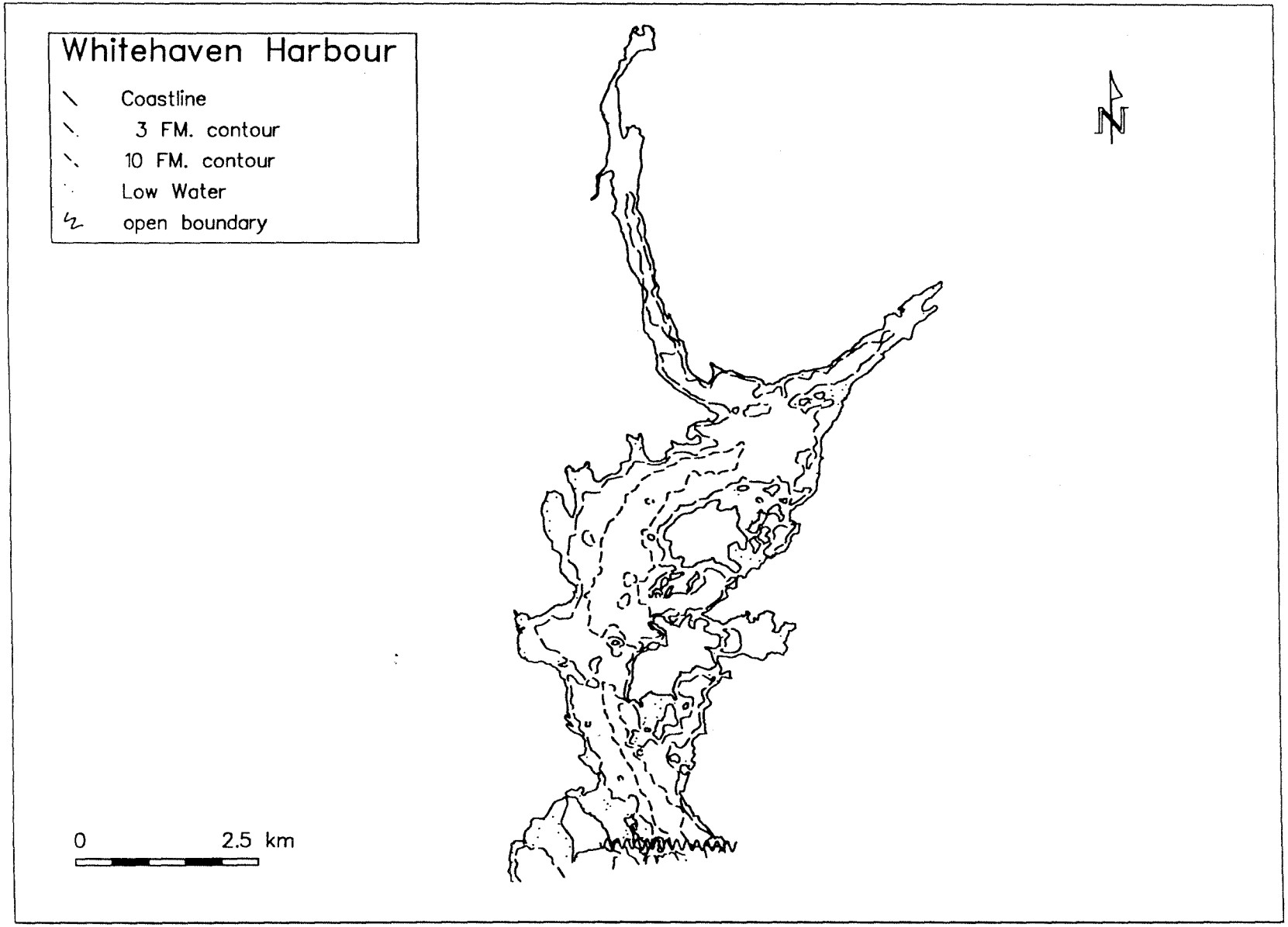
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.90 m	5.7 $10^6 m^3$	0.07 m/s	0.11 m/s

Flushing time 34.0 hr
Tidal/Freshwater volume ratio 491.81

Watershed Area 13.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	0.6 (48%)	May	0.7 (65%)	Sept	0.2 (63%)
Feb	0.4 (56%)	June	0.3 (66%)	Oct	0.4 (59%)
Mar	0.7 (42%)	July	0.2 (73%)	Nov	0.7 (56%)
Apr	1.0 (31%)	Aug	0.2 (64%)	Dec	0.8 (36%)


Whitehaven Harbour
Coastline
3 FM. contour
10 FM. contour
Low Water
open boundary
N
0
2.5 km

WHITEHAVEN HARBOUR Zone 4Wd Chart 4282
Bay ID..AY

Area (CD)	14.7 km^2	Area (HW)	16.1 km^2
Perimeter	46.7 km	Volume (CD)	133.0 $10^6 m^3$
Axis Length	17.0 km	Maximum Depth	29.3 m
Section Width	1.4 km	Section Area	14764.0 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.30 m	1.80 m	20.0 $10^6 m^3$	0.06 m/s	0.10 m/s

Flushing time 88.5 hr
Tidal/Freshwater volume ratio 280.71

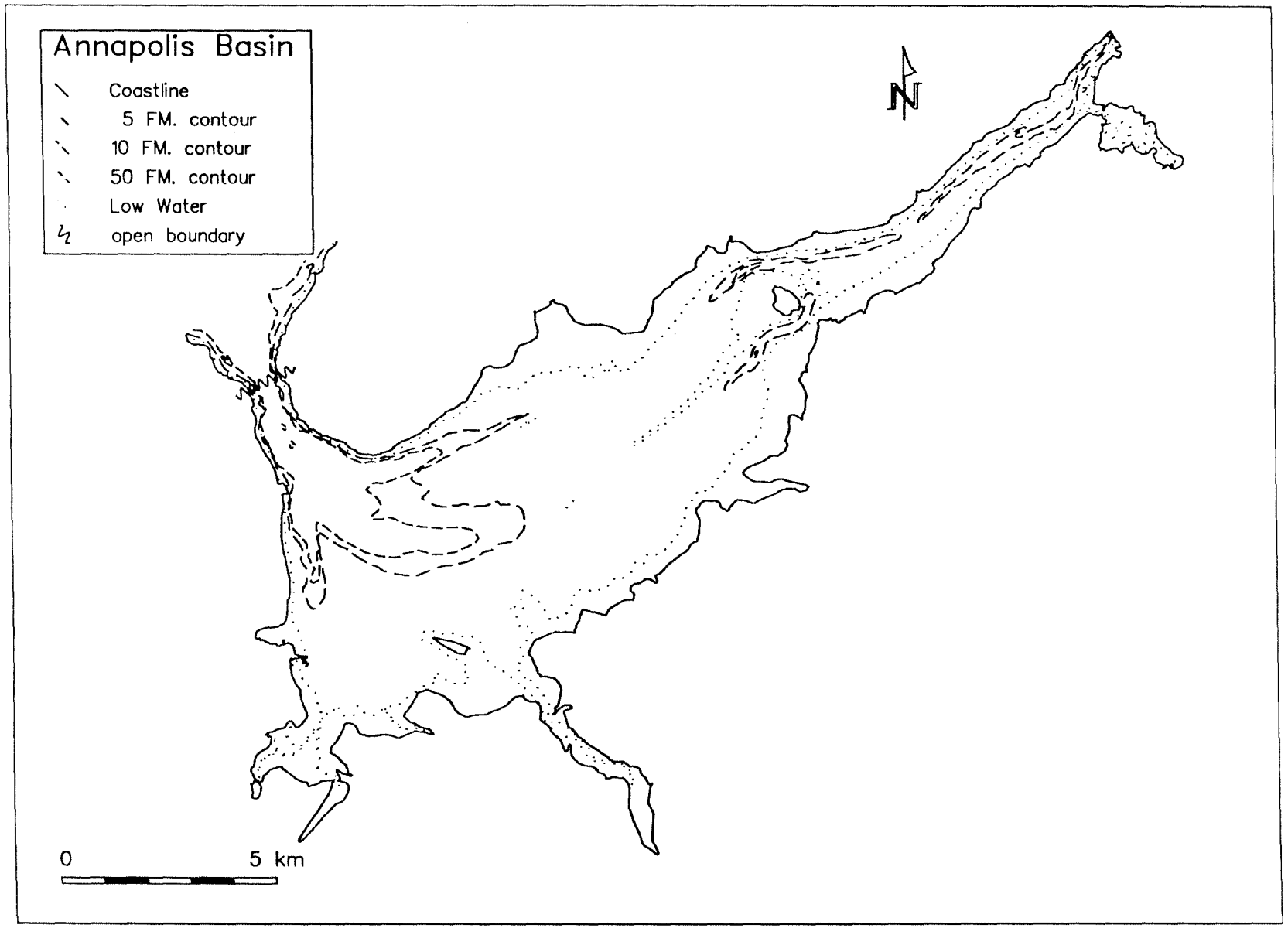
Watershed Area 78.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.8 (48%)	May	4.0 (65%)	Sept	1.3 (63%)
Feb	2.9 (56%)	June	2.0 (66%)	Oct	2.4 (59%)
Mar	4.3 (42%)	July	1.4 (73%)	Nov	4.2 (56%)
Apr	5.9 (31%)	Aug	1.4 (64%)	Dec	4.7 (36%)

APPENDIX A(iii)

Southern Nova Scotia and Bay of Fundy


Annapolis Basin
Coastline
5 FM. contour
10 FM. contour
50 FM. contour
Low Water
open boundary
N
0
5 km

ANNAPOLIS BASIN Zone 4Xr Chart 4396
Bay ID..CF

Area (CD)	66.5 km^2	Area (HW)	96.2 km^2
Perimeter	100.2 km	Volume (CD)	612.0 $10^6 m^3$
Axis Length	25.8 km	Maximum Depth	94.2 m
Section Width	0.7 km	Section Area	25526.0 m^2

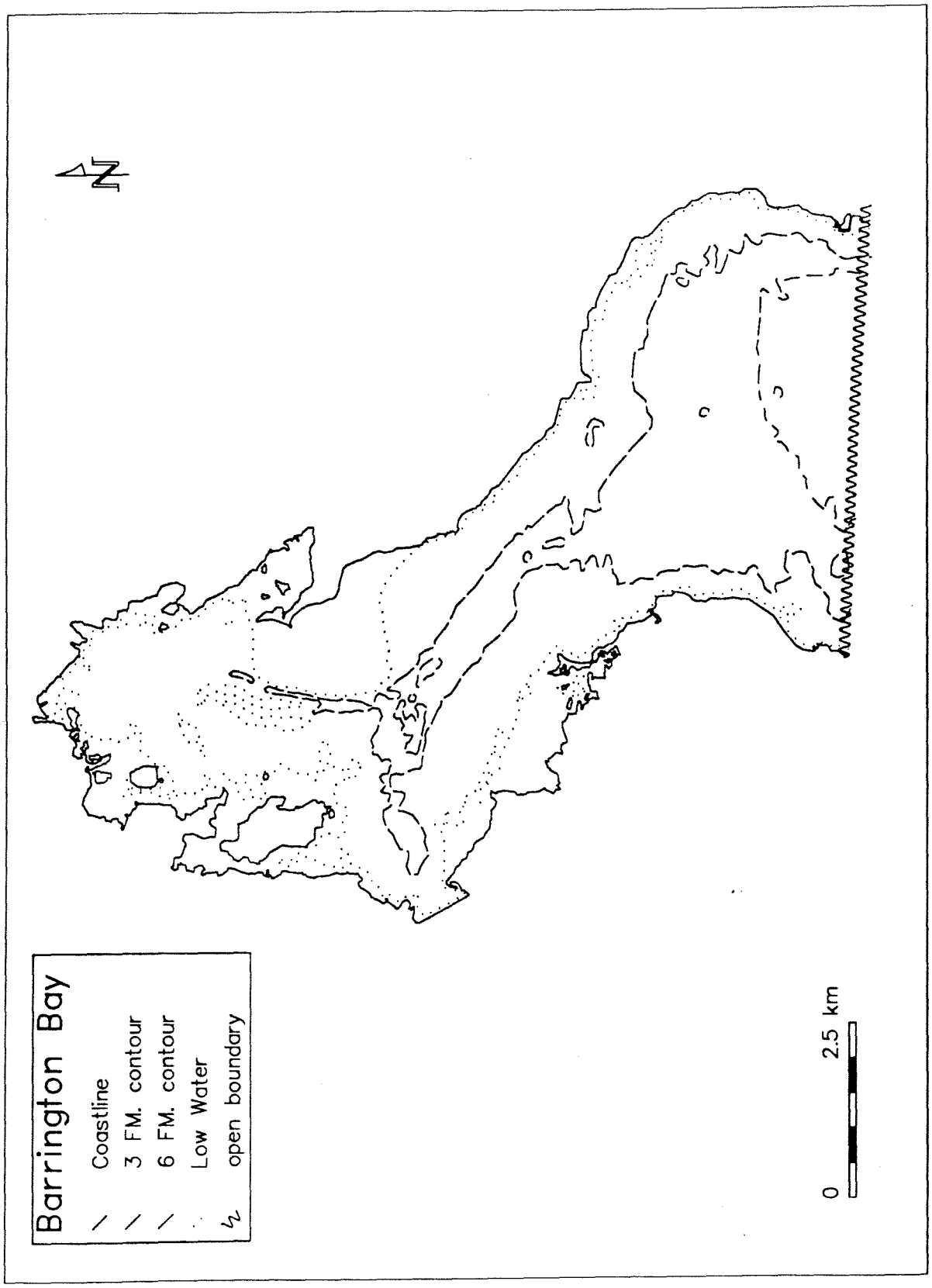
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
6.80 m	9.30 m	553.2 $10^6 m^3$	0.97 m/s	1.52 m/s

Flushing time 19.2 hr
Tidal/Freshwater volume ratio 455.46

Watershed Area 2408.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	61.8 (42%)	May	62.2 (51%)	Sept	14.4 (101%)
Feb	68.4 (50%)	June	32.9 (71%)	Oct	31.8 (89%)
Mar	99.2 (41%)	July	21.3 (85%)	Nov	52.9 (60%)
Apr	103.2 (35%)	Aug	20.5 (122%)	Dec	83.4 (42%)


Barrington Bay
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
N
0
2.5 km

BARRINGTON BAY Zone 4Xo . Chart 4215
Bay ID..AT

Area (CD)	40.1 km^2	Area (HW)	51.4 km^2
Perimeter	50.3 km	Volume (CD)	220.0 $10^6 m^3$
Axis Length	14.0 km	Maximum Depth	15.0 m
Section Width	5.9 km	Section Area	54002.7 m^2

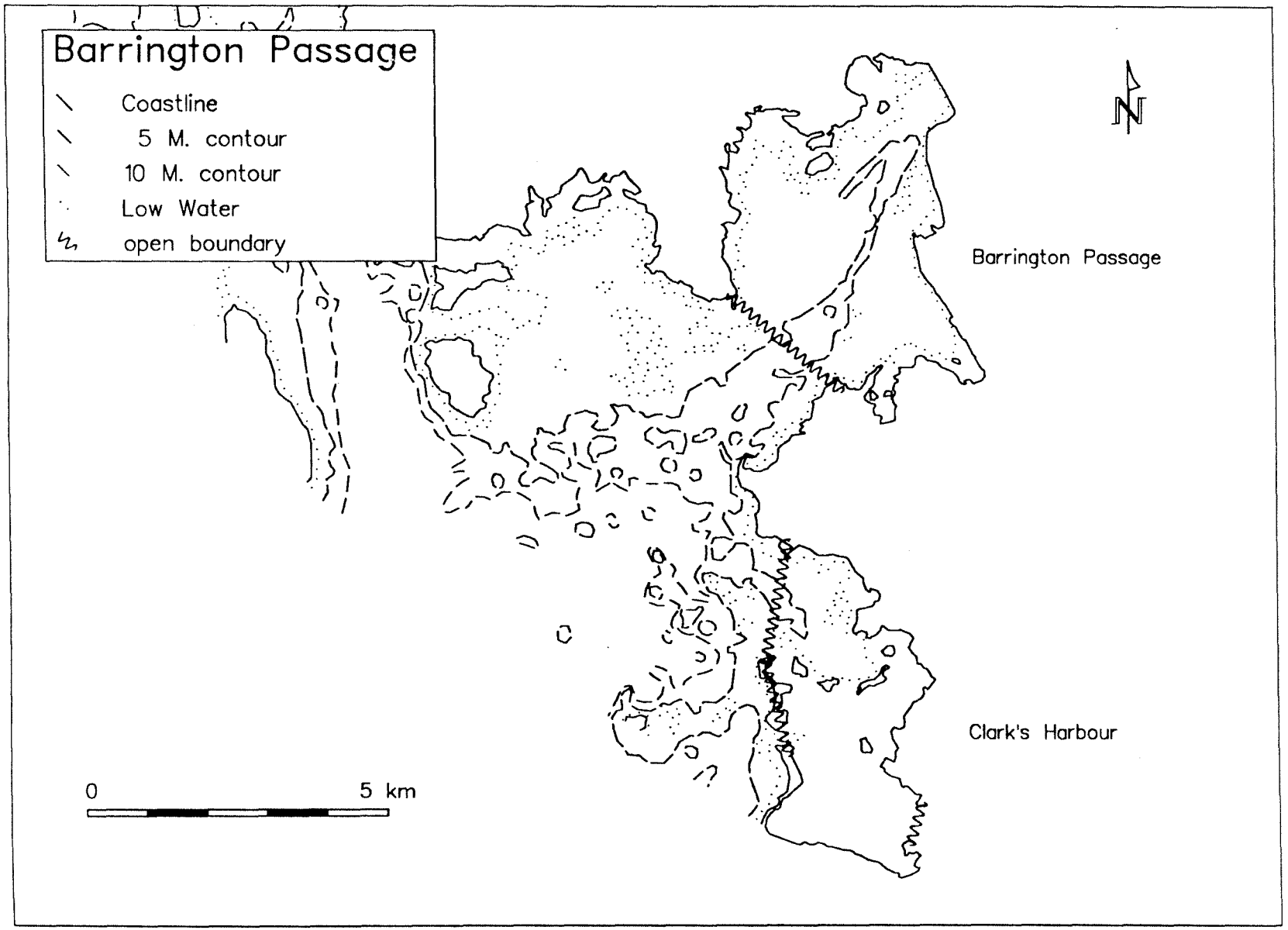
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
2.00 m	2.50 m	91.5 $10^6 m^3$	0.08 m/s	0.12 m/s

Flushing time 35.7 hr
Tidal/Freshwater volume ratio 509.74

Watershed Area 341.5 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	11.1 (25%)	May	11.7 (42%)	Sept	5.4 (64%)
Feb	10.0 (27%)	June	5.5 (25%)	Oct	4.3 (52%)
Mar	11.5 (32%)	July	5.7 (41%)	Nov	5.1 (60%)
Apr	12.4 (54%)	Aug	4.6 (36%)	Dec	9.0 (41%)


Barrington Passage
Coastline
5 M. contour
10 M. contour
Low Water
open boundary
Barrington Passage
Clark's Harbour
0
5 km
N

BARRINGTON PASSAGE Zone 4Xo · Chart 4242
Bay ID..AEa

Area (CD)	11.1 km^2	Area (HW)	15.1 km^2
Perimeter	20.8 km	Volume (CD)	33.0 $10^6 m^3$
Axis Length	5.3 km	Maximum Depth	14.9 m
Section Width	1.6 km	Section Area	5339.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
2.50 m	3.50 m	32.8 $10^6 m^3$	0.28 m/s	0.43 m/s

Flushing time 17.9 hr
Tidal/Freshwater volume ratio 1122.75

Watershed Area 56.2 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.8 (25%)	May	1.9 (42%)	Sept	0.9 (64%)
Feb	1.7 (27%)	June	0.9 (25%)	Oct	0.7 (52%)
Mar	1.9 (32%)	July	0.9 (41%)	Nov	0.8 (60%)
Apr	2.0 (54%)	Aug	0.8 (36%)	Dec	1.4 (41%)

Barrington Passage closed off at causeway to Cape Sable Island

CLARKE'S HARBOUR Zone 4Xo Chart 4242
Bay ID..AEb

Area (CD)	1.9 km^2	Area (HW)	9.2 km^2
Perimeter	6.2 km	Volume (CD)	5.0 $10^6 m^3$
Axis Length	2.0 km	Maximum Depth	6.7 m
Section Width	0.8 km	Section Area	2179.5 m^2

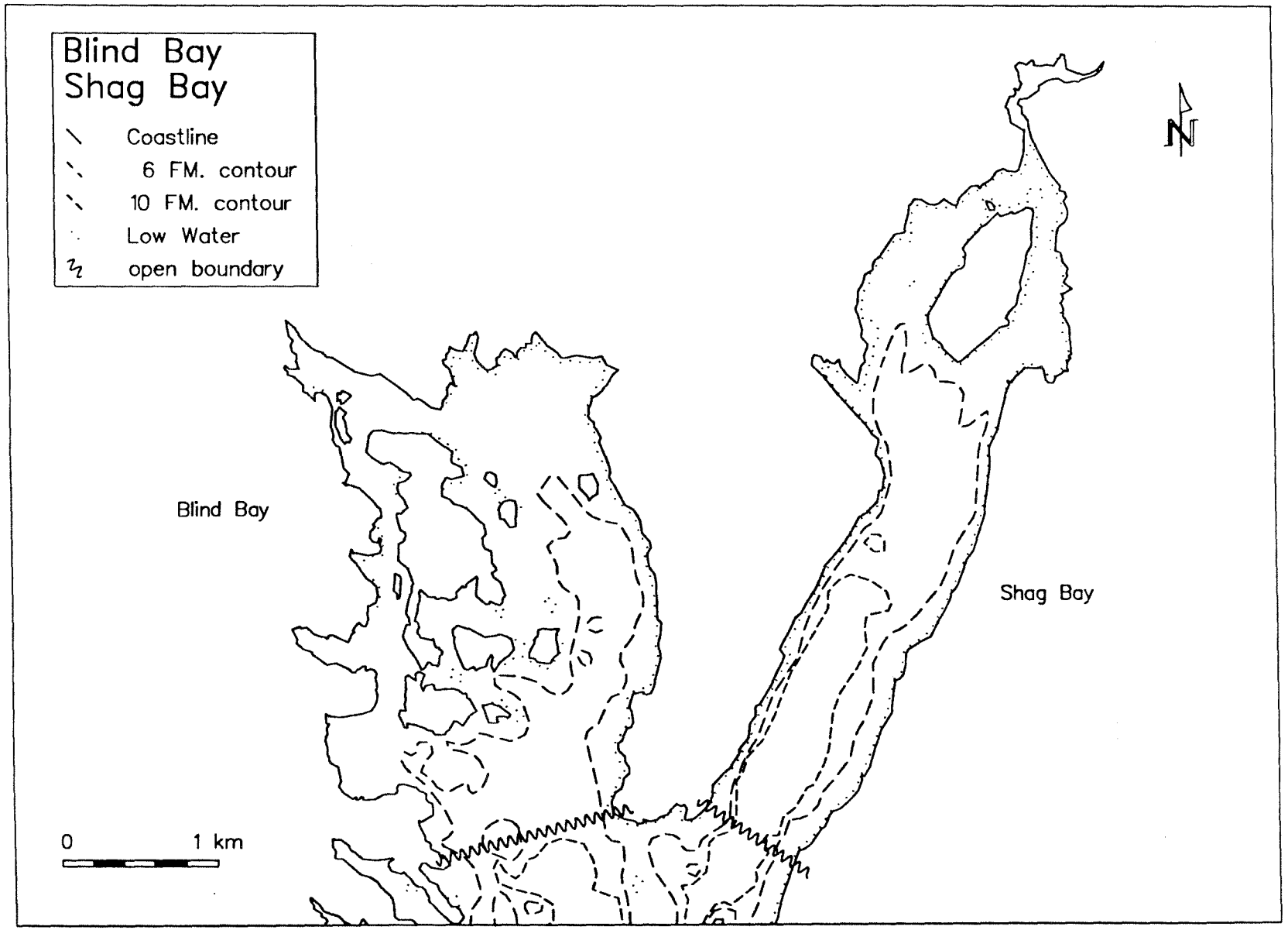
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
2.40 m	3.40 m	13.4 $10^6 m^3$	0.28 m/s	0.43 m/s

Flushing time 9.5 hr
Tidal/Freshwater volume ratio 1675.91

Watershed Area 15.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	0.5 (25%)	May	0.5 (42%)	Sept	0.2 (64%)
Feb	0.4 (27%)	June	0.3 (25%)	Oct	0.2 (52%)
Mar	0.5 (32%)	July	0.3 (41%)	Nov	0.2 (60%)
Apr	0.6 (54%)	Aug	0.2 (36%)	Dec	0.4 (41%)


Blind Bay
Shag Bay
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
Blind Bay
Shag Bay
N
0
1 km

BLIND BAY Zone 4Xm Chart 4386
Bay ID..BQa

Area (CD)	4.0 km^2	Area (HW)	4.2 km^2
Perimeter	12.5 km	Volume (CD)	29.0 $10^6 m^3$
Axis Length	3.7 km	Maximum Depth	16.2 m
Section Width	1.1 km	Section Area	11871.6 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.00 m	6.2 $10^6 m^3$	0.02 m/s	0.04 m/s

Flushing time 63.6 hr
Tidal/Freshwater volume ratio 168.45

Watershed Area 45.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	2.2 (64%)	May	2.0 (56%)	Sept	0.4 (103%)
Feb	1.8 (54%)	June	1.2 (70%)	Oct	1.1 (84%)
Mar	2.7 (40%)	July	0.6 (86%)	Nov	2.0 (57%)
Apr	2.9 (38%)	Aug	0.6 (106%)	Dec	2.4 (42%)

SHAG BAY Zone 4Xm Chart 4386
Bay ID..BQb

Area (CD)	3.2 km^2	Area (HW)	3.6 km^2
Perimeter	11.6 km	Volume (CD)	37.0 $10^6 m^3$
Axis Length	5.6 km	Maximum Depth	23.8 m
Section Width	0.6 km	Section Area	7752.8 m^2

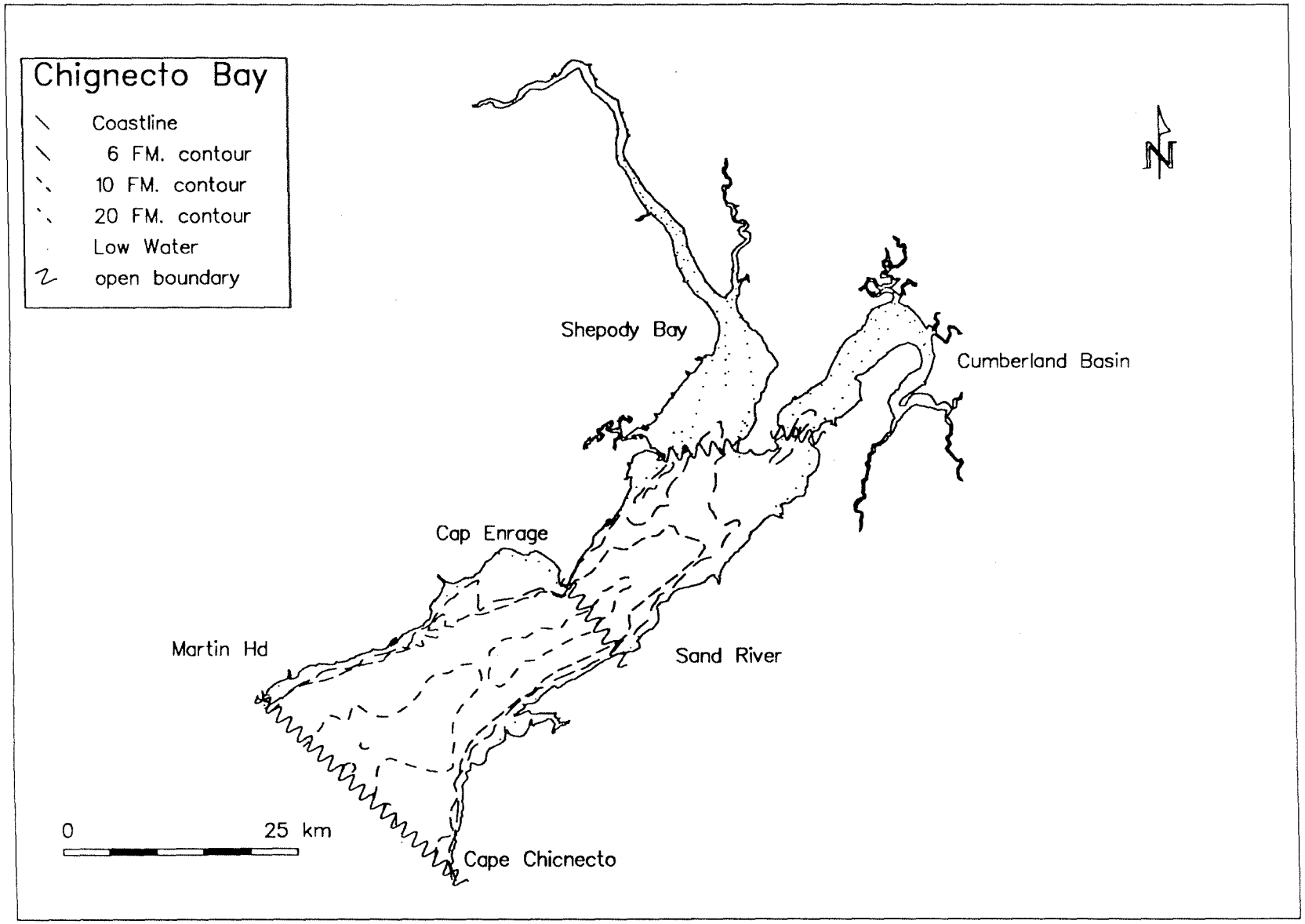
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.00 m	5.2 $10^6 m^3$	0.03 m/s	0.05 m/s

Flushing time 94.4 hr
Tidal/Freshwater volume ratio 32.10

Watershed Area 146.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	8.2 (64%)	May	6.2 (56%)	Sept	4.1 (103%)
Feb	7.3 (54%)	June	7.9 (70%)	Oct	4.0 (84%)
Mar	12.4 (40%)	July	3.8 (86%)	Nov	6.0 (57%)
Apr	13.1 (38%)	Aug	6.1 (106%)	Dec	7.9 (42%)


Chignecto Bay
Coastline
6 FM. contour
10 FM. contour
20 FM. contour
Low Water
open boundary
Shepody Bay
Cumberland Basin
Cap Enrage
Martin Hd
Sand River
Cape Chicnecto
0
25 km
N

CHIGNECTO BAY Zone 4Xs Chart 4010
(CAPE CHICNECTO to MARTIN HEAD) Bay ID..BL

Area (CD)	913.5 km^2	Area (HW)	1118.2 km^2
Perimeter	293.4 km	Volume (CD)	18448.0 10^6m^3
Axis Length	100.0 km	Maximum Depth	62.2 m
Section Width	26.8 km	Section Area	782737.8 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
9.60 m	13.00 m	9752.7 10^6m^3	0.56 m/s	0.88 m/s

Flushing time 29.2 hr
Tidal/Freshwater volume ratio 2333.74

Watershed Area 6733.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	157.8 (77%)	May	294.5 (59%)	Sept	67.4 (77%)
Feb	141.7 (71%)	June	126.1 (60%)	Oct	156.3 (82%)
Mar	232.3 (52%)	July	93.7 (68%)	Nov	219.8 (58%)
Apr	432.2 (33%)	Aug	82.5 (80%)	Dec	238.8 (50%)

CHIGNECTO BAY Zone 4Xs Chart 4010
(CAP ENRAGE to SAND RIVER) Bay ID..BLa

Area (CD)	383.9 km^2	Area (HW)	569.5 km^2
Perimeter	214.4 km	Volume (CD)	4717.0 10^6m^3
Axis Length	69.5 km	Maximum Depth	45.7 m
Section Width	9.1 km	Section Area	237918.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
10.30 m	14.10 m	4910.7 10^6m^3	0.92 m/s	1.45 m/s

Flushing time 17.4 hr
Tidal/Freshwater volume ratio 1564.44

Watershed Area 5462.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	121.4 (75%)	May	215.9 (50%)	Sept	47.1 (67%)
Feb	109.1 (57%)	June	92.5 (57%)	Oct	112.1 (66%)
Mar	181.3 (51%)	July	68.6 (65%)	Nov	162.2 (55%)
Apr	338.3 (28%)	Aug	59.9 (78%)	Dec	176.5 (49%)

SHEPODY BAY Zone 4Xs Chart 4010
Bay ID..BLb

Area (CD)	77.1 km^2	Area (HW)	173.4 km^2
Perimeter	92.1 km	Volume (CD)	383.0 10^6m^3
Axis Length	47.3 km	Maximum Depth	14.6 m
Section Width	6.9 km	Section Area	53436.1 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
11.10 m	14.60 m	1390.9 10^6m^3	1.16 m/s	1.83 m/s

Flushing time 8.1 hr
Tidal/Freshwater volume ratio 1017.62

Watershed Area 2963.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	41.3 (101%)	May	106.4 (70%)	Sept	15.8 (76%)
Feb	41.2 (93%)	June	43.2 (74%)	Oct	43.3 (97%)
Mar	77.3 (67%)	July	30.8 (91%)	Nov	64.7 (68%)
Apr	180.4 (39%)	Aug	20.1 (82%)	Dec	69.2 (57%)

CUMBERLAND BASIN Zone 4Xs Chart 4010
Bay ID..BLc

Area (CD)	37.7 km^2	Area (HW)	108.5 km^2
Perimeter	61.7 km	Volume (CD)	216.0 10^6m^3
Axis Length	29.6 km	Maximum Depth	21.9 m
Section Width	2.1 km	Section Area	20579.6 m^2

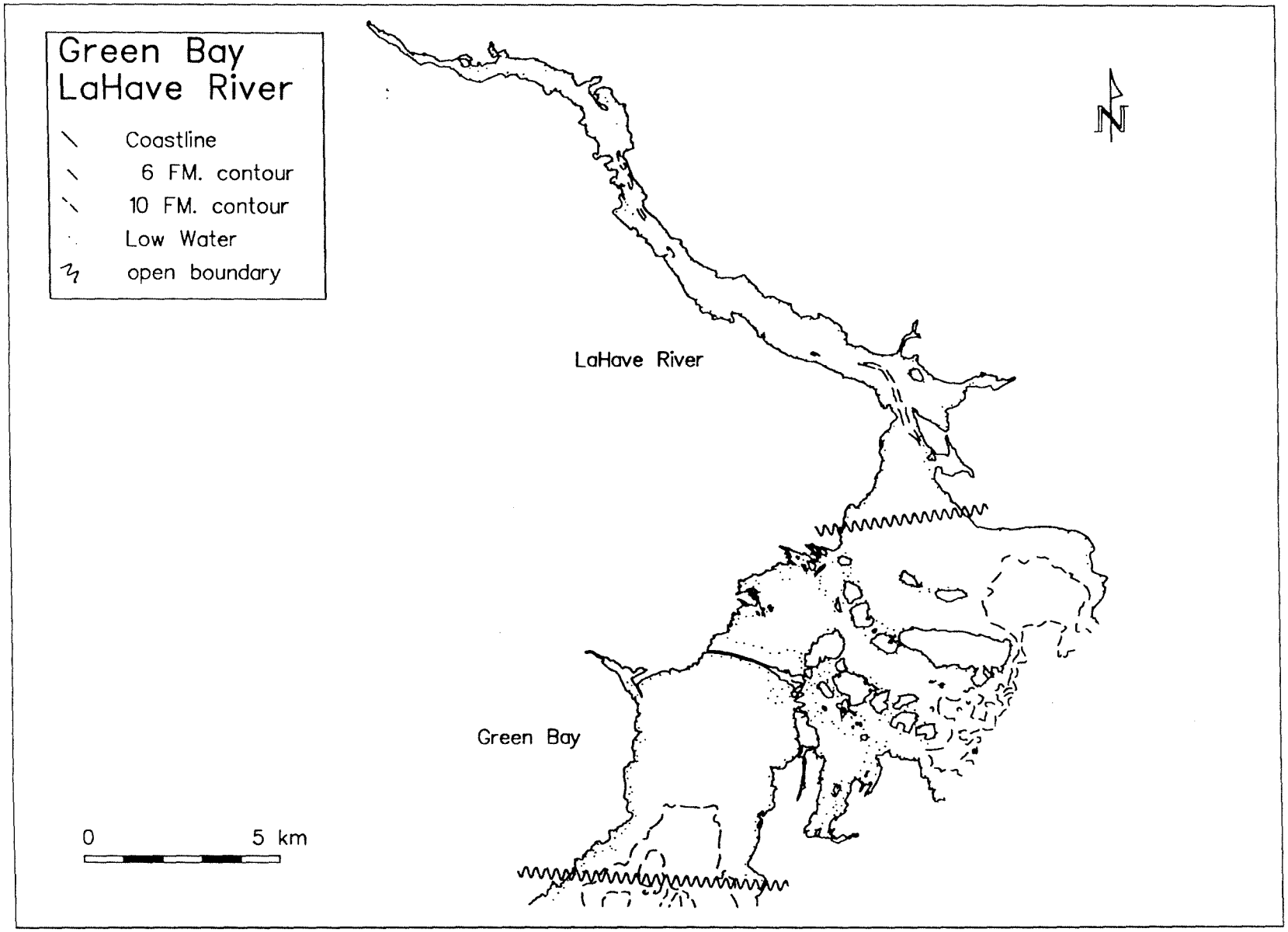
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
10.20 m	14.40 m	746.1 10^6m^3	1.62 m/s	2.55 m/s

Flushing time 8.3 hr
Tidal/Freshwater volume ratio 542.05

Watershed Area 1979.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	63.9 (58%)	May	80.2 (64%)	Sept	24.4 (91%)
Feb	54.2 (72%)	June	37.6 (52%)	Oct	52.6 (82%)
Mar	82.4 (35%)	July	28.8 (54%)	Nov	75.8 (58%)
Apr	123.4 (28%)	Aug	31.6 (85%)	Dec	83.9 (39%)


Green Bay
LaHave River
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
LaHave River
Green Bay
0
5 km
N

GREEN BAY Zone 4Xm Chart 4384
Bay ID..BMa

Area (CD)	21.0 km^2	Area (HW)	25.0 km^2
Perimeter	31.9 km	Volume (CD)	194.0 10^6m^3
Axis Length	6.2 km	Maximum Depth	21.9 m
Section Width	5.8 km	Section Area	57045.9 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.20 m	36.9 10^6m^3	0.03 m/s	0.05 m/s

Flushing time 71.3 hr
Tidal/Freshwater volume ratio 456.08

Watershed Area 121.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	4.6 (51%)	May	4.2 (52%)	Sept	0.9 (90%)
Feb	4.0 (57%)	June	2.4 (69%)	Oct	2.4 (92%)
Mar	6.0 (37%)	July	1.2 (79%)	Nov	4.4 (51%)
Apr	6.5 (23%)	Aug	1.1 (117%)	Dec	5.7 (37%)

LAHAVE RIVER Zone 4Xm Chart 4384
Bay ID..BMb

Area (CD)	16.8 km^2	Area (HW)	19.5 km^2
Perimeter	58.8 km	Volume (CD)	77.0 10^6m^3
Axis Length	24.3 km	Maximum Depth	27.4 m
Section Width	3.3 km	Section Area	17007.4 m^2

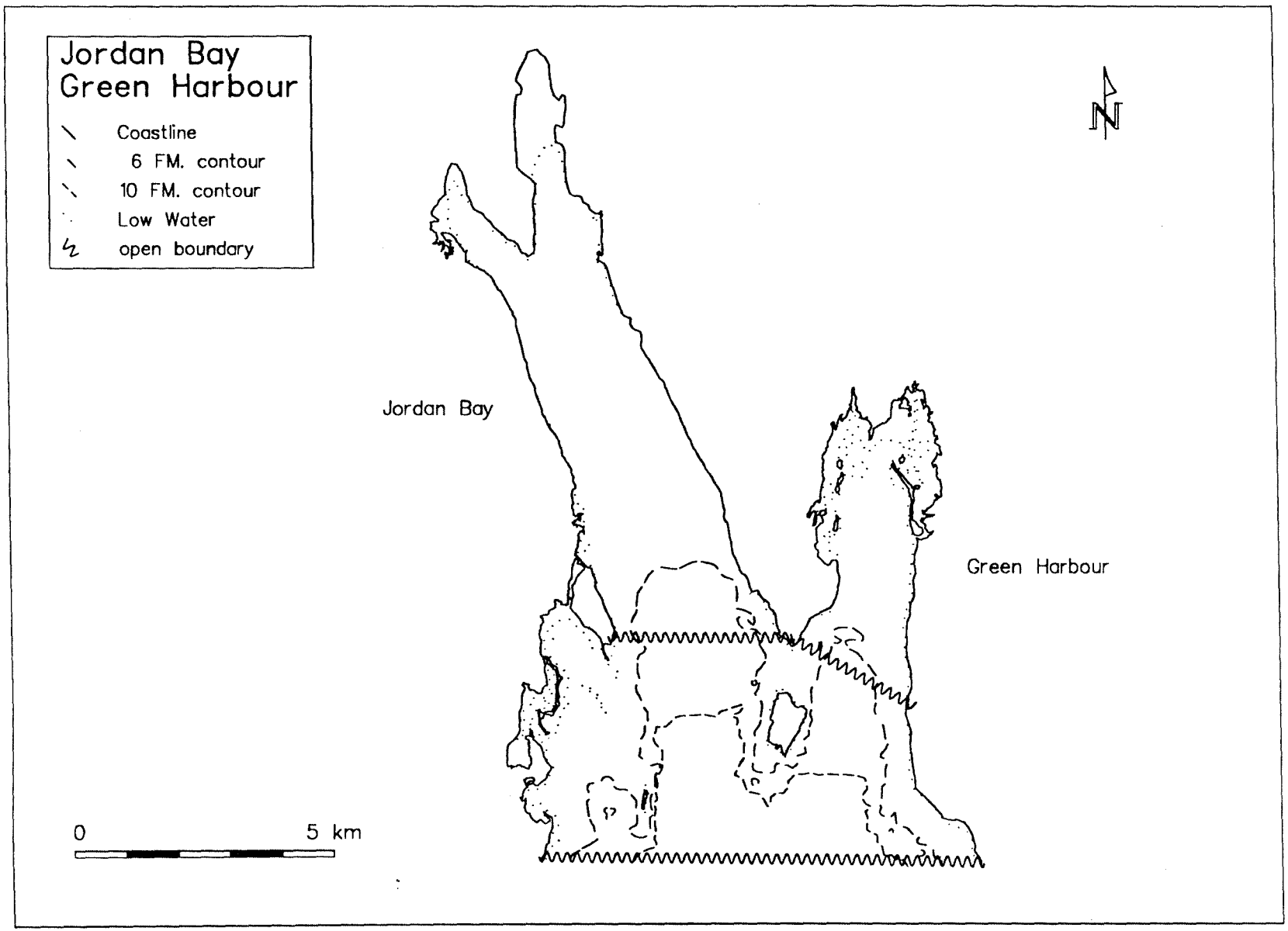
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.20 m	29.1 10^6m^3	0.08 m/s	0.12 m/s

Flushing time 38.7 hr
Tidal/Freshwater volume ratio 27.10

Watershed Area 1741.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	66.6 (58%)	May	54.6 (53%)	Sept	13.2 (101%)
Feb	53.9 (55%)	June	29.0 (66%)	Oct	28.4 (96%)
Mar	74.0 (42%)	July	16.3 (83%)	Nov	57.3 (58%)
Apr	100.6 (35%)	Aug	13.0 (111%)	Dec	70.2 (40%)


Jordan Bay
Green Harbour
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
Jordan Bay
Green Harbour
N
0
5 km

JORDAN BAY / GREEN HARBOUR Zone 4Xo Chart 4214
Bay ID..BG

Area (CD)	57.6 km^2	Area (HW)	64.8 km^2
Perimeter	65.0 km	Volume (CD)	540.0 $10^6 m^3$
Axis Length	15.2 km	Maximum Depth	21.9 m
Section Width	8.3 km	Section Area	130558.5 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.70 m	2.40 m	104.1 $10^6 m^3$	0.04 m/s	0.06 m/s

Flushing time 70.4 hr
Tidal/Freshwater volume ratio 202.05

Watershed Area 704.5 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	33.9 (42%)	May	22.6 (45%)	Sept	9.5 (83%)
Feb	29.3 (47%)	June	14.4 (54%)	Oct	15.6 (71%)
Mar	35.2 (33%)	July	10.5 (83%)	Nov	25.9 (51%)
Apr	36.5 (33%)	Aug	8.7 (89%)	Dec	34.5 (39%)

JORDAN BAY Zone 4Xo Chart 4214
Bay ID..BGa

Area (CD)	30.2 km^2	Area (HW)	34.3 km^2
Perimeter	40.1 km	Volume (CD)	276.0 10^6m^3
Axis Length	15.2 km	Maximum Depth	21.9 m
Section Width	5.5 km	Section Area	63659.2 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.70 m	2.40 m	54.8 10^6m^3	0.04 m/s	0.06 m/s

Flushing time 68.5 hr
Tidal/Freshwater volume ratio 125.21

Watershed Area 598.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	28.8 (42%)	May	19.2 (45%)	Sept	8.1 (83%)
Feb	24.9 (47%)	June	12.2 (54%)	Oct	13.3 (71%)
Mar	29.9 (33%)	July	8.9 (83%)	Nov	22.0 (51%)
Apr	31.1 (33%)	Aug	7.4 (89%)	Dec	29.3 (39%)

GREEN HARBOUR Zone 4Xo Chart 4214
Bay ID..BGb

Area (CD)	7.5 km^2	Area (HW)	10.4 km^2
Perimeter	20.1 km	Volume (CD)	44.0 10^6m^3
Axis Length	8.7 km	Maximum Depth	21.9 m
Section Width	2.9 km	Section Area	24766.2 m^2

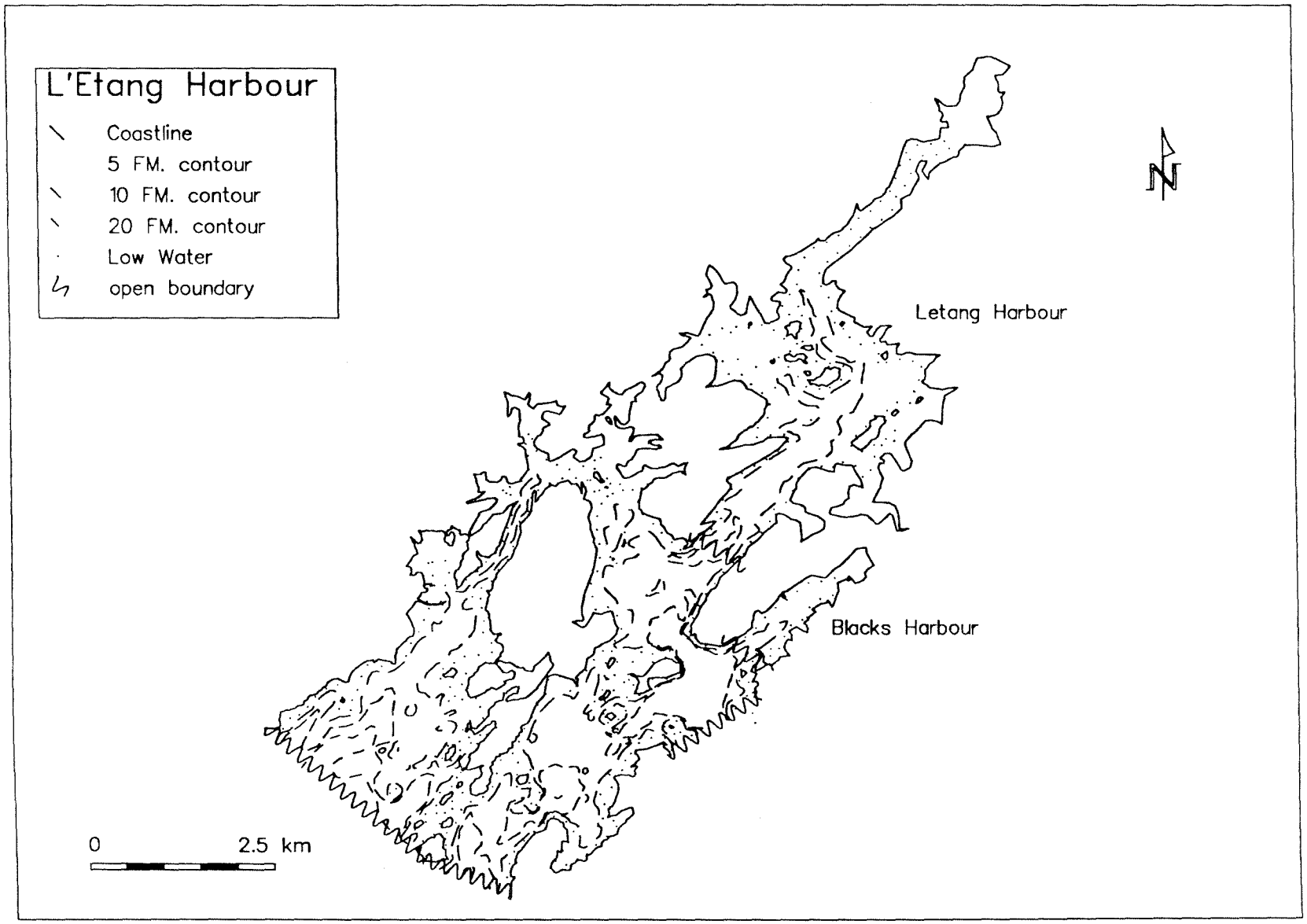
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.70 m	2.40 m	15.3 10^6m^3	0.03 m/s	0.04 m/s

Flushing time 41.5 hr
Tidal/Freshwater volume ratio 198.44

Watershed Area 105.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	5.1 (42%)	May	3.4 (45%)	Sept	1.4 (83%)
Feb	4.4 (47%)	June	2.2 (54%)	Oct	2.3 (71%)
Mar	5.3 (33%)	July	1.6 (83%)	Nov	3.9 (51%)
Apr	5.4 (33%)	Aug	1.3 (89%)	Dec	5.2 (39%)


L'Etang Harbour
Coastline
5 FM. contour
10 FM. contour
20 FM. contour
Low Water
open boundary
Letang Harbour
Blacks Harbour
N
0
2.5 km

L'ETANG HARBOUR AND VICINITY Zone 4Xs Chart 4313
Bay ID..BY

Area (CD)	18.6 km^2	Area (HW)	27.3 km^2
Perimeter	49.8 km	Volume (CD)	206.0 $10^6 m^3$
Axis Length	15.4 km	Maximum Depth	51.8 m
Section Width	4.7 km	Section Area	98628.3 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
5.60 m	7.80 m	128.8 $10^6 m^3$	0.06 m/s	0.09 m/s

Flushing time 25.5 hr
Tidal/Freshwater volume ratio 1908.38

Watershed Area 86.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	2.7 (64%)	May	4.0 (55%)	Sept	1.1 (87%)
Feb	2.1 (75%)	June	1.8 (66%)	Oct	2.1 (78%)
Mar	3.2 (63%)	July	1.0 (80%)	Nov	3.4 (48%)
Apr	6.6 (34%)	Aug	1.0 (105%)	Dec	3.4 (54%)

L'ETANG HARBOUR Zone 4Xs Chart 4313
Bay ID..BYa

Area (CD)	4.8 km^2	Area (HW)	8.7 km^2
Perimeter	24.5 km	Volume (CD)	31.0 $10^6 m^3$
Axis Length	11.8 km	Maximum Depth	29.3 m
Section Width	0.5 km	Section Area	7804.5 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
5.60 m	7.80 m	38.0 $10^6 m^3$	0.22 m/s	0.34 m/s

Flushing time 15.5 hr
Tidal/Freshwater volume ratio 711.54

Watershed Area 46.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.5 (64%)	May	2.1 (55%)	Sept	0.6 (87%)
Feb	1.2 (75%)	June	1.0 (66%)	Oct	1.2 (78%)
Mar	1.7 (63%)	July	0.6 (80%)	Nov	1.8 (48%)
Apr	3.5 (34%)	Aug	0.6 (105%)	Dec	1.8 (54%)

BLACKS HARBOUR Zone 4Xs Chart 4313
Bay ID..BYc

Area (CD)	0.5 km^2	Area (HW)	0.9 km^2
Perimeter	4.0 km	Volume (CD)	3.0 $10^6 m^3$
Axis Length	4.3 km	Maximum Depth	36.6 m
Section Width	0.3 km	Section Area	2530.6 m^2

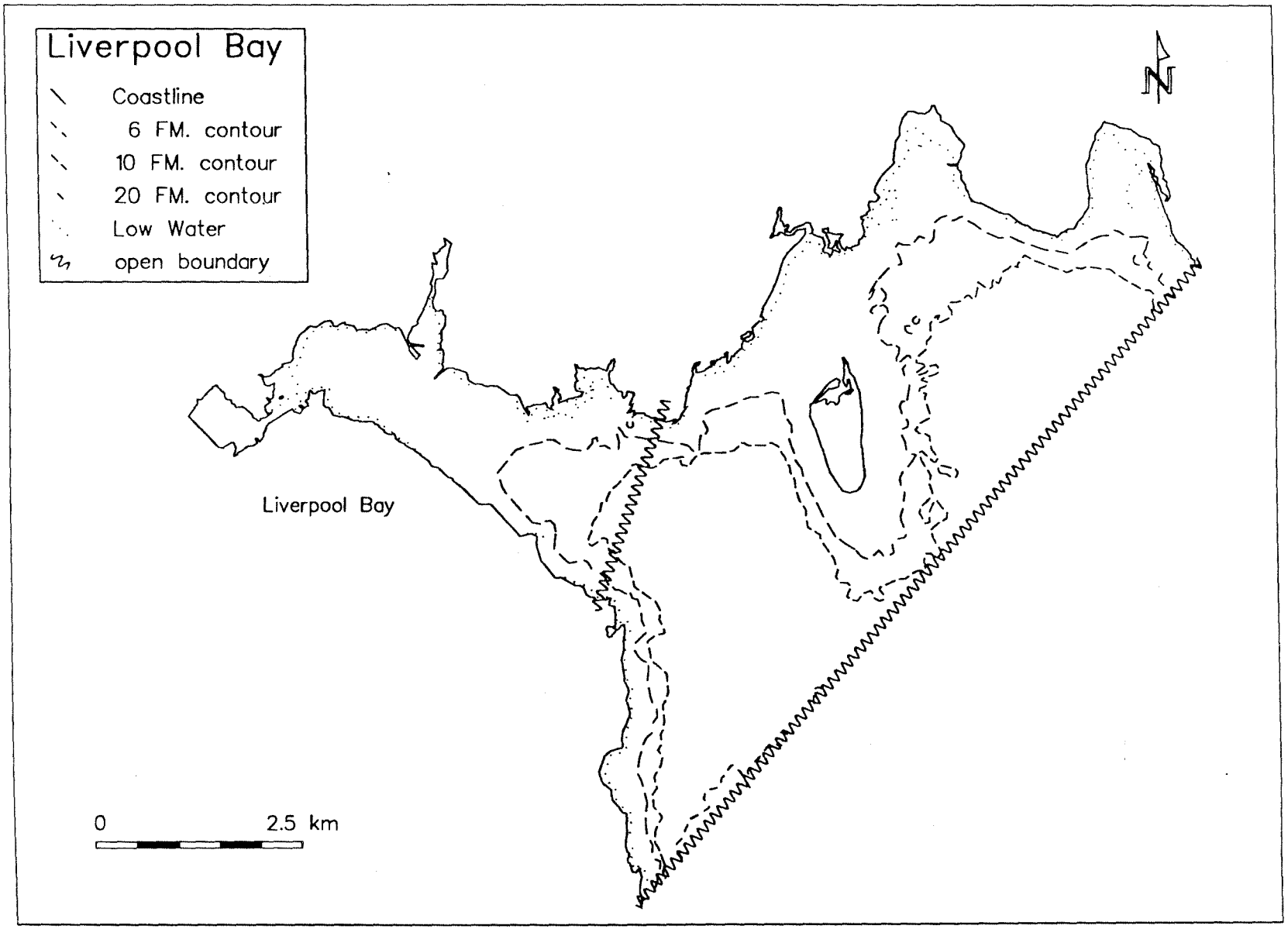
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
5.60 m	7.80 m	3.9 $10^6 m^3$	0.07 m/s	0.11 m/s

Flushing time 14.7 hr
Tidal/Freshwater volume ratio 1106.08

Watershed Area 3.6 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	0.1 (64%)	May	0.2 (55%)	Sept	0.1 (87%)
Feb	0.1 (75%)	June	0.1 (66%)	Oct	0.1 (78%)
Mar	0.2 (63%)	July	0.1 (80%)	Nov	0.2 (48%)
Apr	0.3 (34%)	Aug	0.1 (105%)	Dec	0.2 (54%)


Liverpool Bay
Coastline
6 FM. contour
10 FM. contour
20 FM. contour
Low Water
open boundary
N
Liverpool Bay
0
2.5 km

LIVERPOOL BAY AND VICINITY Zone 4Xo · Chart 4211
Bay ID..BT

Area (CD)	34.1 km^2	Area (HW)	35.9 km^2
Perimeter	38.9 km	Volume (CD)	563.0 $10^6 m^3$
Axis Length	8.7 km	Maximum Depth	38.4 m
Section Width	10.1 km	Section Area	269503.1 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.20 m	56.0 $10^6 m^3$	0.01 m/s	0.01 m/s

Flushing time 130.8 hr
Tidal/Freshwater volume ratio 42.75

Watershed Area 2015.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	72.4 (45%)	May	58.7 (42%)	Sept	49.8 (62%)
Feb	65.3 (40%)	June	53.8 (44%)	Oct	52.8 (56%)
Mar	64.4 (34%)	July	50.8 (53%)	Nov	54.2 (46%)
Apr	68.0 (36%)	Aug	53.2 (61%)	Dec	60.4 (38%)

LIVERPOOL BAY Zone 4Xo Chart 4211
Bay ID..BTa

Area (CD)	6.7 km^2	Area (HW)	7.4 km^2
Perimeter	19.8 km	Volume (CD)	54.0 $10^6 m^3$
Axis Length	5.6 km	Maximum Depth	19.2 m
Section Width	2.1 km	Section Area	32522.8 m^2

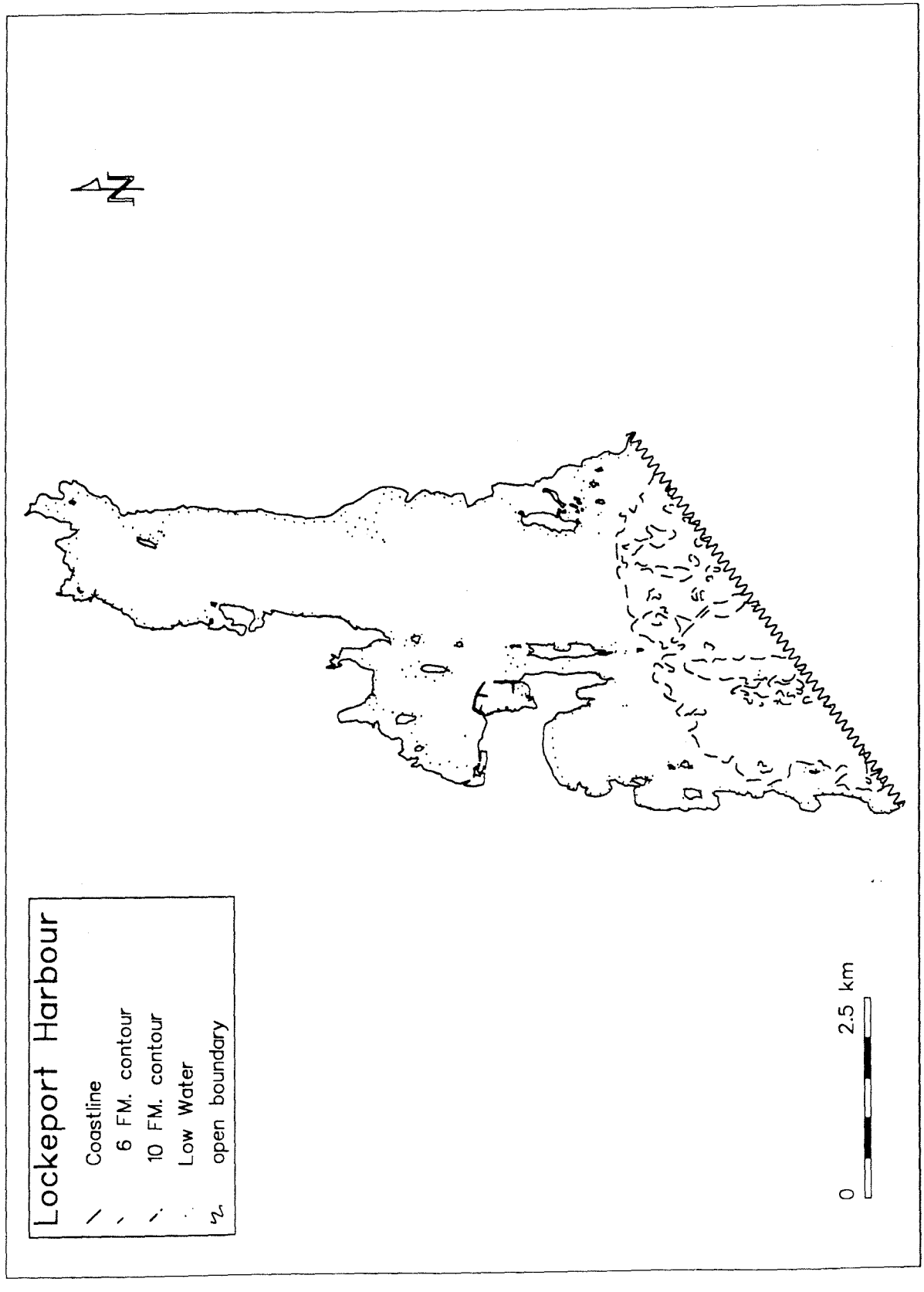
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.20 m	11.3 $10^6 m^3$	0.02 m/s	0.02 m/s

Flushing time 65.0 hr
Tidal/Freshwater volume ratio 8.67

Watershed Area 2015.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	72.4 (27%)	May	58.7 (27%)	Sept	49.8 (22%)
Feb	65.3 (26%)	June	53.7 (19%)	Oct	52.8 (28%)
Mar	64.4 (27%)	July	50.8 (19%)	Nov	54.2 (34%)
Apr	68.0 (34%)	Aug	53.2 (15%)	Dec	60.4 (33%)


Lockeport Harbour
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
N
0
2.5 km

LOCKEPORT HARBOUR Zone 4Xo Chart 4327
Bay ID..AW

Area (CD)	20.8 km^2	Area (HW)	23.5 km^2
Perimeter	40.6 km	Volume (CD)	142.0 $10^6 m^3$
Axis Length	27.4 km	Maximum Depth	19.2 m
Section Width	5.5 km	Section Area	71418.5 m^2

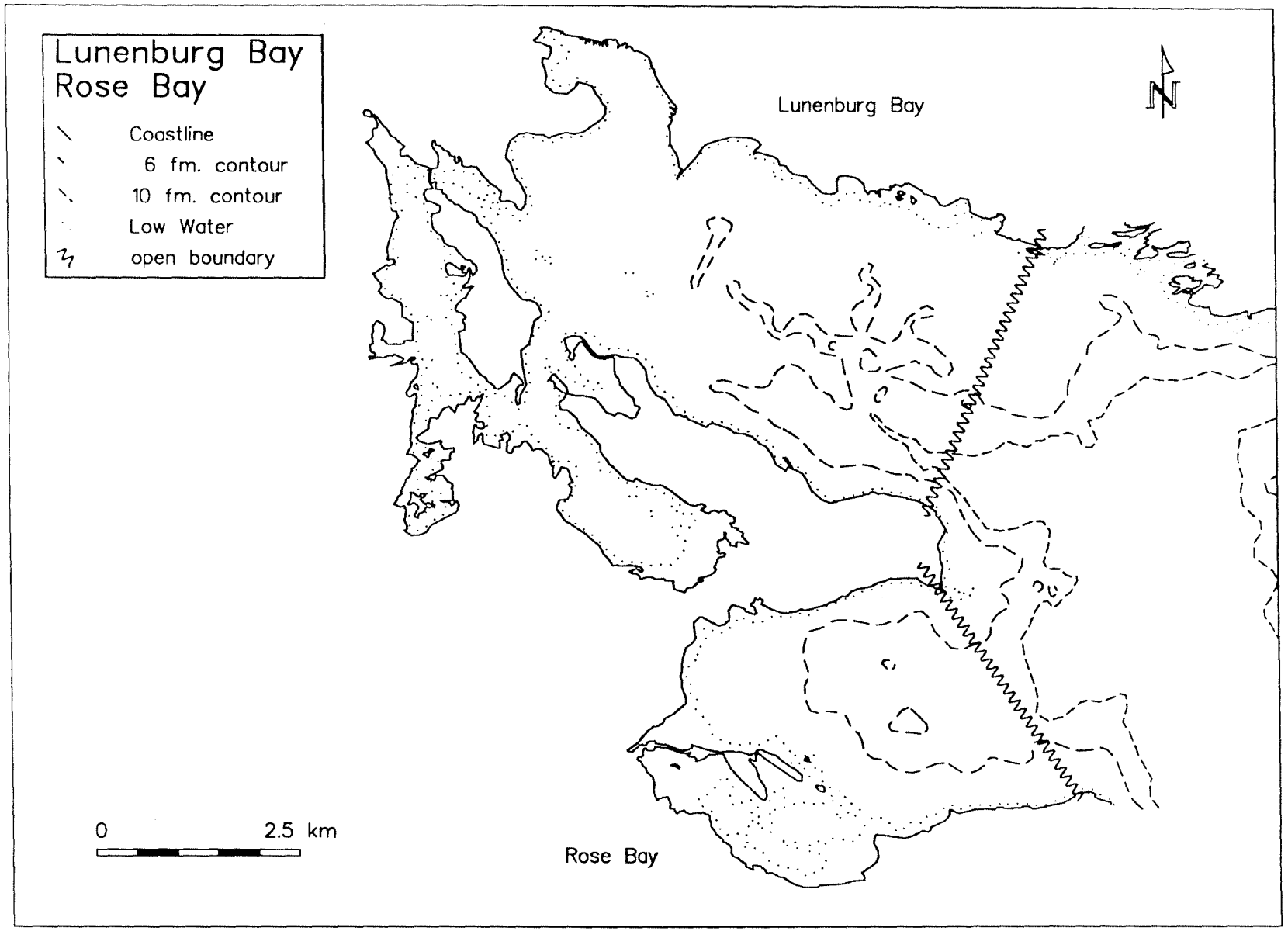
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.80 m	2.40 m	39.8 $10^6 m^3$	0.02 m/s	0.04 m/s

Flushing time 50.1 hr
Tidal/Freshwater volume ratio 705.30

Watershed Area 77.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.8 (42%)	May	2.6 (45%)	Sept	1.1 (83%)
Feb	3.2 (47%)	June	1.5 (54%)	Oct	1.5 (71%)
Mar	3.9 (33%)	July	1.1 (83%)	Nov	2.9 (51%)
Apr	3.9 (33%)	Aug	1.0 (89%)	Dec	3.8 (39%)


Lunenburg Bay
Rose Bay
Coastline
6 fm. contour
10 fm. contour
Low Water
open boundary
Lunenburg Bay
Rose Bay
N
0
2.5 km

LUNENBURG HARBOUR Zone 4Xm Chart 4384
Bay ID..BNa

Area (CD)	22.7 km^2	Area (HW)	27.2 km^2
Perimeter	49.0 km	Volume (CD)	155.0 $10^6 m^3$
Axis Length	7.4 km	Maximum Depth	19.2 m
Section Width	3.3 km	Section Area	33830.1 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.20 m	40.0 $10^6 m^3$	0.05 m/s	0.08 m/s

Flushing time 54.0 hr
Tidal/Freshwater volume ratio 473.61

Watershed Area 127.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	4.8 (51%)	May	4.4 (52%)	Sept	0.9 (90%)
Feb	4.2 (57%)	June	2.4 (69%)	Oct	2.6 (92%)
Mar	6.3 (37%)	July	1.2 (79%)	Nov	4.6 (51%)
Apr	6.8 (23%)	Aug	1.2 (117%)	Dec	5.9 (37%)

ROSE BAY Zone 4Xm Chart 4384
Bay ID..BNb

Area (CD)	9.4 km^2	Area (HW)	12.1 km^2
Perimeter	18.0 km	Volume (CD)	69.0 $10^6 m^3$
Axis Length	5.3 km	Maximum Depth	15.5 m
Section Width	2.8 km	Section Area	24135.5 m^2

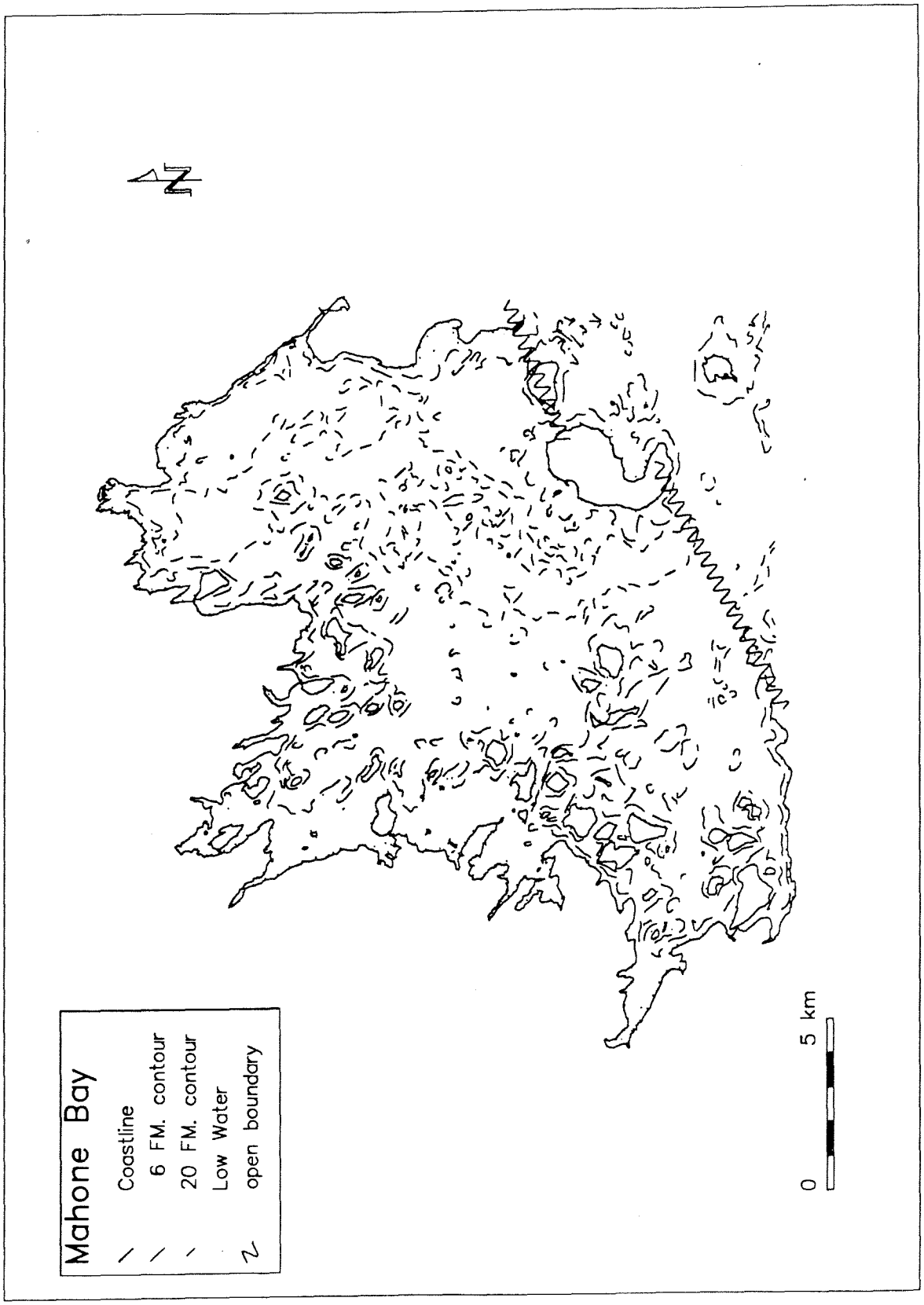
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.20 m	17.3 $10^6 m^3$	0.03 m/s	0.05 m/s

Flushing time 55.4 hr
Tidal/Freshwater volume ratio 710.73

Watershed Area 22.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.2 (65%)	May	0.9 (51%)	Sept	0.6 (42%)
Feb	1.1 (49%)	June	1.2 (70%)	Oct	0.6 (59%)
Mar	1.9 (10%)	July	0.6 (82%)	Nov	0.9 (75%)
Apr	2.0 (29%)	Aug	0.9 (55%)	Dec	1.2 (64%)


Mahone Bay
Coastline
6 FM. contour
20 FM. contour
Low Water
open boundary
N
0
5 km

MAHONE BAY Zone 4Xm Chart 4381
Bay ID..BX

Area (CD)	209.1 km^2	Area (HW)	216.5 km^2
Perimeter	138.3 km	Volume (CD)	4227.0 $10^6 m^3$
Axis Length	11.8 km	Maximum Depth	62.2 m
Section Width	8.6 km	Section Area	165427.7 m^2

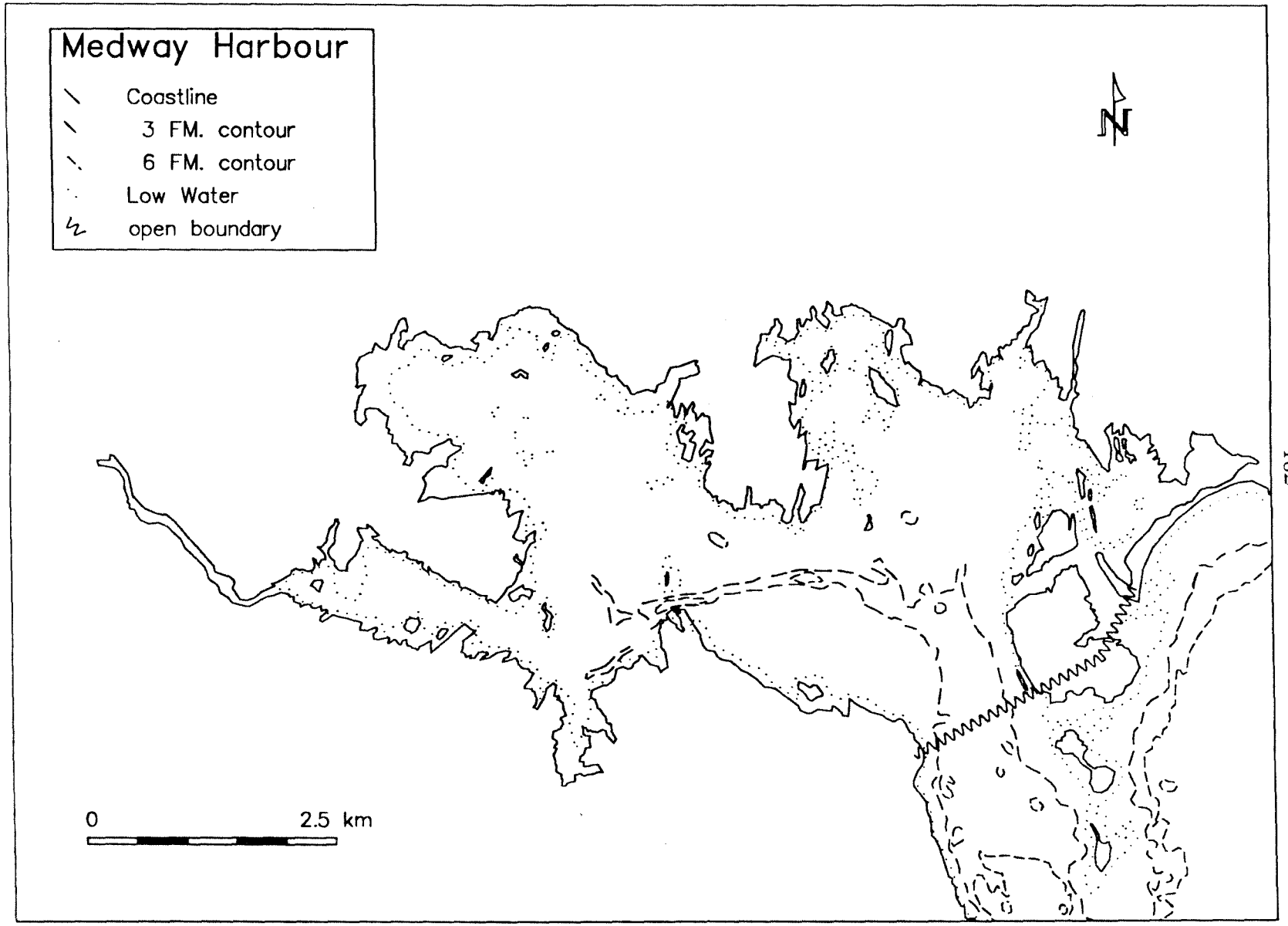
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.10 m	319.2 $10^6 m^3$	0.09 m/s	0.14 m/s

Flushing time 170.5 hr
Tidal/Freshwater volume ratio 344.53

Watershed Area 1390.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	53.0 (51%)	May	48.4 (52%)	Sept	9.8 (90%)
Feb	45.4 (57%)	June	27.3 (69%)	Oct	28.0 (92%)
Mar	69.2 (37%)	July	13.4 (79%)	Nov	50.0 (51%)
Apr	74.8 (23%)	Aug	13.1 (117%)	Dec	65.0 (37%)


Medway Harbour
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
N
0
2.5 km

MEDWAY HARBOUR Zone 4Xo Chart 4211
Bay ID..BU

Area (CD)	16.2 km^2	Area (HW)	22.0 km^2
Perimeter	46.4 km	Volume (CD)	45.0 $10^6 m^3$
Axis Length	9.0 km	Maximum Depth	11.9 m
Section Width	1.1 km	Section Area	7583.3 m^2

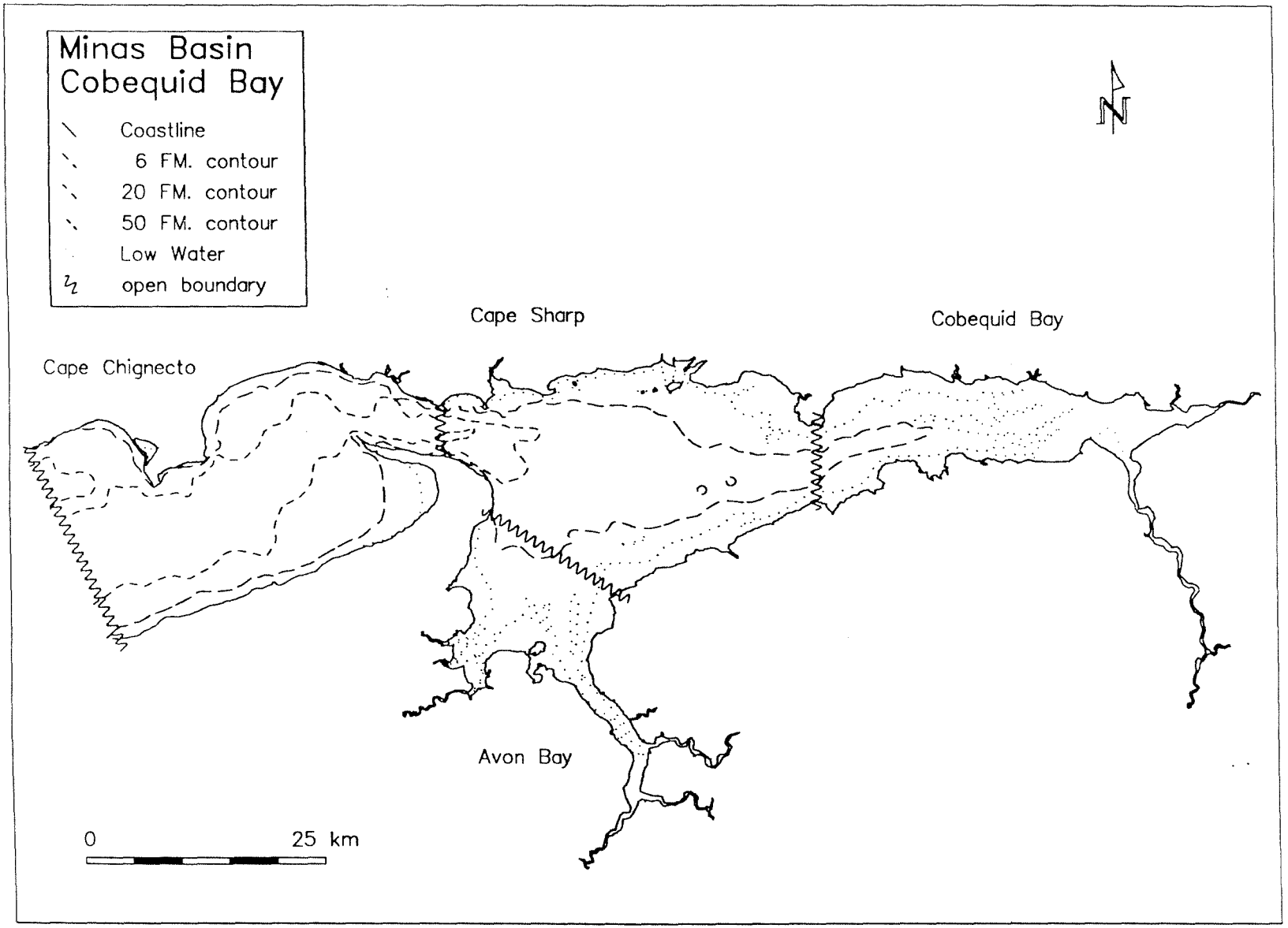
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.20 m	30.6 $10^6 m^3$	0.18 m/s	0.28 m/s

Flushing time 23.9 hr
Tidal/Freshwater volume ratio 26.52

Watershed Area 1730.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	72.2 (50%)	May	62.4 (46%)	Sept	14.4 (91%)
Feb	62.6 (45%)	June	35.6 (46%)	Oct	28.0 (92%)
Mar	80.0 (39%)	July	20.4 (74%)	Nov	55.0 (63%)
Apr	98.5 (41%)	Aug	15.4 (92%)	Dec	75.3 (41%)


Minas Basin
Cobequid Bay
Coastline
6 FM. contour
20 FM. contour
50 FM. contour
Low Water
open boundary
N
Cape Sharp
Cobequid Bay
Cape Chignecto
Avon Bay
0
25 km

MINAS BASIN (FROM CAPE CHIGNECTO) Zone 4Xr Chart 4010
Bay ID..BK

Area (CD)	1468.3 km^2	Area (HW)	1905.1 km^2
Perimeter	453.1 km	Volume (CD)	37616.0 10^6m^3
Axis Length	126.8 km	Maximum Depth	111.6 m
Section Width	21.7 km	Section Area	966758.2 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
10.50 m	14.10 m	17710.7 10^6m^3	0.82 m/s	1.29 m/s

Flushing time 32.1 hr
Tidal/Freshwater volume ratio 2401.23

Watershed Area 10465.5 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	379.0 (65%)	May	549.8 (44%)	Sept	126.1 (83%)
Feb	282.2 (55%)	June	199.3 (56%)	Oct	260.5 (80%)
Mar	434.1 (50%)	July	129.0 (70%)	Nov	368.6 (51%)
Apr	677.8 (26%)	Aug	126.7 (80%)	Dec	425.9 (39%)

MINAS BASIN (FROM CAPE SHARP) Zone 4Xr Chart 4010
Bay ID..BKa

Area (CD)	757.3 km^2	Area (HW)	1182.9 km^2
Perimeter	320.1 km	Volume (CD)	10498.0 10^6m^3
Axis Length	84.2 km	Maximum Depth	111.6 m
Section Width	5.4 km	Section Area	226381.1 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
11.30 m	15.00 m	10962.9 10^6m^3	2.17 m/s	3.40 m/s

Flushing time 17.3 hr
Tidal/Freshwater volume ratio 1700.59

Watershed Area 9196.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	339.4 (66%)	May	472.4 (71%)	Sept	110.1 (47%)
Feb	251.4 (73%)	June	176.1 (41%)	Oct	218.6 (68%)
Mar	378.2 (65%)	July	111.6 (72%)	Nov	325.3 (25%)
Apr	589.8 (25%)	Aug	109.5 (68%)	Dec	377.9 (40%)

COBEQUID BAY Zone 4Xr Chart 4010
Bay ID..BKb

Area (CD)	97.2 km^2	Area (HW)	313.8 km^2
Perimeter	112.8 km	Volume (CD)	529.0 $10^6 m^3$
Axis Length	43.5 km	Maximum Depth	16.4 m
Section Width	5.7 km	Section Area	42246.3 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
11.90 m	16.00 m	2446.0 $10^6 m^3$	2.59 m/s	4.07 m/s

Flushing time 7.1 hr
Tidal/Freshwater volume ratio 786.59

Watershed Area 4446.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	186.4 (48%)	May	158.1 (33%)	Sept	55.7 (73%)
Feb	131.9 (62%)	June	90.6 (68%)	Oct	104.0 (79%)
Mar	202.0 (48%)	July	54.3 (63%)	Nov	164.9 (62%)
Apr	278.8 (26%)	Aug	55.1 (79%)	Dec	187.4 (46%)

AVON BAY Zone 4Xr Chart 4010
Bay ID..BKc

Area (CD)	110.3 km^2	Area (HW)	218.2 km^2
Perimeter	99.9 km	Volume (CD)	607.0 $10^6 m^3$
Axis Length	43.5 km	Maximum Depth	14.6 m
Section Width	14.0 km	Section Area	140078.2 m^2

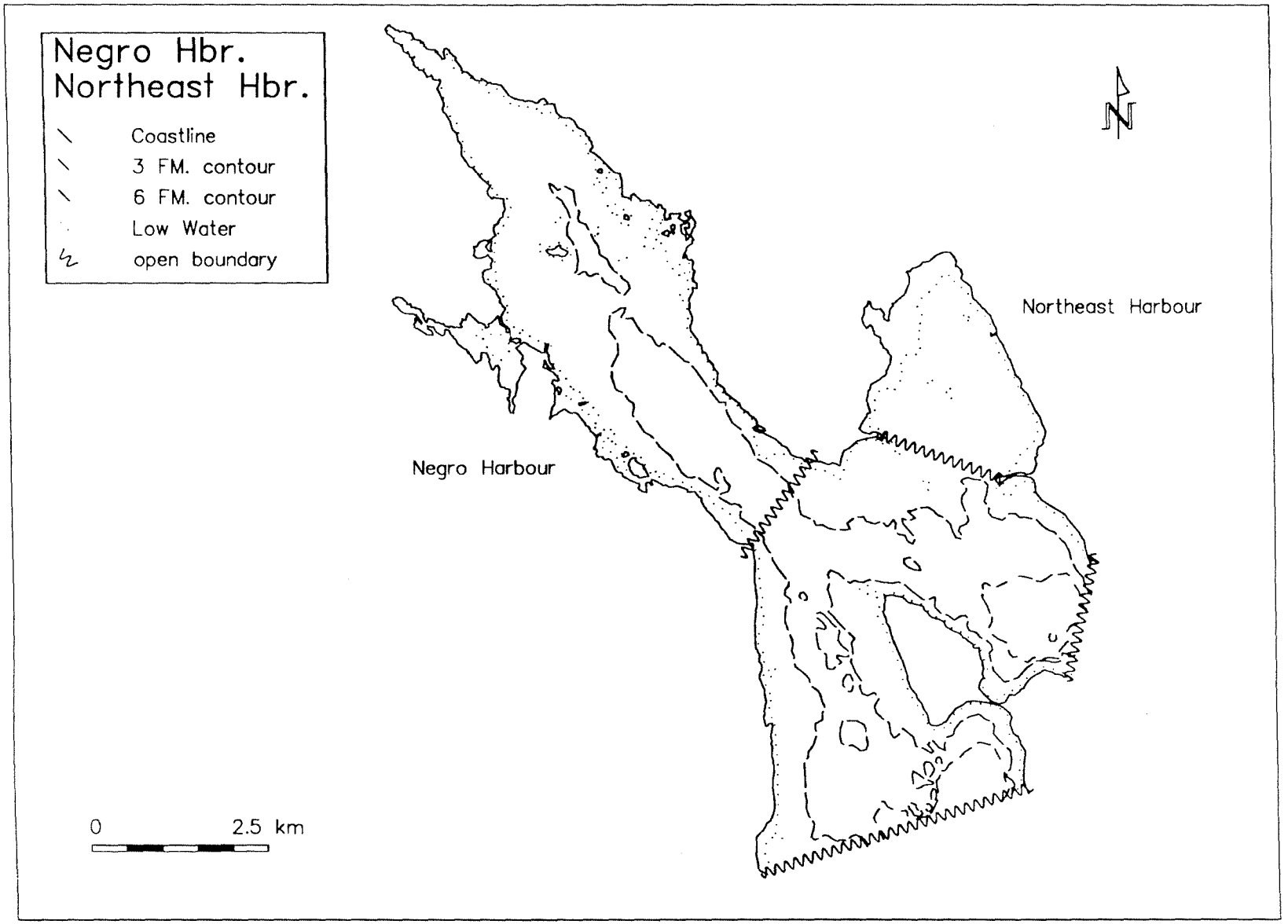
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
12.00 m	15.10 m	1971.1 $10^6 m^3$	0.63 m/s	0.99 m/s

Flushing time 8.5 hr
Tidal/Freshwater volume ratio 947.78

Watershed Area 3326.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	113.1 (39%)	May	112.9 (36%)	Sept	33.8 (82%)
Feb	88.6 (49%)	June	55.5 (64%)	Oct	64.4 (91%)
Mar	119.3 (44%)	July	36.3 (78%)	Nov	112.9 (69%)
Apr	209.8 (28%)	Aug	31.7 (88%)	Dec	138.1 (46%)


Negro Hbr.
Northeast Hbr.
Coastline
3 FM. contour
6 FM. contour
Low Water
open boundary
Northeast Harbour
Negro Harbour
0
2.5 km

NEGRO HARBOUR / NORTHEAST HARBOUR Zone 4Xo Chart 4215
Bay ID..AV

Area (CD)	34.2 km^2	Area (HW)	39.3 km^2
Perimeter	45.6 km	Volume (CD)	177.0 $10^6 m^3$
Axis Length	13.5 km	Maximum Depth	18.5 m
Section Width	5.1 km	Section Area	37387.7 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
2.00 m	2.50 m	73.5 $10^6 m^3$	0.09 m/s	0.14 m/s

Flushing time 35.7 hr
Tidal/Freshwater volume ratio 118.67

Watershed Area 847.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	40.7 (42%)	May	27.2 (45%)	Sept	11.4 (83%)
Feb	35.3 (47%)	June	17.3 (54%)	Oct	18.8 (71%)
Mar	42.3 (33%)	July	12.6 (83%)	Nov	31.2 (51%)
Apr	44.0 (33%)	Aug	10.4 (89%)	Dec	41.4 (39%)

NEGRO HARBOUR Zone 4Xo Chart 4215
Bay ID..AVa

Area (CD)	12.1 km^2	Area (HW)	14.8 km^2
Perimeter	25.9 km	Volume (CD)	7.0 $10^6 m^3$
Axis Length	8.8 km	Maximum Depth	8.5 m
Section Width	1.2 km	Section Area	918.1 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
2.00 m	2.50 m	26.9 $10^6 m^3$	1.31 m/s	2.06 m/s

Flushing time 7.8 hr
Tidal/Freshwater volume ratio 45.63

Watershed Area 807.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	38.8 (42%)	May	25.9 (45%)	Sept	10.9 (83%)
Feb	33.6 (47%)	June	16.4 (54%)	Oct	17.9 (71%)
Mar	40.3 (33%)	July	12.0 (83%)	Nov	29.7 (51%)
Apr	41.9 (33%)	Aug	10.0 (89%)	Dec	39.4 (39%)

NORTHEAST HARBOUR Zone 4Xo Chart 4215
Bay ID..AVb

Area (CD)	0.0 km^2	Area (HW)	4.9 km^2
Perimeter	8.6 km	Volume (CD)	0.0 $10^6 m^3$
Axis Length	3.3 km	Maximum Depth	5.2 m
Section Width	0.0 km	Section Area	0.0 m^2

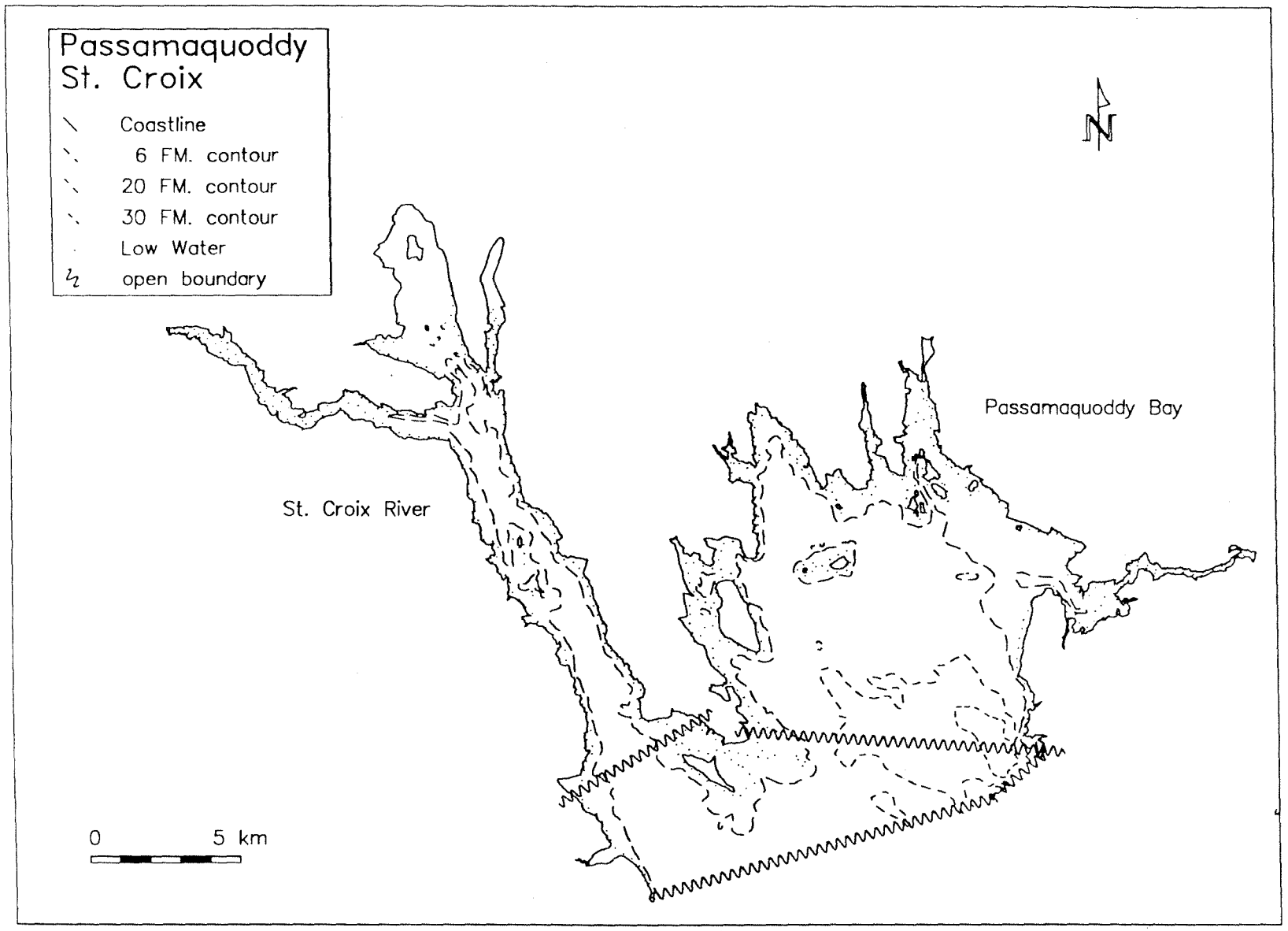
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
2.00 m	2.50 m	0.0 $10^6 m^3$	0.00 m/s	0.00 m/s

Flushing time 0.0 hr
Tidal/Freshwater volume ratio 0.00

Watershed Area 8.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	0.4 (42%)	May	0.3 (45%)	Sept	0.1 (83%)
Feb	0.4 (47%)	June	0.2 (54%)	Oct	0.2 (71%)
Mar	0.4 (33%)	July	0.1 (83%)	Nov	0.3 (51%)
Apr	0.5 (33%)	Aug	0.1 (89%)	Dec	0.4 (39%)


Passamaquoddy
St. Croix
Coastline
6 FM. contour
20 FM. contour
30 FM. contour
Low Water
open boundary
N
Passamaquoddy Bay
St. Croix River
0
5 km

PASSAMAQUODDY BAY & ST. CROIX Zone 4Xs Chart 4331
Bay ID..CE

Area (CD)	172.3 km^2	Area (HW)	197.0 km^2
Perimeter	160.8 km	Volume (CD)	3217.0 $10^6 m^3$
Axis Length	13.7 km	Maximum Depth	67.7 m
Section Width	13.7 km	Section Area	346287.0 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
6.00 m	8.00 m	1108.3 $10^6 m^3$	0.14 m/s	0.22 m/s

Flushing time 41.9 hr
Tidal/Freshwater volume ratio 334.07

Watershed Area 6949.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	124.8 (49%)	May	237.8 (47%)	Sept	79.3 (57%)
Feb	125.4 (58%)	June	135.4 (51%)	Oct	103.7 (60%)
Mar	161.2 (51%)	July	94.7 (47%)	Nov	141.8 (50%)
Apr	340.4 (34%)	Aug	82.5 (57%)	Dec	153.9 (57%)

PASSAMAQUODDY BAY Zone 4Xs Chart 4331
Bay ID..CEa

Area (CD)	86.0 km^2	Area (HW)	98.5 km^2
Perimeter	75.7 km	Volume (CD)	1733.0 $10^6 m^3$
Axis Length	13.7 km	Maximum Depth	67.7 m
Section Width	8.7 km	Section Area	330040.3 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
6.00 m	8.00 m	553.6 $10^6 m^3$	0.08 m/s	0.12 m/s

Flushing time 44.8 hr
Tidal/Freshwater volume ratio 377.53

Watershed Area 2724.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	52.8 (62%)	May	113.0 (51%)	Sept	24.4 (79%)
Feb	47.8 (71%)	June	53.0 (62%)	Oct	45.1 (76%)
Mar	69.6 (60%)	July	31.8 (68%)	Nov	70.8 (52%)
Apr	178.6 (32%)	Aug	24.5 (87%)	Dec	75.8 (60%)

ST CROIX RIVER Zone 4Xs Chart 4331
Bay ID..CEb

Area (CD)	40.0 km^2	Area (HW)	49.3 km^2
Perimeter	75.6 km	Volume (CD)	406.0 $10^6 m^3$
Axis Length	24.4 km	Maximum Depth	32.9 m
Section Width	4.5 km	Section Area	48780.2 m^2

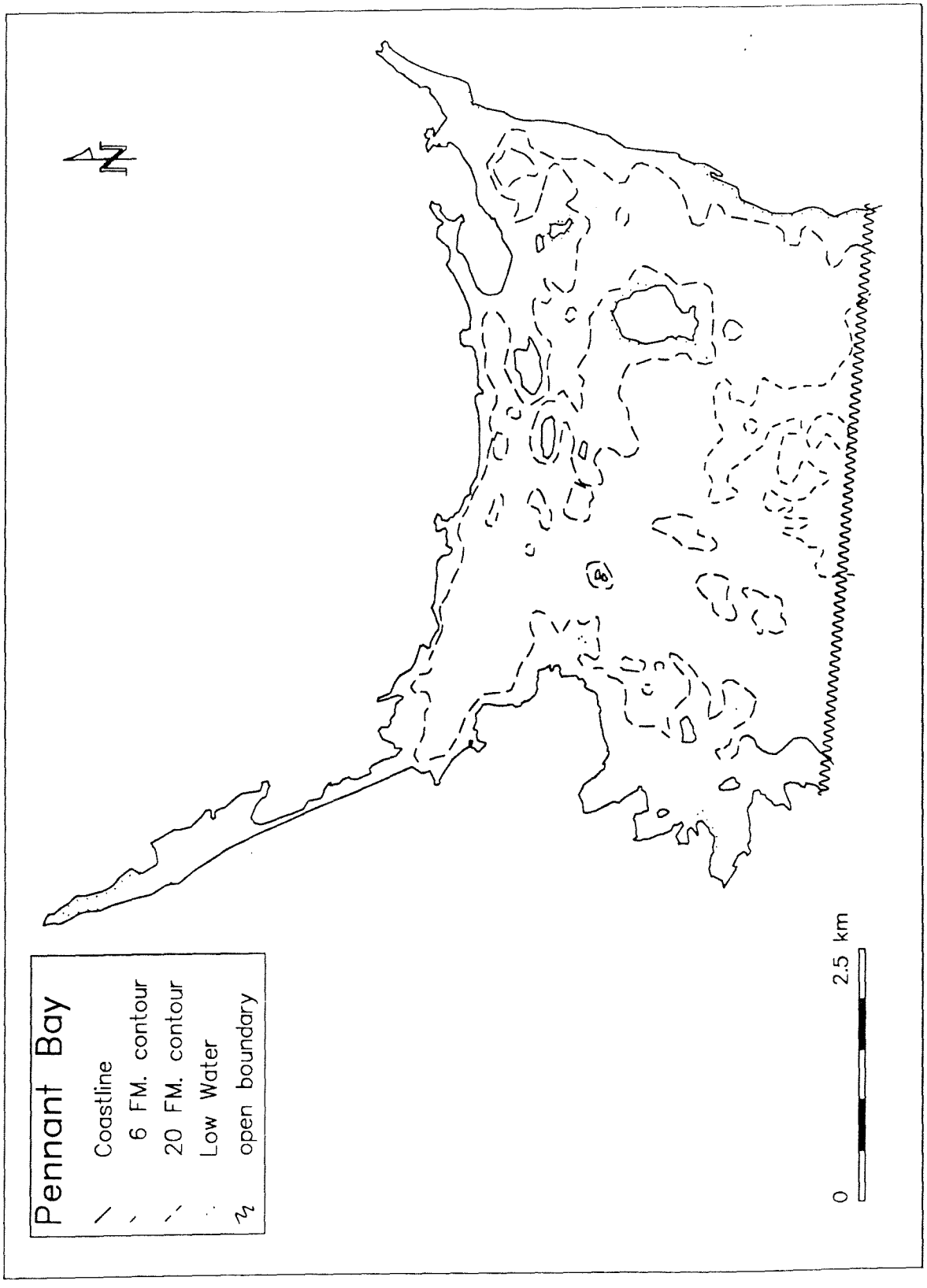
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
6.00 m	8.00 m	267.9 $10^6 m^3$	0.25 m/s	0.39 m/s

Flushing time 24.5 hr
Tidal/Freshwater volume ratio 144.75

Watershed Area 4224.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	72.0 (35%)	May	124.8 (42%)	Sept	54.9 (35%)
Feb	77.6 (44%)	June	82.4 (40%)	Oct	58.6 (43%)
Mar	91.6 (43%)	July	62.9 (26%)	Nov	71.0 (49%)
Apr	161.8 (36%)	Aug	58.0 (28%)	Dec	78.1 (55%)


Pennant Bay
Coastline
6 FM. contour
20 FM. contour
Low Water
open boundary
N
0
2.5 km

PENNANT BAY Zone 4Xm Chart 4385
Bay ID..BV

Area (CD)	23.8 km^2	Area (HW)	24.2 km^2
Perimeter	38.1 km	Volume (CD)	400.0 $10^6 m^3$
Axis Length	9.3 km	Maximum Depth	42.1 m
Section Width	5.7 km	Section Area	152350.0 m^2

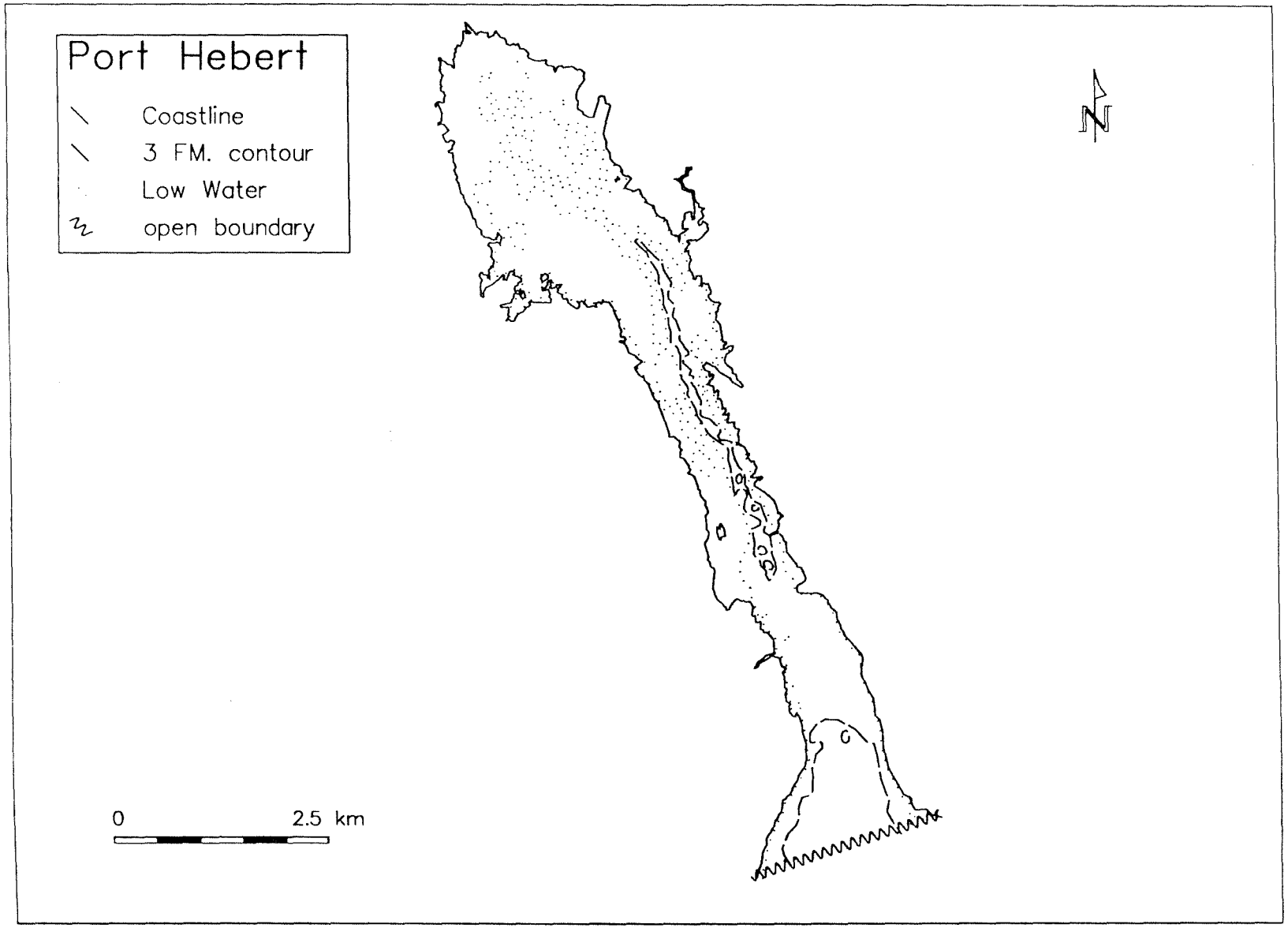
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.00 m	36.0 $10^6 m^3$	0.01 m/s	0.02 m/s

Flushing time 143.8 hr
Tidal/Freshwater volume ratio 181.03

Watershed Area 180.7 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	10.1 (65%)	May	7.6 (51%)	Sept	4.9 (42%)
Feb	8.9 (49%)	June	9.8 (70%)	Oct	4.9 (59%)
Mar	15.4 (10%)	July	4.6 (82%)	Nov	7.4 (75%)
Apr	16.1 (29%)	Aug	7.5 (55%)	Dec	9.7 (64%)


Port Hebert
Coastline
3 FM. contour
Low Water
open boundary
0
2.5 km
N

PORT HEBERT Zone 4Xo Chart 4212
Bay ID..BE

Area (CD)	7.5 km^2	Area (HW)	12.1 km^2
Perimeter	32.5 km	Volume (CD)	25.0 $10^6 m^3$
Axis Length	10.6 km	Maximum Depth	10.1 m
Section Width	1.8 km	Section Area	8635.5 m^2

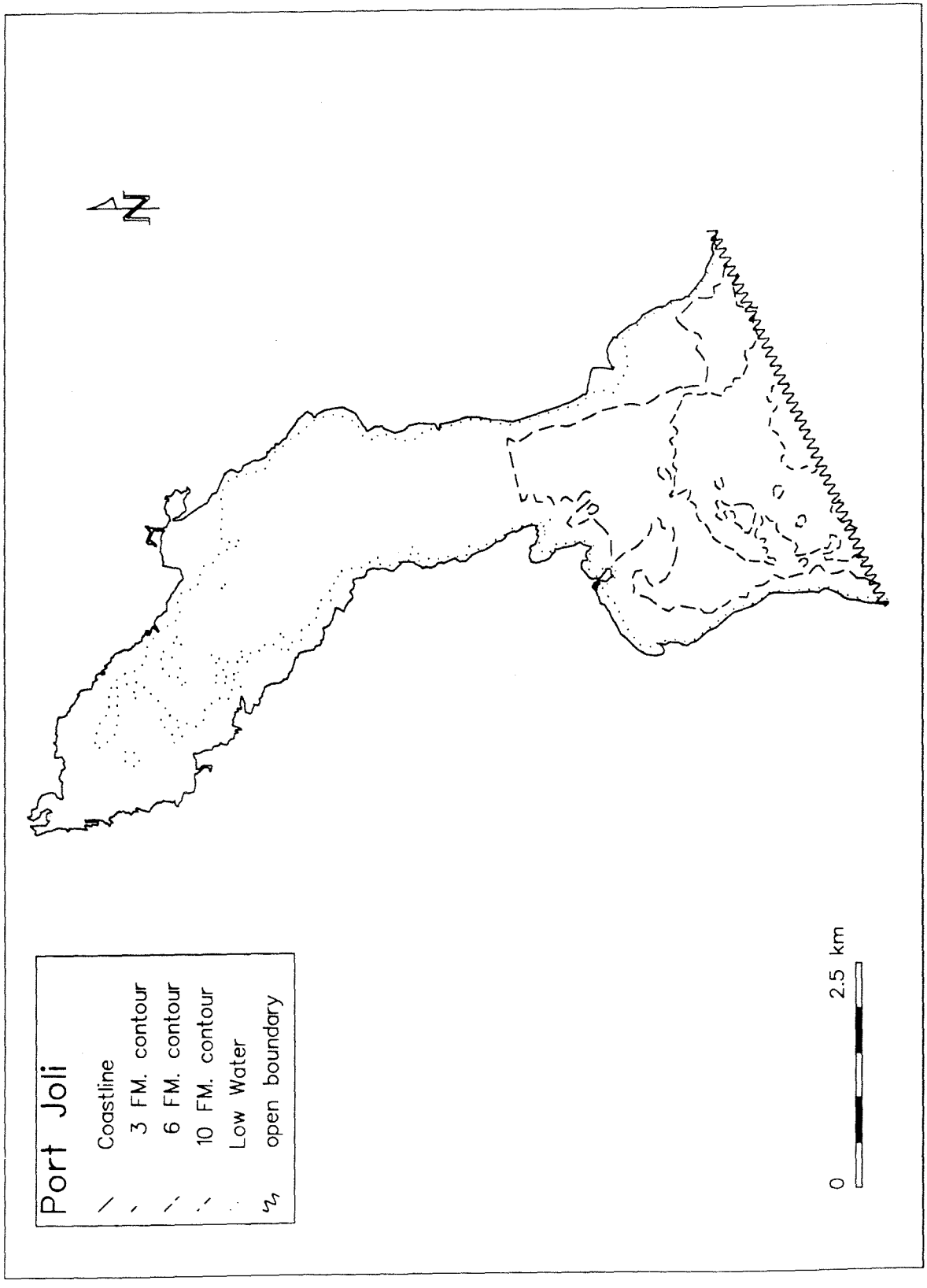
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.30 m	15.7 $10^6 m^3$	0.08 m/s	0.13 m/s

Flushing time 25.4 hr
Tidal/Freshwater volume ratio 237.75

Watershed Area 90.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	4.4 (42%)	May	2.9 (45%)	Sept	1.2 (83%)
Feb	3.8 (47%)	June	1.9 (54%)	Oct	2.0 (71%)
Mar	4.5 (33%)	July	1.3 (83%)	Nov	3.3 (51%)
Apr	4.7 (33%)	Aug	1.1 (89%)	Dec	4.4 (39%)


Port Joli
Coastline
3 FM. contour
6 FM. contour
10 FM. contour
Low Water
open boundary
N
0
2.5 km

PORT JOLI Zone 4Xo Chart 4212
Bay ID..BD

Area (CD)	15.8 km^2	Area (HW)	20.1 km^2
Perimeter	26.4 km	Volume (CD)	96.0 $10^6 m^3$
Axis Length	10.1 km	Maximum Depth	20.1 m
Section Width	4.3 km	Section Area	56285.9 m^2

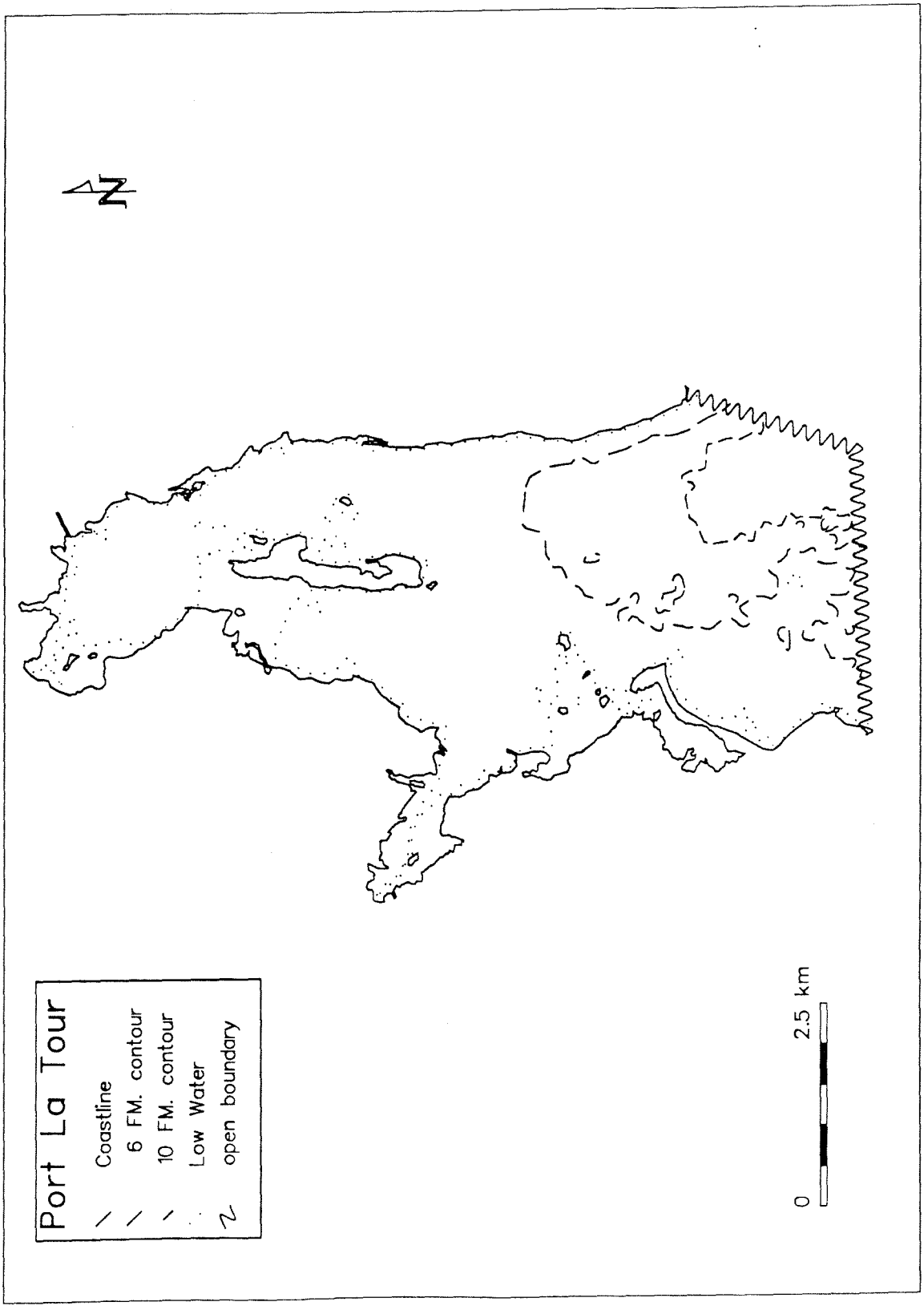
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.30 m	28.8 $10^6 m^3$	0.02 m/s	0.04 m/s

Flushing time 47.3 hr
Tidal/Freshwater volume ratio 499.43

Watershed Area 78.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.8 (42%)	May	2.5 (45%)	Sept	1.1 (83%)
Feb	3.3 (47%)	June	1.6 (54%)	Oct	1.7 (71%)
Mar	3.9 (33%)	July	1.2 (83%)	Nov	2.9 (51%)
Apr	4.1 (33%)	Aug	1.0 (89%)	Dec	3.8 (39%)


Port La Tour
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
N
0
2.5 km

PORT LA TOUR Zone 4Xo Chart 4215
Bay ID..AU

Area (CD)	17.2 km^2	Area (HW)	22.4 km^2
Perimeter	38.5 km	Volume (CD)	90.0 $10^6 m^3$
Axis Length	8.1 km	Maximum Depth	14.3 m
Section Width	2.9 km	Section Area	28845.9 m^2

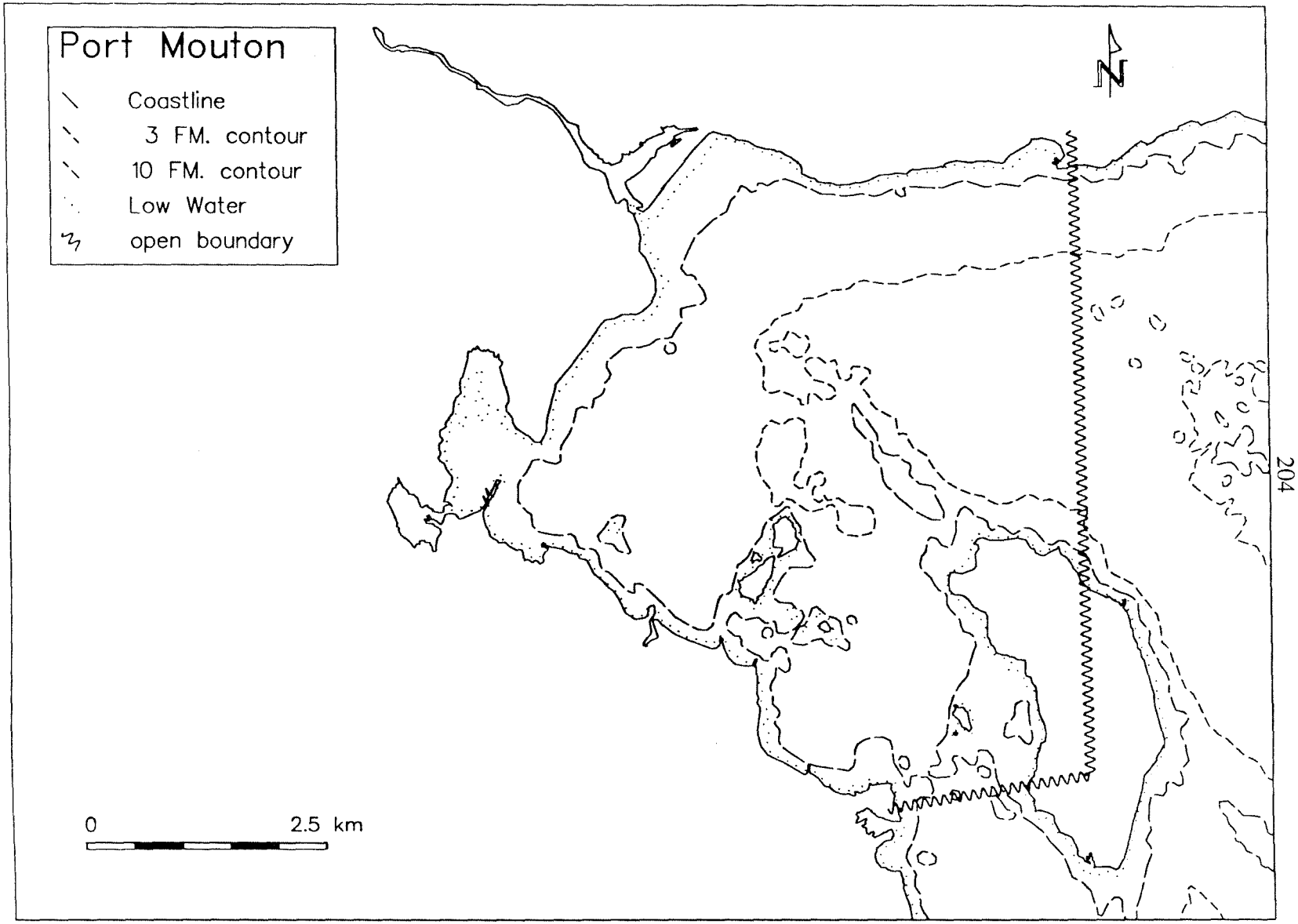
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
2.00 m	2.50 m	39.7 $10^6 m^3$	0.06 m/s	0.10 m/s

Flushing time 33.9 hr
Tidal/Freshwater volume ratio 1225.99

Watershed Area 62.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	2.0 (25%)	May	2.1 (42%)	Sept	1.0 (64%)
Feb	1.8 (27%)	June	1.0 (25%)	Oct	0.8 (52%)
Mar	2.1 (32%)	July	1.0 (41%)	Nov	0.9 (60%)
Apr	2.3 (54%)	Aug	0.8 (36%)	Dec	1.6 (41%)


Port Mouton
Coastline
3 FM. contour
10 FM. contour
Low Water
open boundary
N
0
2.5 km

PORT MOUTON Zone 4Xo Chart 4212
Bay ID..BC

Area (CD)	55.6 km^2	Area (HW)	58.1 km^2
Perimeter	27.0 km	Volume (CD)	726.0 $10^6 m^3$
Axis Length	6.5 km	Maximum Depth	21.9 m
Section Width	13.6 km	Section Area	220328.6 m^2

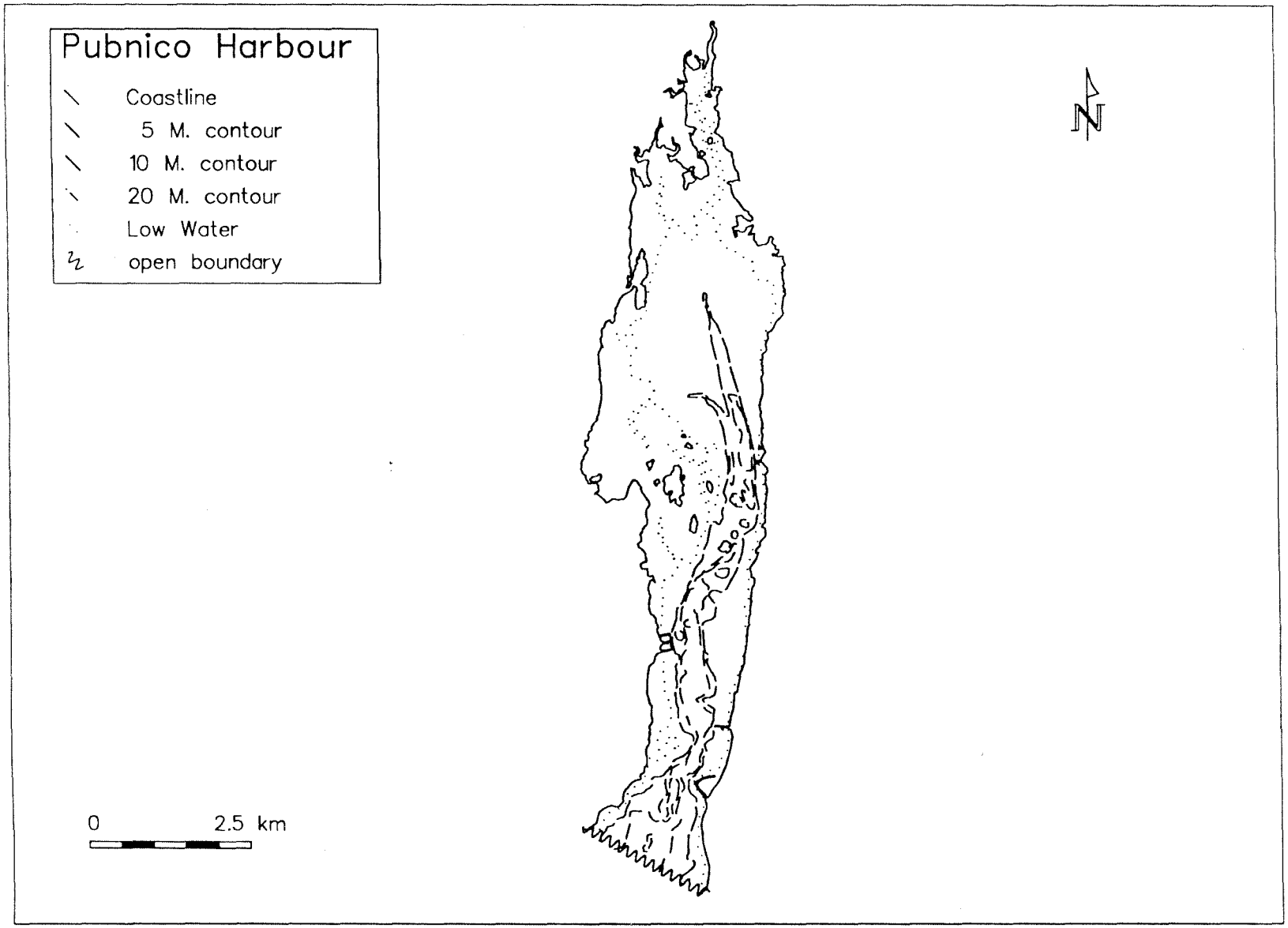
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.50 m	2.10 m	85.3 $10^6 m^3$	0.02 m/s	0.03 m/s

Flushing time 111.7 hr
Tidal/Freshwater volume ratio 386.04

Watershed Area 302.3 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	14.5 (42%)	May	9.7 (45%)	Sept	4.1 (83%)
Feb	12.6 (47%)	June	6.2 (54%)	Oct	6.7 (71%)
Mar	15.1 (33%)	July	4.4 (83%)	Nov	11.2 (51%)
Apr	15.7 (33%)	Aug	3.7 (89%)	Dec	14.8 (39%)


Pubnico Harbour
Coastline
5 M. contour
10 M. contour
20 M. contour
Low Water
open boundary
0
2.5 km
N

PUBNICO HARBOUR Zone 4Xo Chart 4242
Bay ID..AF

Area (CD)	12.5 km^2	Area (HW)	20.5 km^2
Perimeter	39.2 km	Volume (CD)	64.0 $10^6 m^3$
Axis Length	13.7 km	Maximum Depth	22.1 m
Section Width	1.7 km	Section Area	16853.1 m^2

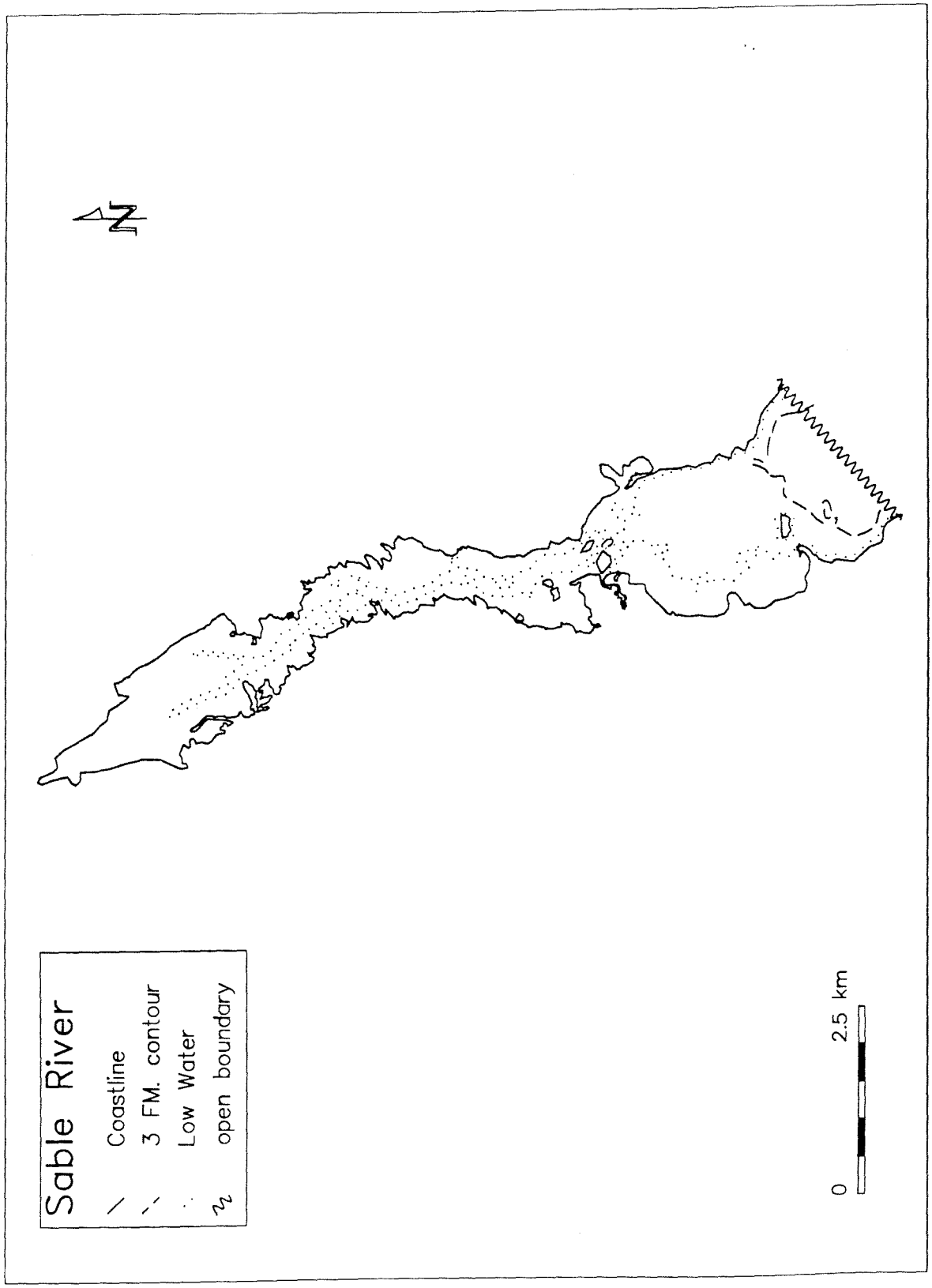
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
2.90 m	4.10 m	48.0 $10^6 m^3$	0.13 m/s	0.20 m/s

Flushing time 22.1 hr
Tidal/Freshwater volume ratio 618.07

Watershed Area 148.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	4.8 (25%)	May	5.1 (42%)	Sept	2.3 (64%)
Feb	4.4 (27%)	June	2.4 (25%)	Oct	1.9 (52%)
Mar	5.0 (32%)	July	2.4 (41%)	Nov	2.2 (60%)
Apr	5.4 (54%)	Aug	2.0 (36%)	Dec	3.9 (41%)


Sable River
Coastline
3 FM. contour
Low Water
open boundary
N
0
2.5 km

SABLE RIVER Zone 4Xo Chart 4213
Bay ID..BB

Area (CD)	5.8 km^2	Area (HW)	13.1 km^2
Perimeter	27.5 km	Volume (CD)	17.0 $10^6 m^3$
Axis Length	11.8 km	Maximum Depth	10.0 m
Section Width	2.1 km	Section Area	10284.3 m^2

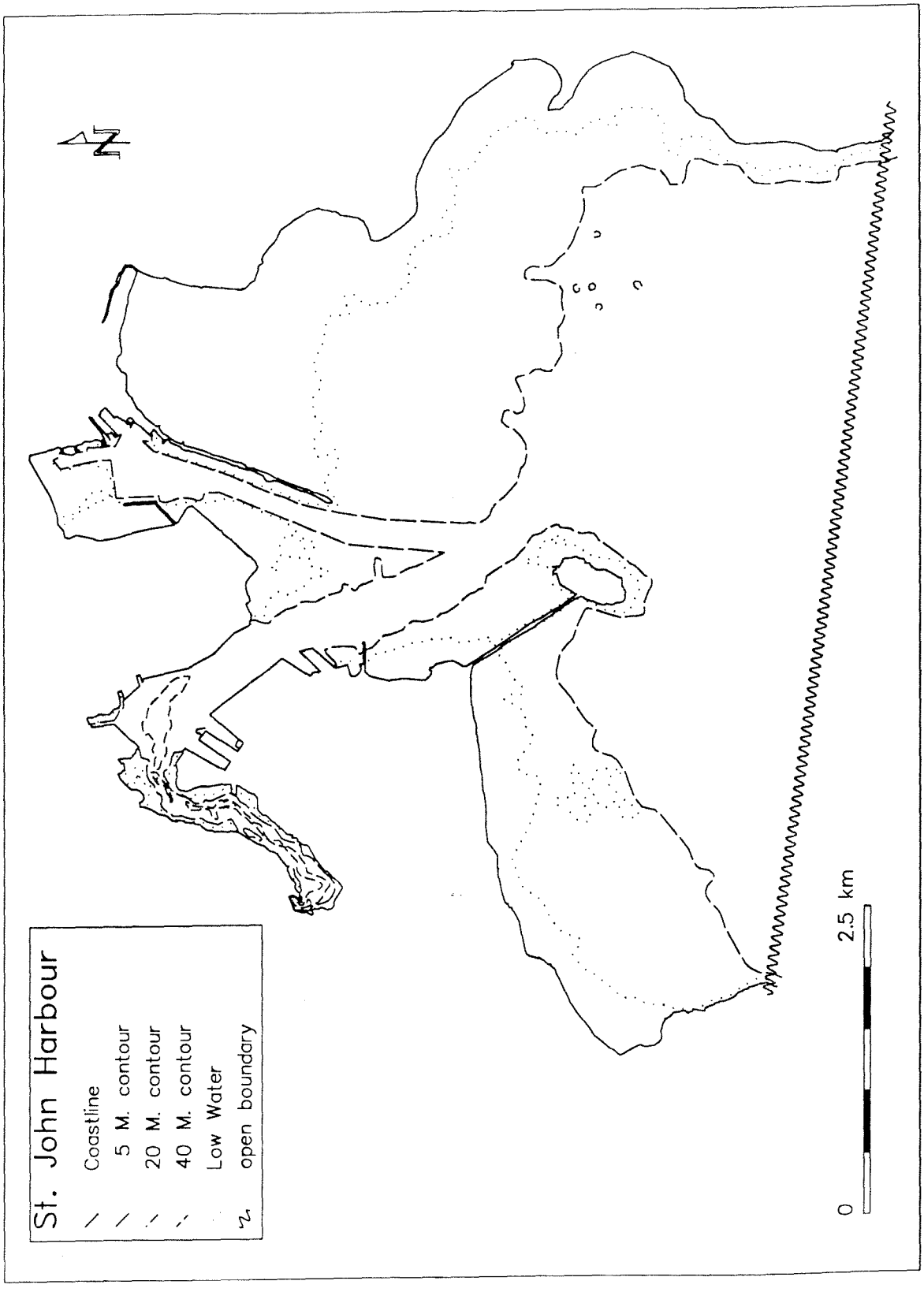
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.70 m	2.40 m	16.1 $10^6 m^3$	0.07 m/s	0.11 m/s

Flushing time 18.6 hr
Tidal/Freshwater volume ratio 61.70

Watershed Area 357.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	17.2 (42%)	May	11.4 (45%)	Sept	4.8 (83%)
Feb	14.9 (47%)	June	7.3 (54%)	Oct	8.0 (71%)
Mar	17.9 (33%)	July	5.3 (83%)	Nov	13.2 (51%)
Apr	18.6 (33%)	Aug	4.4 (89%)	Dec	17.4 (39%)


St. John Harbour
Coastline
5 M. contour
20 M. contour
40 M. contour
Low Water
open boundary
N
0
2.5 km

SAINT JOHN HARBOUR Zone 4Xs Chart 4117
Bay ID..AH

Area (CD)	25.6 km^2	Area (HW)	32.6 km^2
Perimeter	28.4 km	Volume (CD)	169.0 $10^6 m^3$
Axis Length	10.6 km	Maximum Depth	5.2 m
Section Width	7.0 km	Section Area	68402.0 m^2

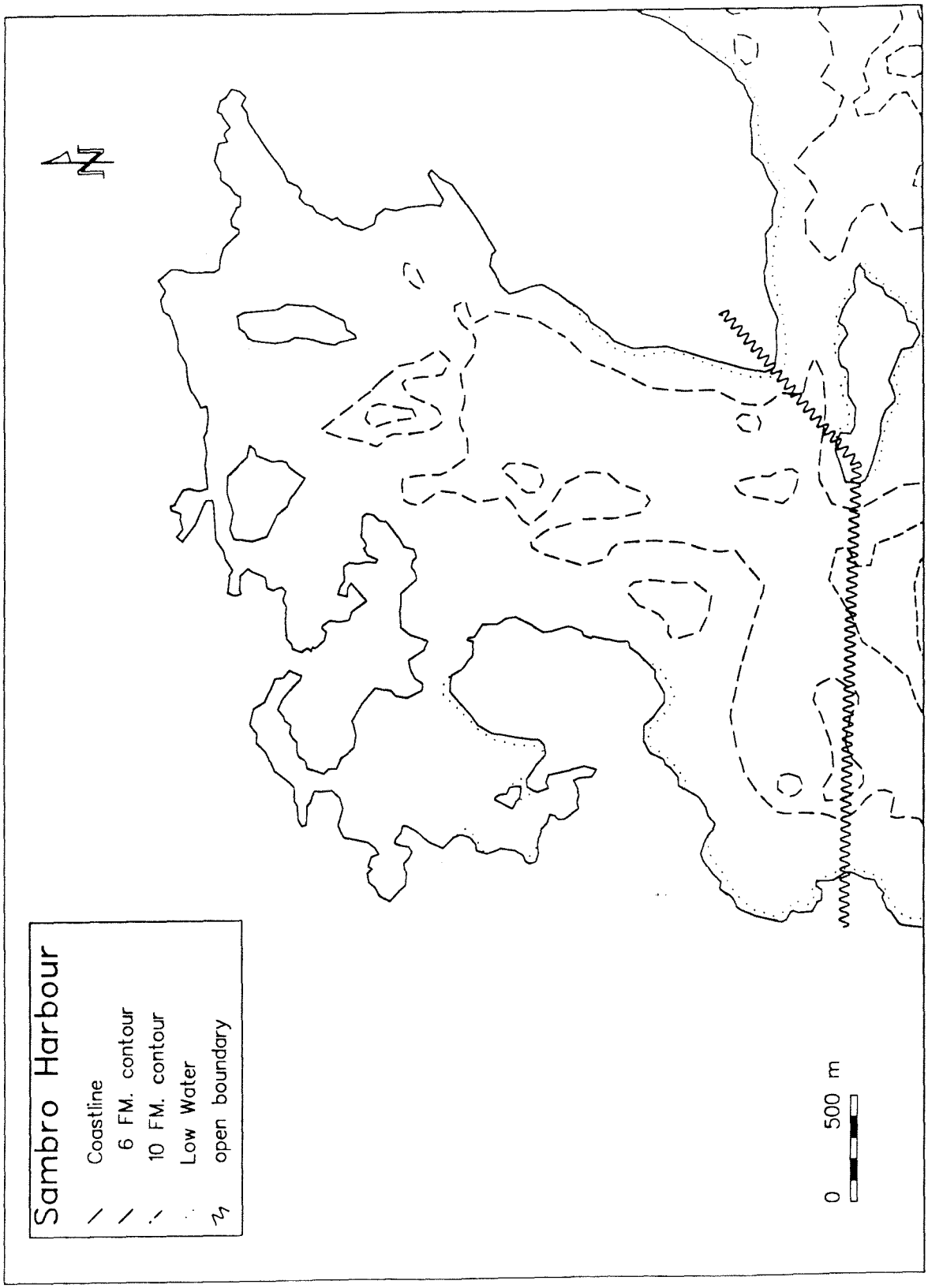
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
6.70 m	9.10 m	195.4 $10^6 m^3$	0.13 m/s	0.20 m/s

Flushing time 16.1 hr
Tidal/Freshwater volume ratio 8.50

Watershed Area 54730.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	433.0	(35%)	May	3391.0	(38%)	Sept	461.0	(52%)
Feb	314.0	(53%)	June	1138.0	(42%)	Oct	666.0	(68%)
Mar	467.0	(72%)	July	644.0	(47%)	Nov	1072.0	(51%)
Apr	2533.0	(41%)	Aug	470.0	(67%)	Dec	753.0	(52%)


Sambro Harbour
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
N
0
500 m

SAMBRO HARBOUR Zone 4XM Chart 4385
Bay ID..BW

Area (CD)	6.3 km^2	Area (HW)	6.4 km^2
Perimeter	20.9 km	Volume (CD)	51.0 $10^6 m^3$
Axis Length	3.3 km	Maximum Depth	15.2 m
Section Width	2.2 km	Section Area	27974.7 m^2

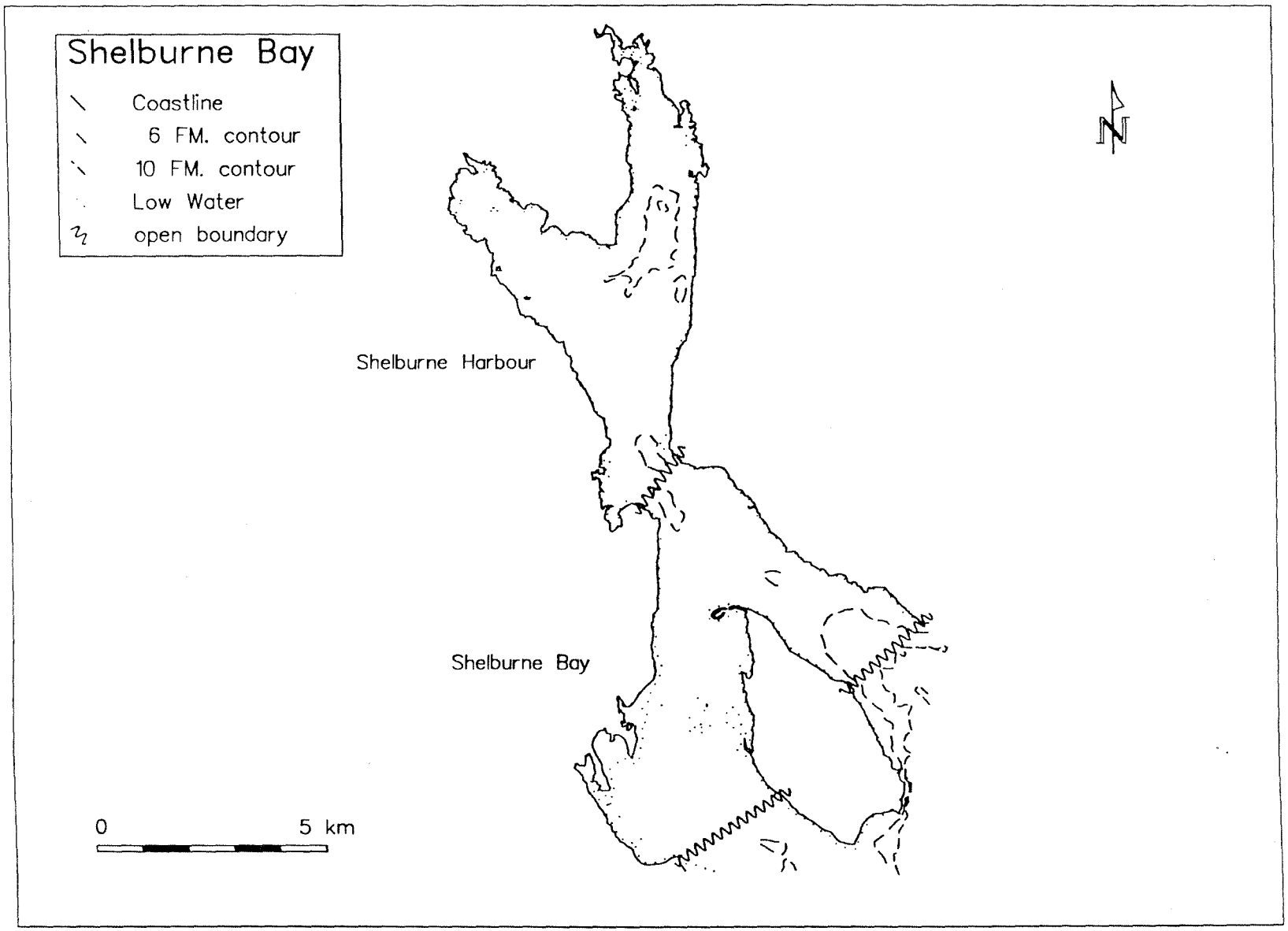
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.10 m	10.1 $10^6 m^3$	0.02 m/s	0.03 m/s

Flushing time 68.3 hr
Tidal/Freshwater volume ratio 417.24

Watershed Area 22.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	1.2 (65%)	May	0.9 (51%)	Sept	0.6 (42%)
Feb	1.1 (49%)	June	1.2 (70%)	Oct	0.6 (59%)
Mar	1.9 (10%)	July	0.6 (82%)	Nov	0.9 (75%)
Apr	2.0 (29%)	Aug	0.9 (55%)	Dec	1.2 (64%)


Shelburne Bay
Coastline
6 FM. contour
10 FM. contour
Low Water
open boundary
Shelburne Harbour
Shelburne Bay
0
5 km
N

SHELBURNE BAY Zone 4Xo Chart 4214
Bay ID..BF

Area (CD)	44.4 km^2	Area (HW)	48.4 km^2
Perimeter	64.6 km	Volume (CD)	260.0 $10^6 m^3$
Axis Length	16.2 km	Maximum Depth	16.4 m
Section Width	4.3 km	Section Area	29019.5 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.70 m	2.40 m	78.9 $10^6 m^3$	0.12 m/s	0.19 m/s

Flushing time 46.8 hr
Tidal/Freshwater volume ratio 132.42

Watershed Area 815.5 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	39.2 (42%)	May	26.2 (45%)	Sept	11.0 (83%)
Feb	33.9 (47%)	June	16.6 (54%)	Oct	18.1 (71%)
Mar	40.7 (33%)	July	12.1 (83%)	Nov	30.0 (51%)
Apr	42.3 (33%)	Aug	10.0 (89%)	Dec	39.9 (39%)

SHELBURNE HARBOUR Zone 4Xo Chart 4214
Bay ID..BFa

Area (CD)	21.1 km^2	Area (HW)	22.6 km^2
Perimeter	42.7 km	Volume (CD)	140.0 $10^6 m^3$
Axis Length	9.6 km	Maximum Depth	13.1 m
Section Width	1.2 km	Section Area	8702.7 m^2

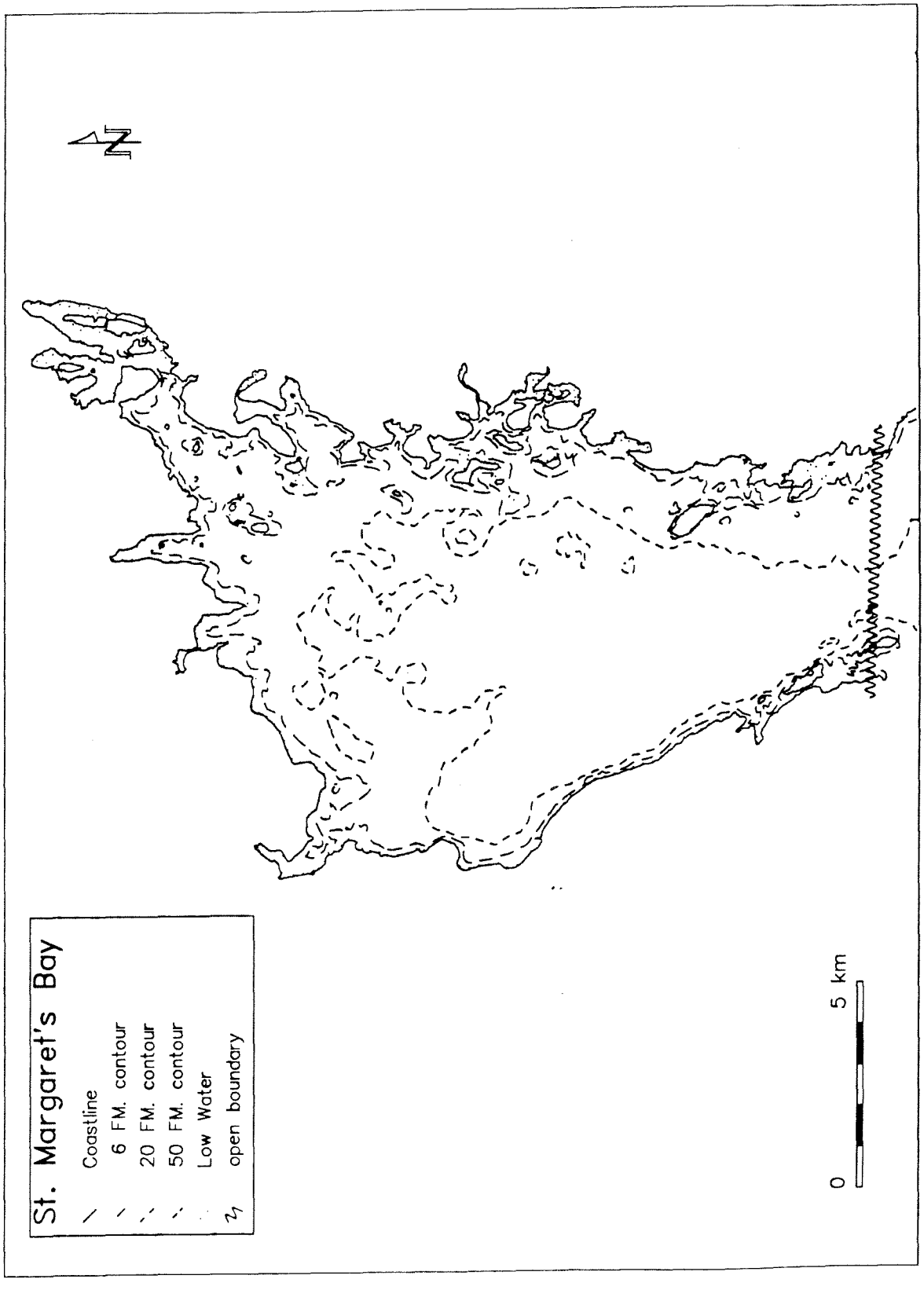
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.70 m	2.40 m	37.2 $10^6 m^3$	0.19 m/s	0.30 m/s

Flushing time 52.6 hr
Tidal/Freshwater volume ratio 68.29

Watershed Area 748.0 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	35.9 (42%)	May	24.0 (45%)	Sept	10.1 (83%)
Feb	31.1 (47%)	June	15.3 (54%)	Oct	16.6 (71%)
Mar	37.3 (33%)	July	11.1 (83%)	Nov	27.5 (51%)
Apr	38.3 (33%)	Aug	9.2 (89%)	Dec	36.6 (39%)


St. Margaret's Bay
Coastline
6 FM. contour
20 FM. contour
50 FM. contour
Low Water
open boundary
0
5 km

ST. MARGARET'S BAY Zone 4Xm Chart 4386
Bay ID..BP

Area (CD)	138.0 km^2	Area (HW)	141.7 km^2
Perimeter	123.6 km	Volume (CD)	5191.0 $10^6 m^3$
Axis Length	23.7 km	Maximum Depth	91.4 m
Section Width	7.2 km	Section Area	273965.5 m^2

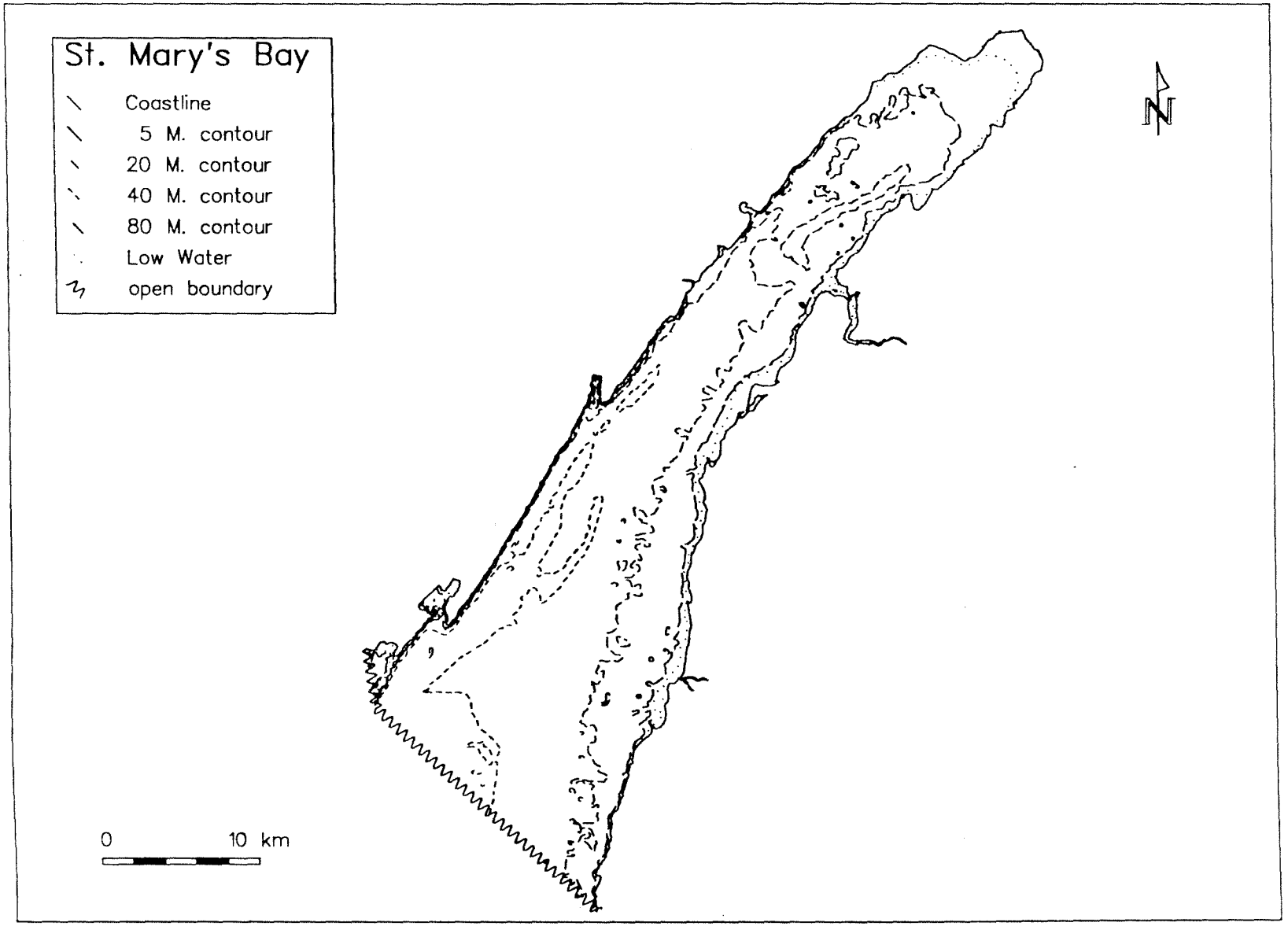
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
1.60 m	2.30 m	223.8 $10^6 m^3$	0.04 m/s	0.06 m/s

Flushing time 294.1 hr
Tidal/Freshwater volume ratio 416.32

Watershed Area 819.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	29.0 (64%)	May	29.4 (56%)	Sept	10.7 (103%)
Feb	22.4 (54%)	June	16.7 (70%)	Oct	17.2 (84%)
Mar	30.5 (40%)	July	10.1 (86%)	Nov	30.3 (57%)
Apr	50.7 (38%)	Aug	8.6 (106%)	Dec	33.0 (42%)


St. Mary's Bay
Coastline
5 M. contour
20 M. contour
40 M. contour
80 M. contour
Low Water
open boundary
0
10 km
N

ST. MARY'S BAY Zone 4Xr Chart 4118
Bay ID..AJ

Area (CD)	556.2 km^2	Area (HW)	589.7 km^2
Perimeter	161.5 km	Volume (CD)	13168.0 $10^6 m^3$
Axis Length	59.8 km	Maximum Depth	84.0 m
Section Width	22.6 km	Section Area	816248.6 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
4.60 m	6.40 m	2635.9 $10^6 m^3$	0.14 m/s	0.23 m/s

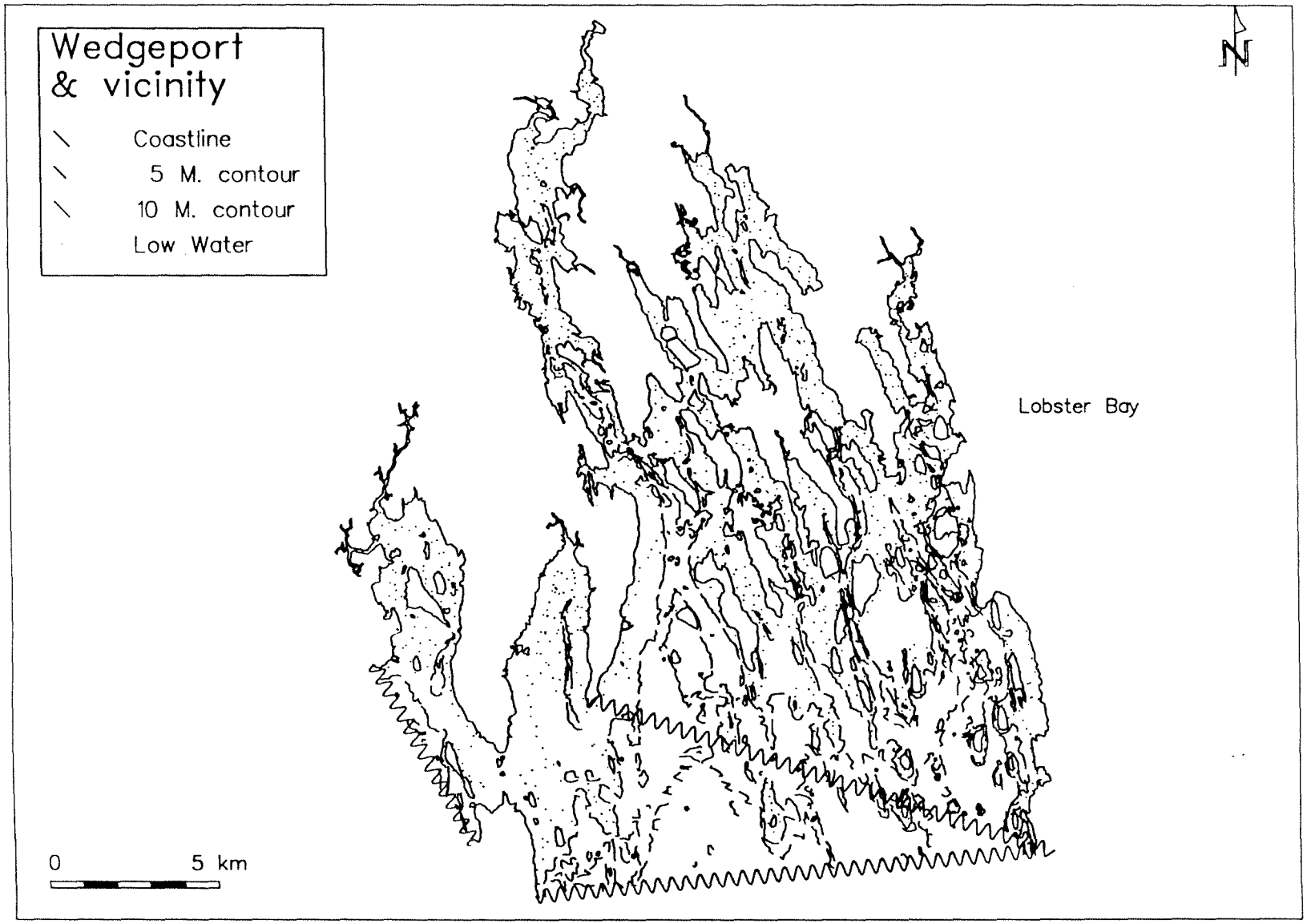
Flushing time 68.0 hr
Tidal/Freshwater volume ratio 5527.76

Watershed Area 748.1 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	31.9 (38%)	May	21.0 (49%)	Sept	6.7 (112%)
Feb	26.5 (46%)	June	12.2 (78%)	Oct	12.3 (90%)
Mar	35.5 (44%)	July	9.0 (90%)	Nov	23.0 (60%)
Apr	39.1 (36%)	Aug	6.3 (130%)	Dec	32.4 (41%)

Coastline closed at Petit Passage and Grand Passage


Wedgeport
& vicinity
Coastline
5 M. contour
10 M. contour
Low Water
Lobster Bay
N
0
5 km

WEDGEPORT & VICINITY Zone 4Xq Chart 4244
Bay ID..AI

Area (CD)	144.0 km^2	Area (HW)	215.6 km^2
Perimeter	186.1 km	Volume (CD)	849.0 $10^6 m^3$
Axis Length	26.4 km	Maximum Depth	16.5 m
Section Width	20.0 km	Section Area	173040.1 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
3.00 m	4.10 m	539.5 $10^6 m^3$	0.14 m/s	0.22 m/s

Flushing time 25.2 hr
Tidal/Freshwater volume ratio 409.08

Watershed Area 1921.9 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	85.1 (25%)	May	55.9 (42%)	Sept	27.1 (64%)
Feb	77.0 (27%)	June	40.4 (25%)	Oct	38.6 (52%)
Mar	88.0 (32%)	July	29.3 (41%)	Nov	64.4 (60%)
Apr	93.0 (54%)	Aug	24.3 (36%)	Dec	84.9 (41%)

LOBSTER BAY Zone 4Xq Chart 4244
Bay ID..AId

Area (CD)	86.2 km^2	Area (HW)	137.8 km^2
Perimeter	153.1 km	Volume (CD)	443.0 $10^6 m^3$
Axis Length	21.1 km	Maximum Depth	15.4 m
Section Width	13.3 km	Section Area	101898.5 m^2

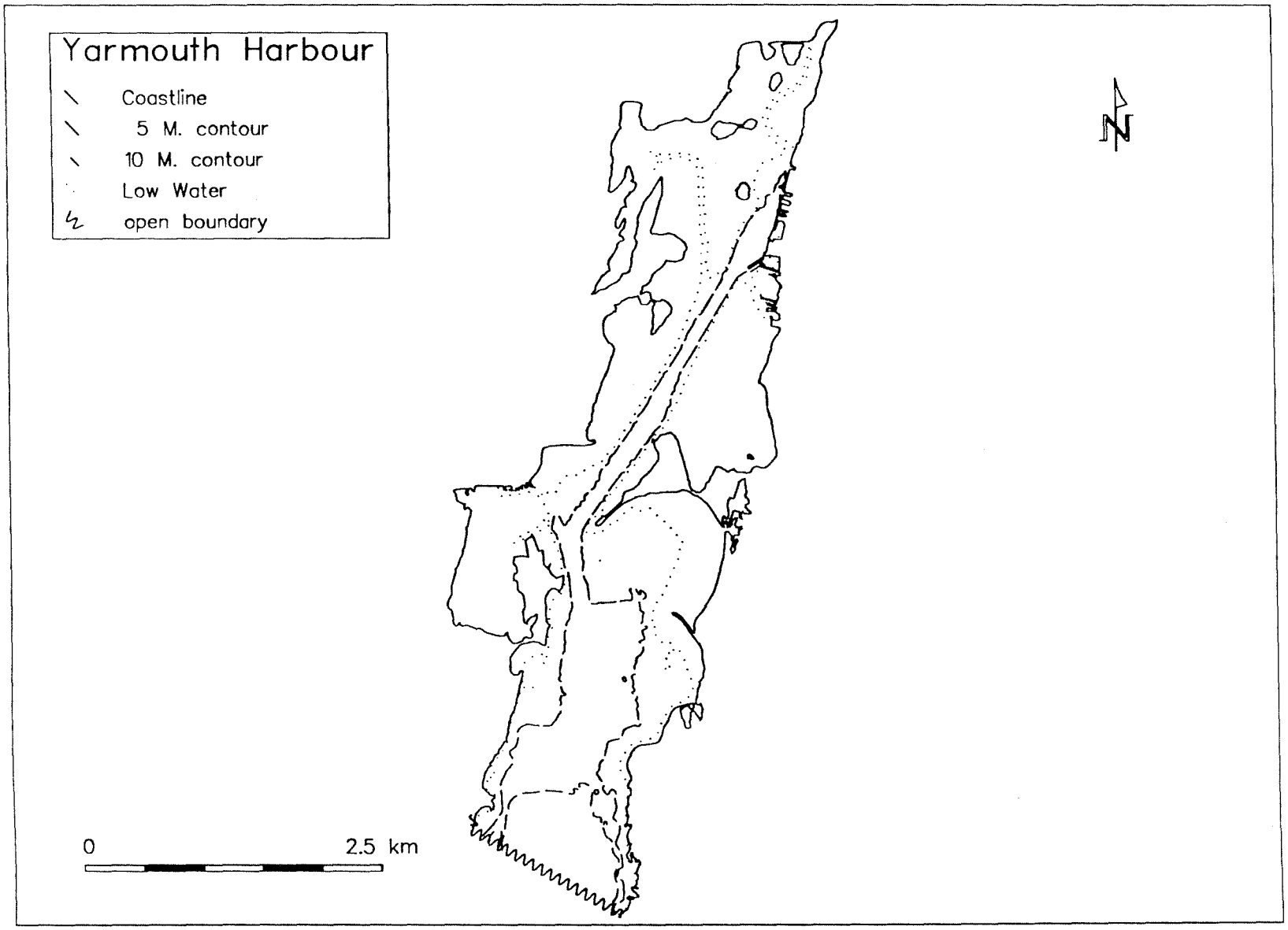
Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
2.90 m	3.90 m	324.9 $10^6 m^3$	0.14 m/s	0.22 m/s

Flushing time 22.5 hr
Tidal/Freshwater volume ratio 2172.85

Watershed Area 283.8 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	9.2 (25%)	May	9.8 (42%)	Sept	4.4 (64%)
Feb	8.4 (27%)	June	4.6 (25%)	Oct	3.6 (52%)
Mar	9.6 (32%)	July	4.8 (41%)	Nov	4.3 (60%)
Apr	10.4 (54%)	Aug	3.8 (36%)	Dec	7.4 (41%)


Yarmouth Harbour
Coastline
5 M. contour
10 M. contour
Low Water
open boundary
0
2.5 km
N

YARMOUTH HARBOUR Zone 4Xq Chart 4245
Bay ID..AG

Area (CD)	3.9 km^2	Area (HW)	9.1 km^2
Perimeter	25.0 km	Volume (CD)	21.0 $10^6 m^3$
Axis Length	8.0 km	Maximum Depth	14.6 m
Section Width	1.2 km	Section Area	10815.8 m^2

Tidal Range		Tidal Volume	Tidal Current	
Mean	Large	Mean tide	Mean	Peak
3.80 m	5.20 m	24.8 $10^6 m^3$	0.10 m/s	0.16 m/s

Flushing time 15.9 hr
Tidal/Freshwater volume ratio 478.32

Watershed Area 98.4 km^2

Freshwater Discharge m^3/s (Standard Deviation)

Jan	3.2 (25%)	May	3.4 (42%)	Sept	1.5 (64%)
Feb	2.9 (27%)	June	1.6 (25%)	Oct	1.3 (52%)
Mar	3.3 (32%)	July	1.7 (41%)	Nov	1.4 (60%)
Apr	3.6 (54%)	Aug	1.3 (36%)	Dec	2.6 (41%)

APPENDIX B

This appendix presents map showing the inshore fishing areas of the Atlantic region. A series of diagrams follows which gives the monthly mean temperatures and their standard deviations for each of the regions. These plots are constructed from the inshore long-term temperature monitoring program. Not all areas have year round coverage. A listing of the data values is given at the end of the appendix. These monthly means of temperature can be used as first estimate of the annual cycle of temperature for inlets in a particular region. Data may be available for individual inlets and can be obtained from the Coastal Oceanography division of Bedford Institute of Oceanography (see also Appendix C).

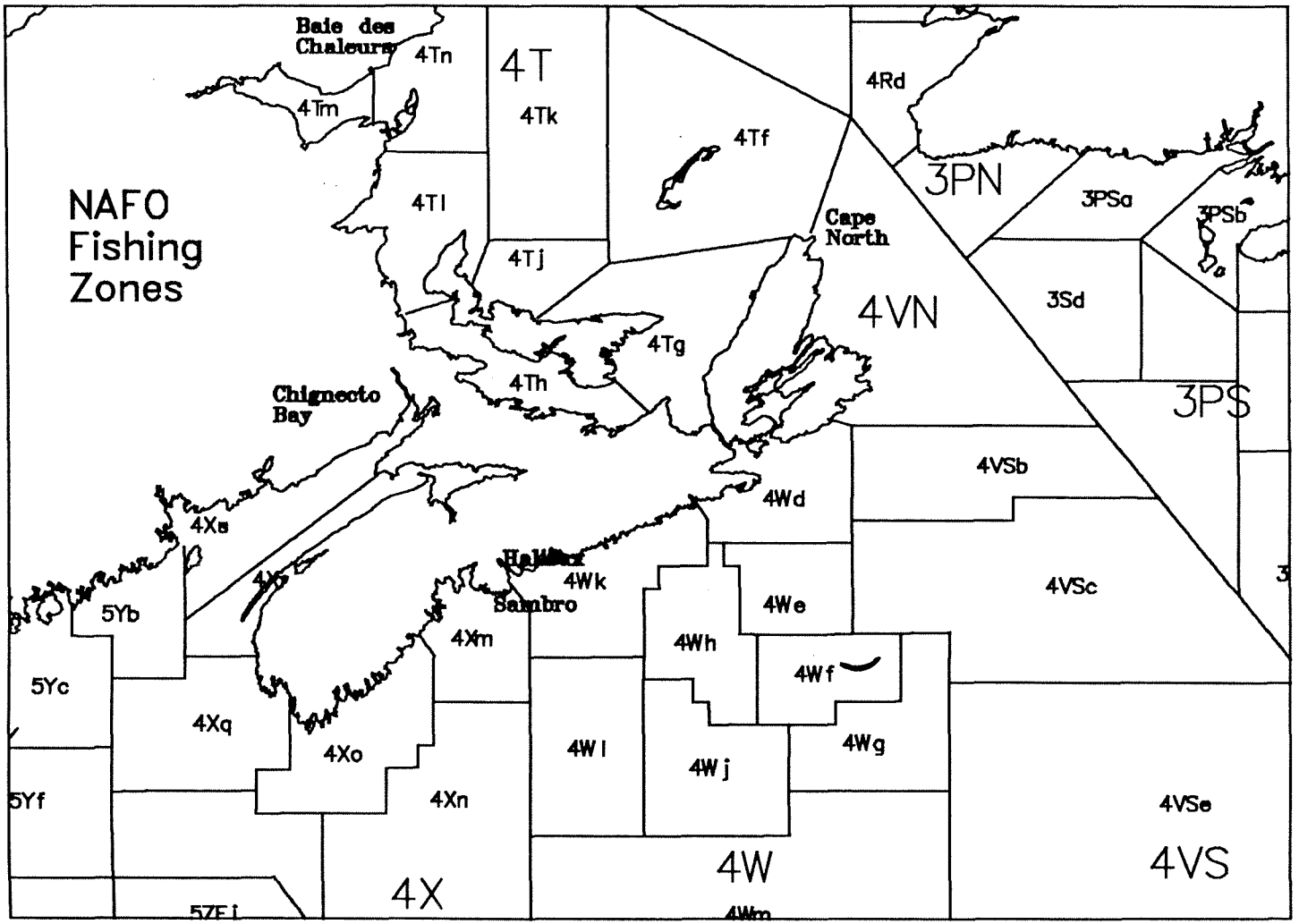


Figure 3 NAFO Fishing Zones

TABLE 1

Table of monthly mean temperatures, standard deviations and number of data months for each inshore fishing area of Scotia-Fundy and the southern Gulf of St. Lawrence. The letter "S" represents the depth range 0-12m; the letter "D" represents depths >12m, in most cases the depth was about 20m. The format of the table has the mean, the standard deviation and the number of data months for each month as follows:

MEAN
STANDARD DEVIATION
NUMBER OF DATA MONTHS

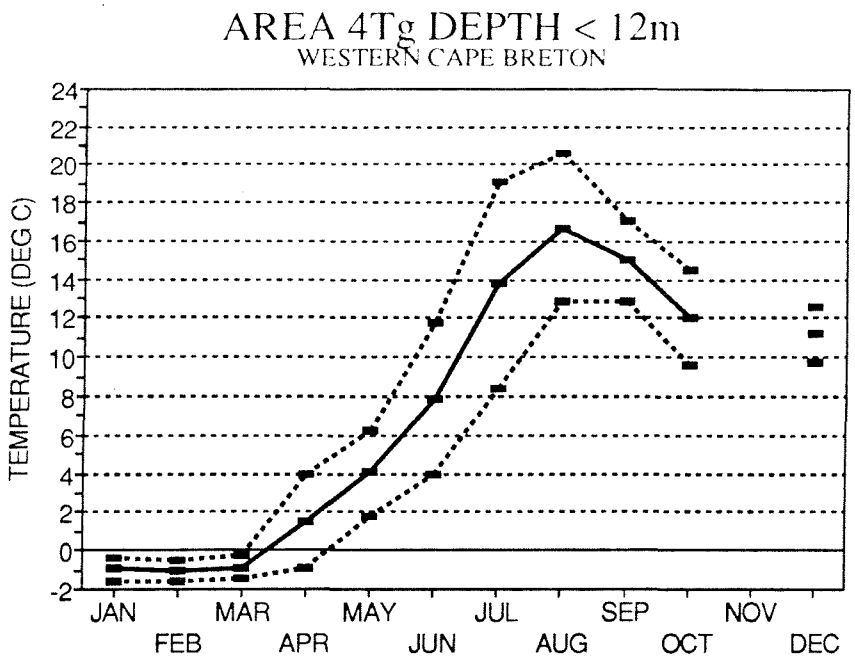
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
S-4Xs	2.1	0.11	0.44	4.08	6.31	8.9	12.1	14.2	12.5	10.5	7.16	4.07
	0.93	0.72	0.88	0.94	1.12	0.98	0.84	0.72	0.79	0.76	1.22	0.94
	1	1	1	1	2	1	2	1	1	1	2	2
D-4Xs					5.8	8.5	9.76	10.7	10.9	10.1	8.84	
					0.95	1.05	2.24	2.1	1.64	0.48	0.9	
					1	2	3	2	2	1	1	
S-4Xr	4.08	1.53	2.06	3.94	6.29	8.76	10.4	10.6	11.9	10.4	8.41	
	0.77	1.4	1	0.97	10.7	1.5	1.51	0.82	0.65	0.91	0.96	
	1	4	4	3	5	3	3	2	2	2	2	
D-4Xr	1.78	2.23	2.9	2.99	5.47	7.35	9.66	11	12.1	10.5	8.15	5.56
	2.2	2.28	1.7	1.4	1.2	1.92	1.79	0.72	1.1	0.91	0.78	1.27
	3	2	1	2	5	6	5	5	4	4	2	3
S-4Xq	1.3	0.53	1.67					16.1	15.4	10.9	7.93	4.47
	1.95	0.73	0.38					1.11	1.93	1.23	1.71	2.4
	2	1	1					2	2	2	2	2
D-4Xq	1.58	-0.63	-0.12	2.84	4.33	7.21	9.24	12.8	12.4	10.2	8.59	4.41
	1.14	0.93	0.87	1.32	1.24	1.21	1.31	3.66	2.69	1.64	1	1.18
	3	3	3	3	4	4	2	2	3	3	2	2
S-4Xo	1.19	-0.12	0.78	3.83	6.65	8.79	11.5	11.9	11.7	10.7	7.11	3.65
	1.61	1.5	1.39	1.72	2.59	2.51	2.87	3.22	2.81	2.28	2.5	2.43
	3	3	4	5	5	3	2	4	4	4	5	3
D-4Xo	2.48	1.11	1.01	2.74	4.58	6.04	6.52	9.1	11.9	10.5	8.5	4.96
	1.15	0.83	0.81	1.29	1.63	2.02	2.15	2.78	2.56	1.82	1.62	1.49
	8	8	7	8	9	8	7	7	8	7	6	7
S-4Xm	1.98	0.68	0.72	2.24	4.79	7.76	9.6	13.6	14.3	11.5	8.51	4.91
	1.51	1.38	1.31	1.18	1.5	2.32	2.9	3.43	3.14	1.68	1.4	1.66
	9	9	9	9	9	9	9	9	9	9	9	8
D-4Xm	0.68	-0.38	-0.02	1.56	3.29	4.7	6.2	11.2	12.5	11	8.07	3.85
	1.6	1.44	1.33	1.17	1.48	2.41	3.75	4.8	3.43	2.28	1.31	1.75
	4	3	3	3	3	3	4	6	6	4	3	4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
S-4Wk	0.31	-1.91	-1.15	0.22	3.28	6.07	8.11	14.2	14.3	10.5	6.7	2.94
	1.27	0.66	0.83	0.88	1.28	1.76	2.14	2.89	1.63	2.31	1.25	1.15
	2	3	3	3	4	4	4	4	3	2	1	1
D-4Wk	-0.61	-2.18			2.32	3.97	5.64	7.4	9.93		5	1.7
	0.68	0.31			1.21	1.09	1.96	3.44	3.31		0.97	1.04
	1	1			2	2	2	2	1		1	1
S-4Wd	-0.58	-1.36	-0.1	2.85	3.96	6.51	8.89	15.2	14.4	11.8	7.47	2.43
	0.95	0.85	1.73	2.07	2.2	2.59	2.78	2.64	2.12	2.83	1.19	1.66
	3	3	4	2	3	6	6	5	5	4	2	3
D-4Wd	1.02	-0.15	-0.4	0.83	2.71	5.3	6.86	12.2	12.3	10.5	7.88	3.82
	0.77	0.74	0.42	0.62	2.11	2.7	3.33	3.38	3.51	2.17	1.03	1.4
	3	3	2	1	7	7	7	7	7	6	4	4
S-4Vn	1.52	0.46	1.21			6.96	12	16.3	14.5	10.2		4.27
	0.65	0.83	0.76			2.25	3.31	2.02	1.69	1.68		1.02
	2	2	2			4	5	5	5	4		1
D-4Vn					2.05	4.03	6.52	7	9.94	10.6		
					0.99	1.8	3.17	5.11	4.96	1.43		
					2	5	4	7	6	1		
S-4Tg	-0.94	-1.1	-0.87	1.56	4.03	7.83	13.8	16.7	15	12.1		11.2
	0.23	0.14	0.28	1.89	2.14	2.71	2.79	2.65	1.86	2.41		1.47
	2	2	2	2	2	4	5	5	4	1		1
D-4Tg					4.36	7.03	9.48	9.65	10.3	11.4		
					1.48	4.93	6.34	6.11	5.99	1.22		
					1	7	7	5	3	2		
S-4Th			-0.08	1.53	7.36	11.5	15.4	17.7	15.5	10.8	5.99	0.75
			0.95	1.71	2.4	2.62	2.98	1.93	3.16	3.01	2.34	1.4
			1	2	4	7	7	8	6	5	2	1
D-4Th					5.01	11.3	15.2	16.8	16.1	11.3		
					1.4	3.16	3.4	2.34	1.63	1.37		
					1	5	6	7	6	2		

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
S-4Tl						9.99	16.9	15.6	14	8.61	4.54	1.75
						3.08	2.25	4.74	2.26	0.91	1.48	0.65
						2	4	6	4	1	1	1
D-4Tl					2.18	7.17	9.06	12.4	13	12.7	9.21	6.44
					0.76	3.09	4.28	4.63	3.79	1.01	1.01	1.45
					1	3	5	5	5	1	1	1
S-4Tj						14.9	21.4	22.9	20.7			
						1.74	2.52	0.93	1.1			
						1	1	1	1			
D-4Tj						4.51	4.9	7.56	6.16	10.3		
						2.05	1.76	3.97	2.91	2.12		
S-4Tm					4.57	8.43	11.1	13.6	11.3	8.88		
					1.78	2.53	2.98	2.94	2.68	1.83		
					3	4	5	5	5	3		
D-4Tm					1.02	3.67	4.05	5.79	5.78	6.5		
					1.8	2.69	2.4	3.25	2.23	1.35		
					1	2	2	2	2	2		
S-4Tn					3.86	7.39	12.9	13.9	11	7.56		
					1.5	2.01	3.28	2.5	2.24	1.72		
					3	3	4	4	4	1		
D-4Tn						6.22	7.63	14.1	14	9.46		
						3.92	4.7	1.84	1.41	0.93		
						3	3	2	2	1		

FIGURE(S) 4

Monthly Mean Temperatures and Standard Deviations by NAFO Zone


AREA 4Tg DEPTH < 12m
WESTERN CAPE BRETON
TEMPERATURE (DEG C)
24
22
20
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JAN
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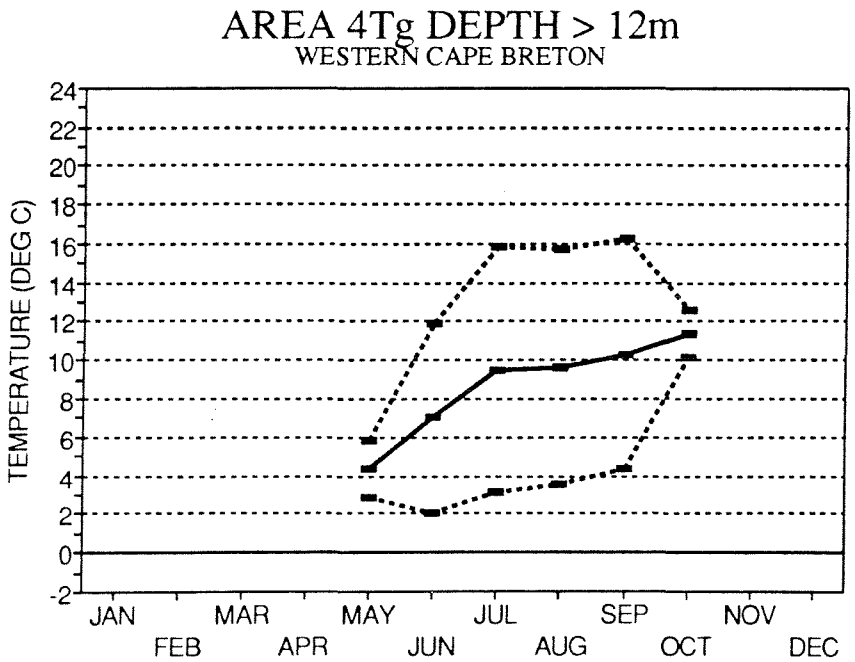
NOV
DEC


AREA 4Tg DEPTH > 12m
WESTERN CAPE BRETON
TEMPERATURE (DEG C)
24
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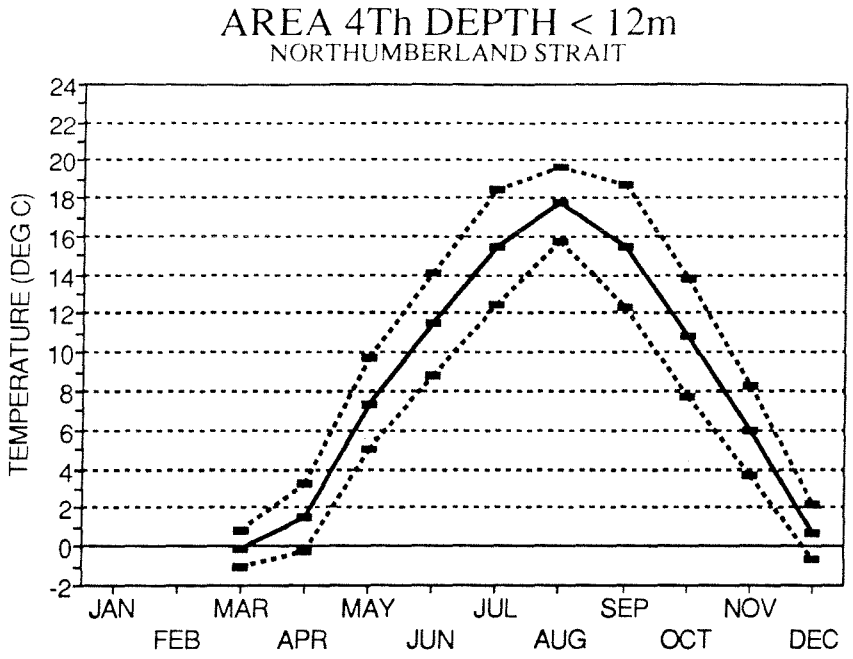
OCT
NOV
DEC


AREA 4Th DEPTH < 12m
NORTHUMBERLAND STRAIT
TEMPERATURE (DEG C)
24
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20
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JAN
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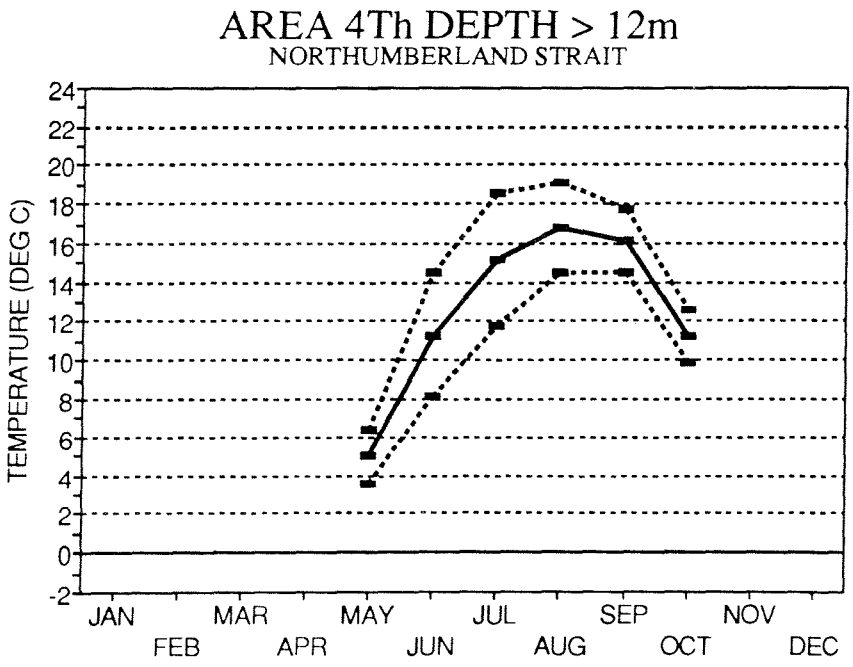
AREA 4Th DEPTH > 12m
NORTHUMBERLAND STRAIT
TEMPERATURE (DEG C)
24
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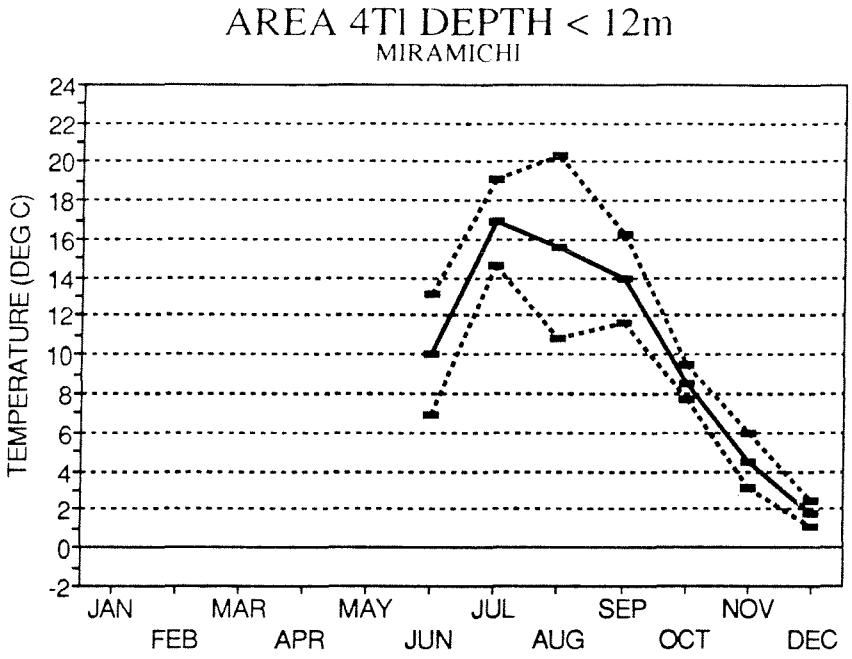
DEC


AREA 4Tl DEPTH < 12m
MIRAMICHI
TEMPERATURE (DEG C)
24
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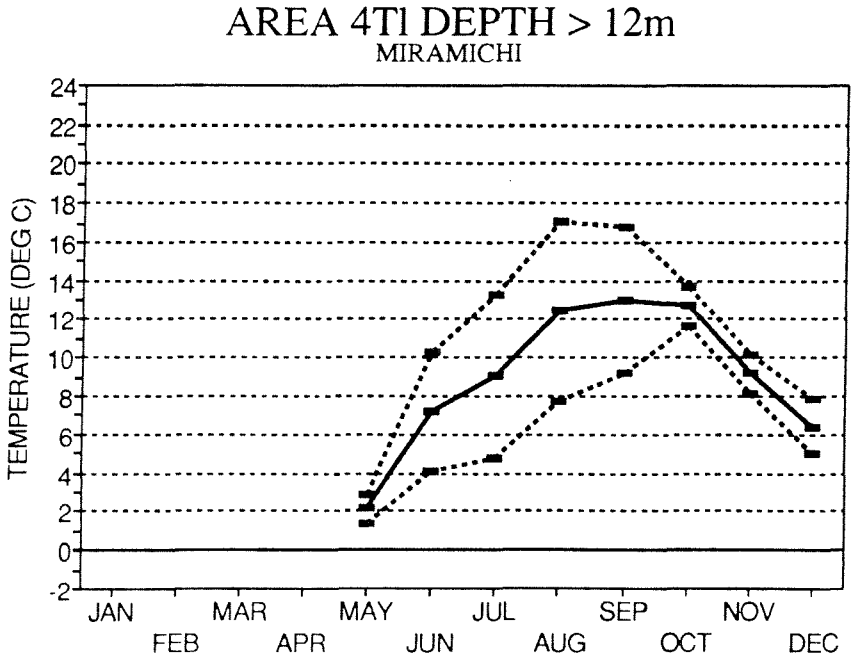
AREA 4Tl DEPTH > 12m
MIRAMICHI
TEMPERATURE (DEG C)
24
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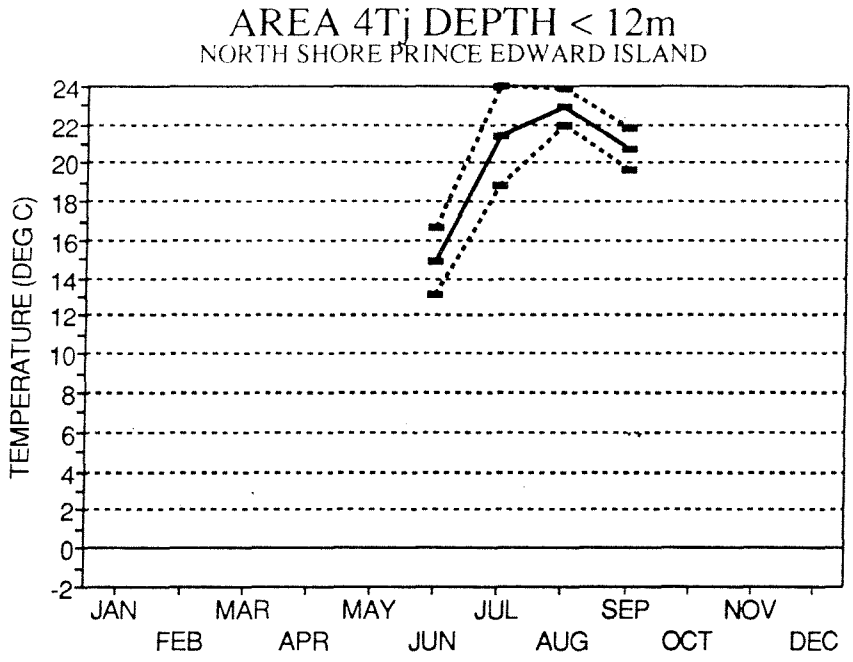
AREA 4Tj DEPTH < 12m
NORTH SHORE PRINCE EDWARD ISLAND
TEMPERATURE (DEG C)
24
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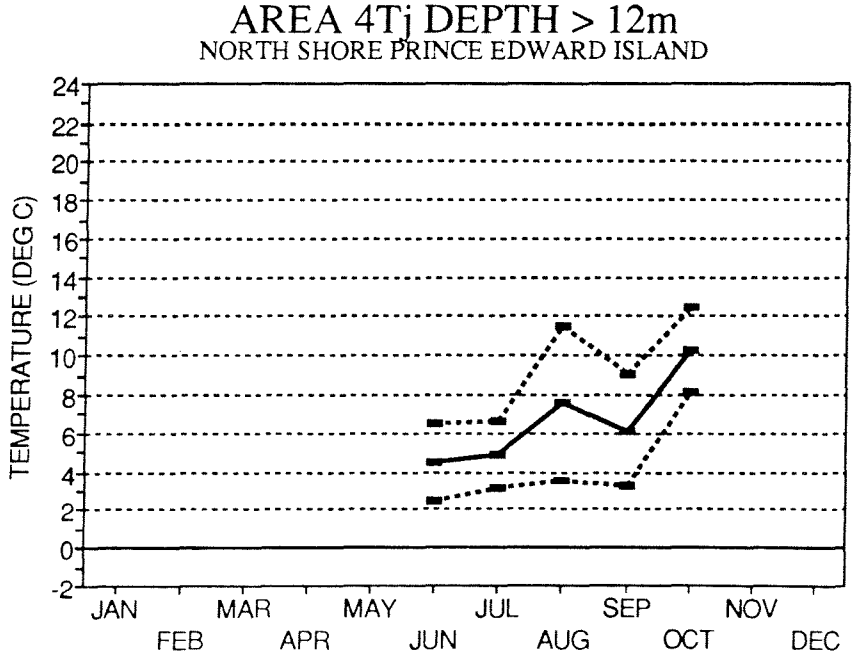
DEC


AREA 4Tj DEPTH > 12m
NORTH SHORE PRINCE EDWARD ISLAND
TEMPERATURE (DEG C)
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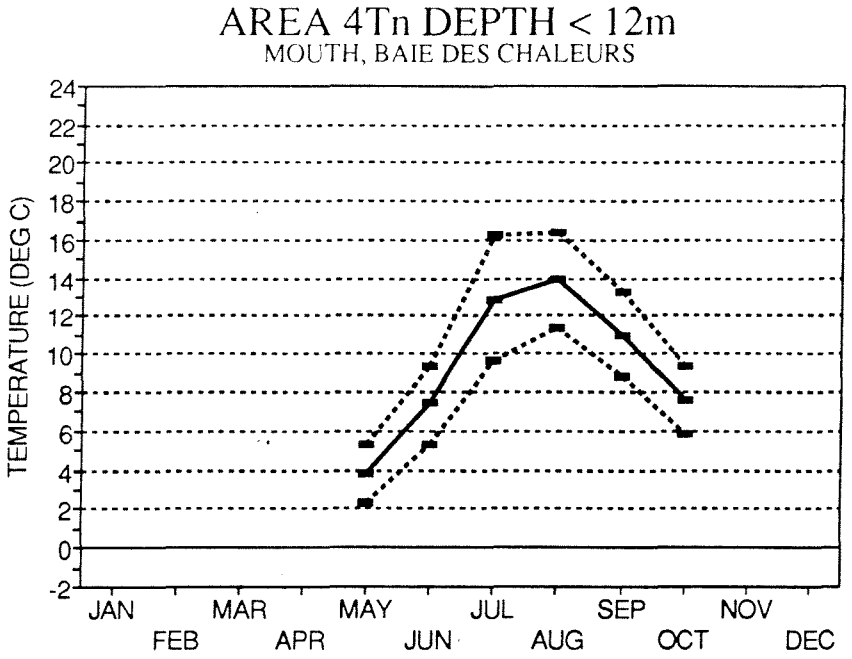
AREA 4Tn DEPTH < 12m
MOUTH, BAIE DES CHALEURS
TEMPERATURE (DEG C)
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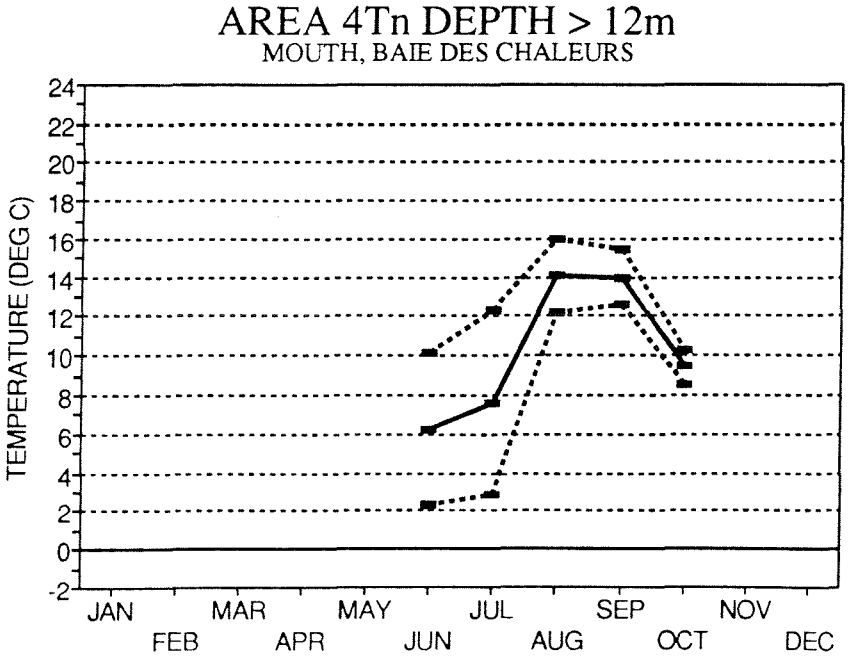
AREA 4Tn DEPTH > 12m
MOUTH, BAIE DES CHALEURS
TEMPERATURE (DEG C)
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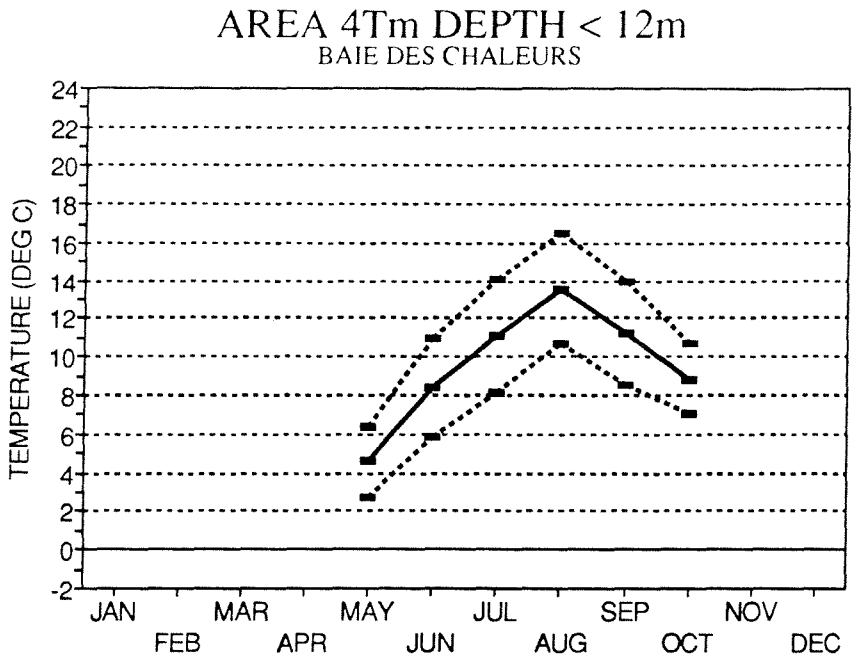
AREA 4Tm DEPTH < 12m
BAIE DES CHALEURS
TEMPERATURE (DEG C)
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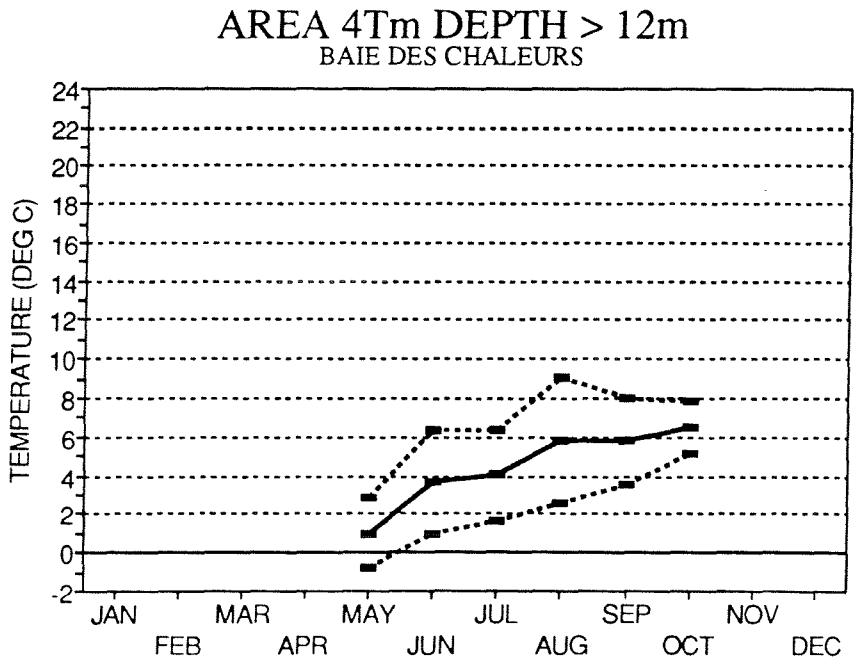
AREA 4Tm DEPTH > 12m
BAIE DES CHALEURS
TEMPERATURE (DEG C)
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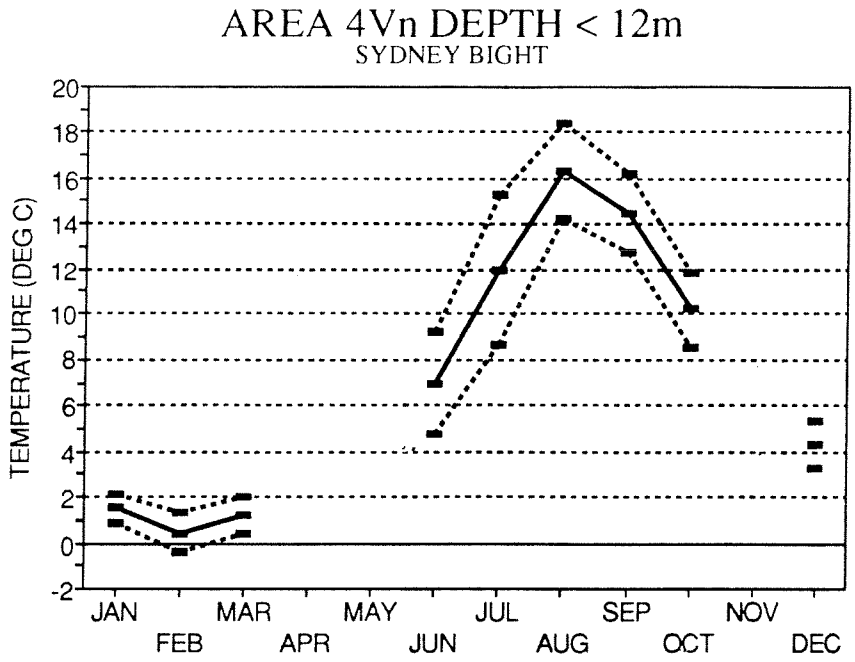
AREA 4Vn DEPTH < 12m
SYDNEY BIGHT
TEMPERATURE (DEG C)
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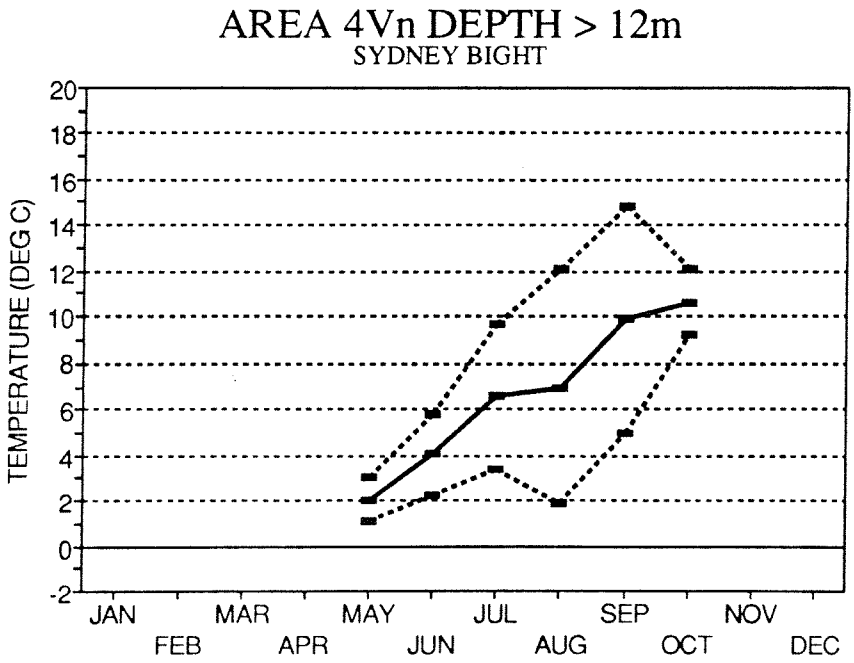
AREA 4Vn DEPTH > 12m
SYDNEY BIGHT
TEMPERATURE (DEG C)
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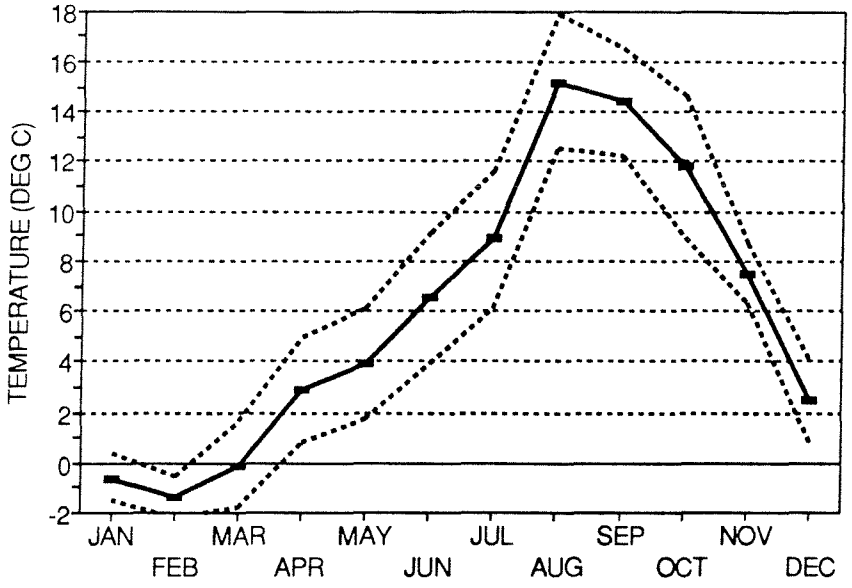
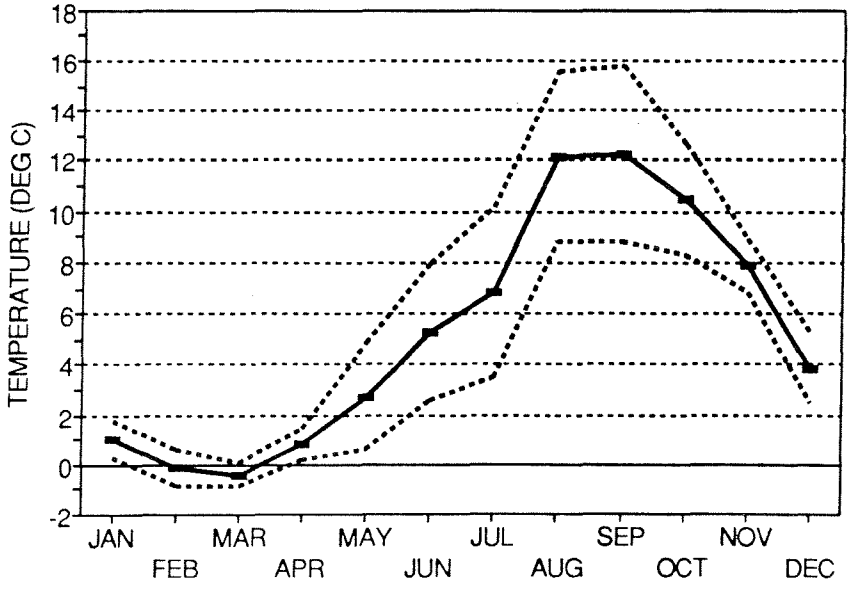
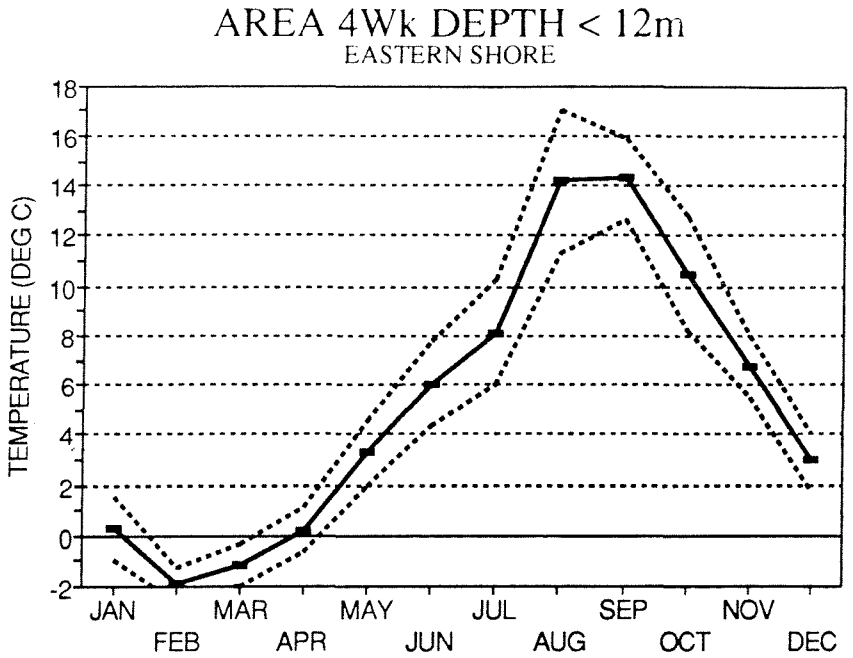
AREA 4Wd DEPTH < 12m
CANSO



AREA 4Wd DEPTH > 12m
CANSO




AREA 4Wk DEPTH < 12m
EASTERN SHORE
TEMPERATURE (DEG C)
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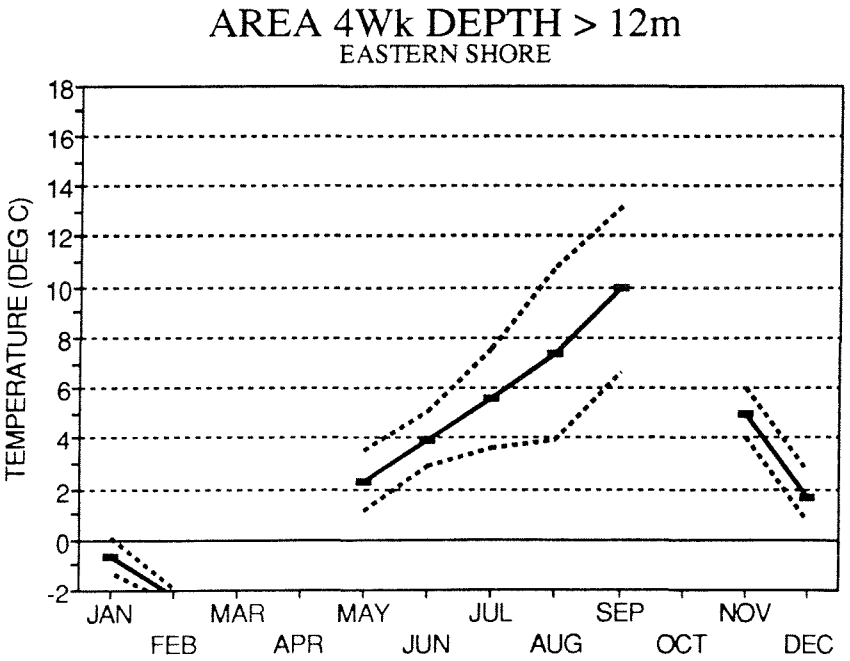
NOV
DEC


AREA 4Wk DEPTH > 12m
EASTERN SHORE
TEMPERATURE (DEG C)
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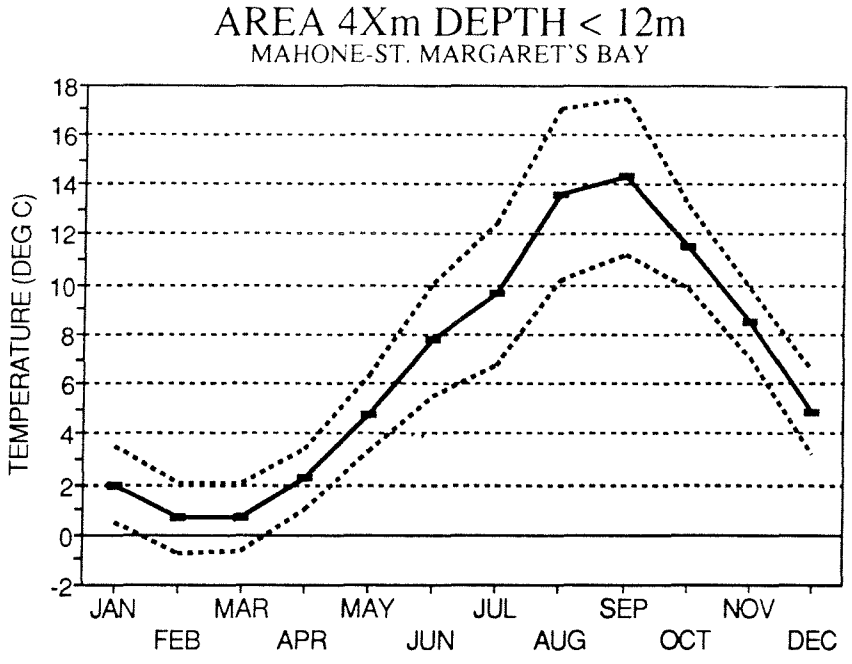
AREA 4Xm DEPTH < 12m
MAHONE-ST. MARGARET'S BAY
TEMPERATURE (DEG C)
18
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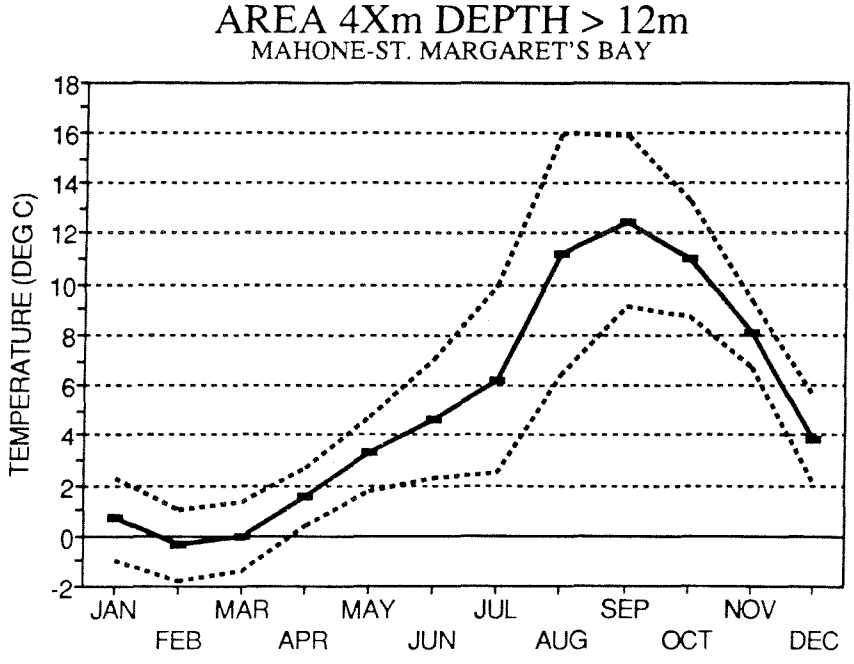
AREA 4Xm DEPTH > 12m
MAHONE-ST. MARGARET'S BAY
TEMPERATURE (DEG C)
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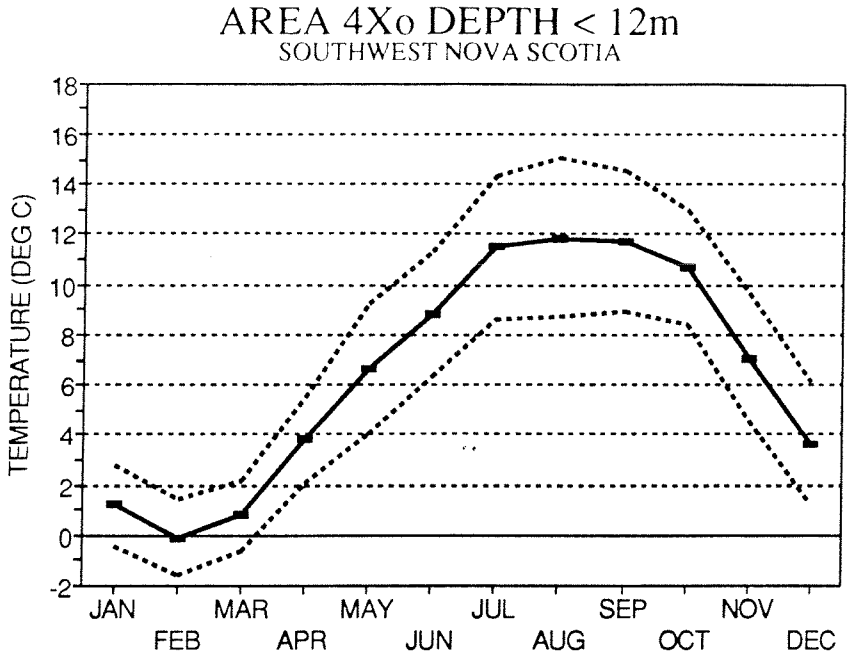
AREA 4Xo DEPTH < 12m
SOUTHWEST NOVA SCOTIA
TEMPERATURE (DEG C)
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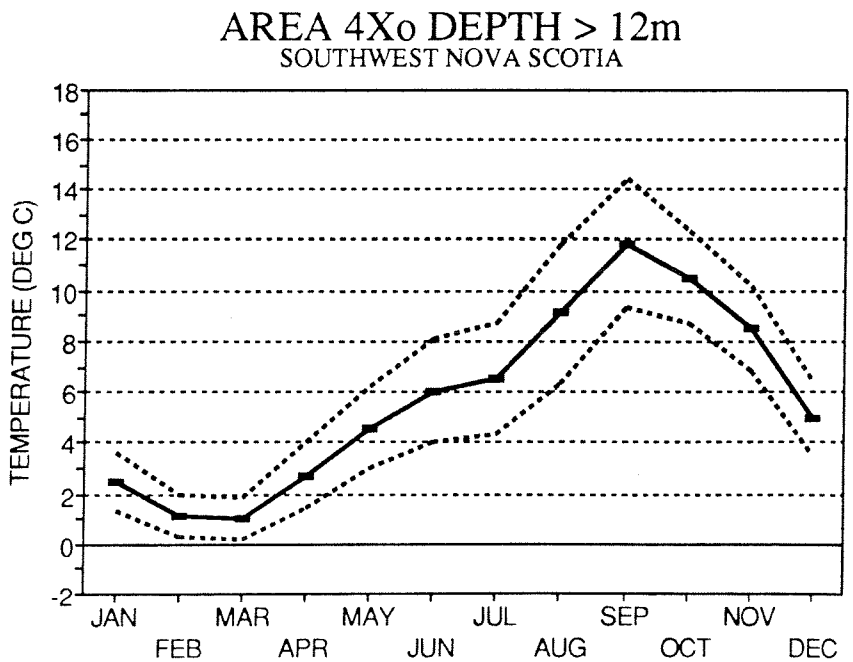
AREA 4Xo DEPTH > 12m
SOUTHWEST NOVA SCOTIA
TEMPERATURE (DEG C)
18
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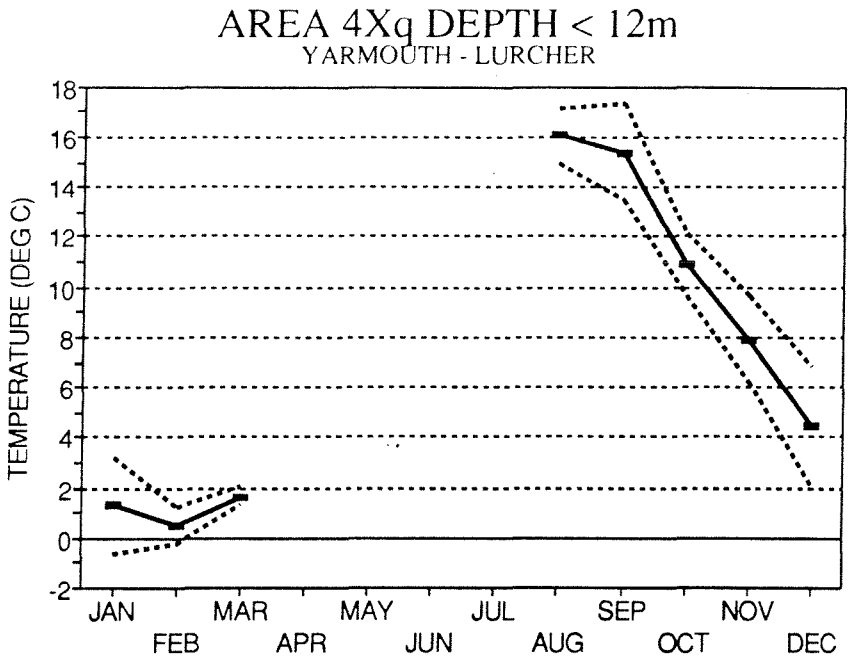
AREA 4Xq DEPTH < 12m
YARMOUTH - LURCHER
TEMPERATURE (DEG C)
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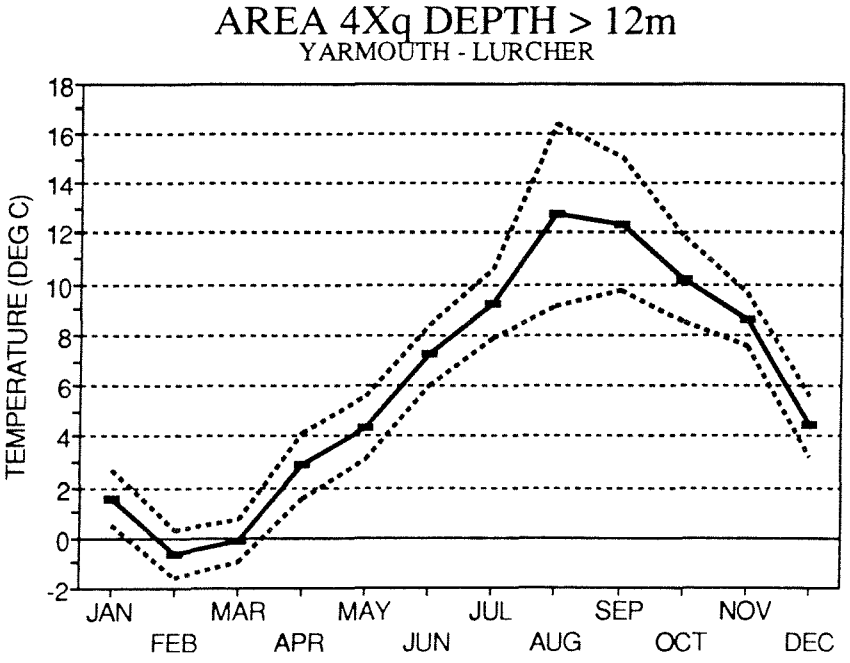
AREA 4Xq DEPTH > 12m
YARMOUTH - LURCHER
TEMPERATURE (DEG C)
18
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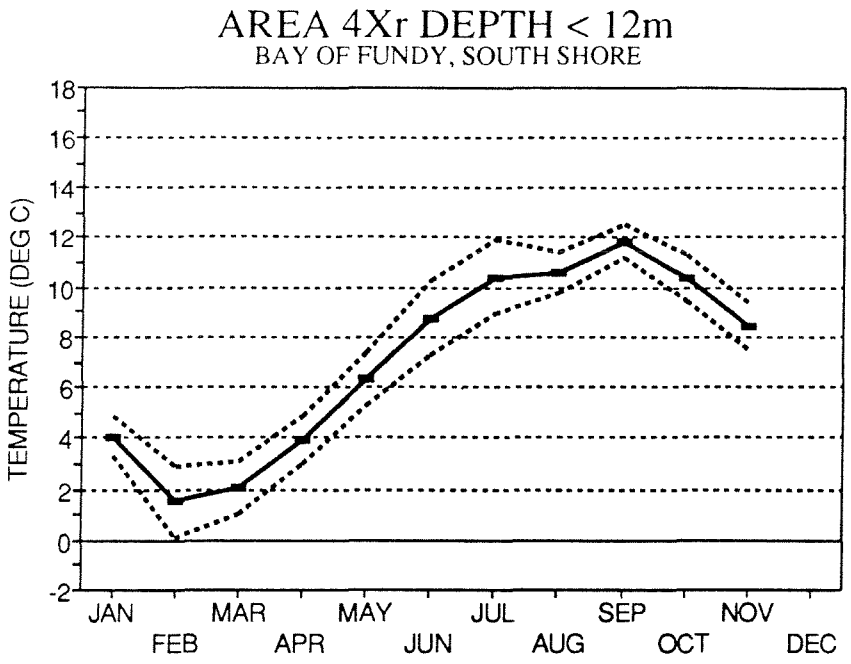
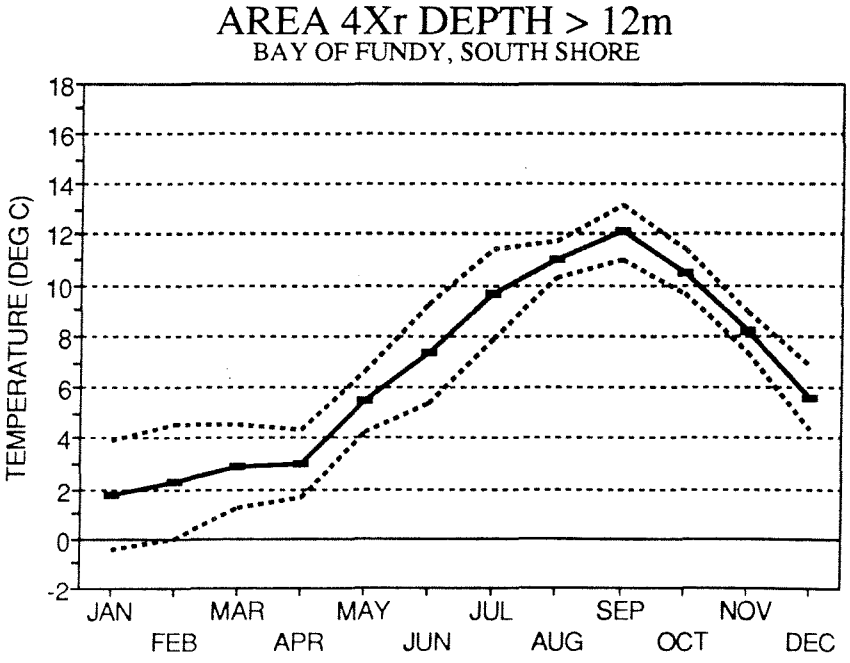
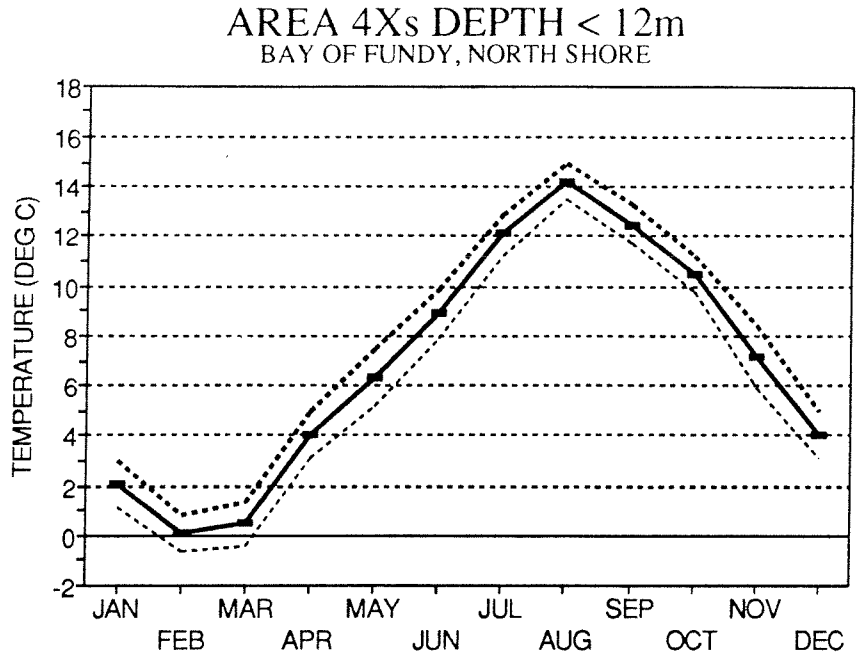
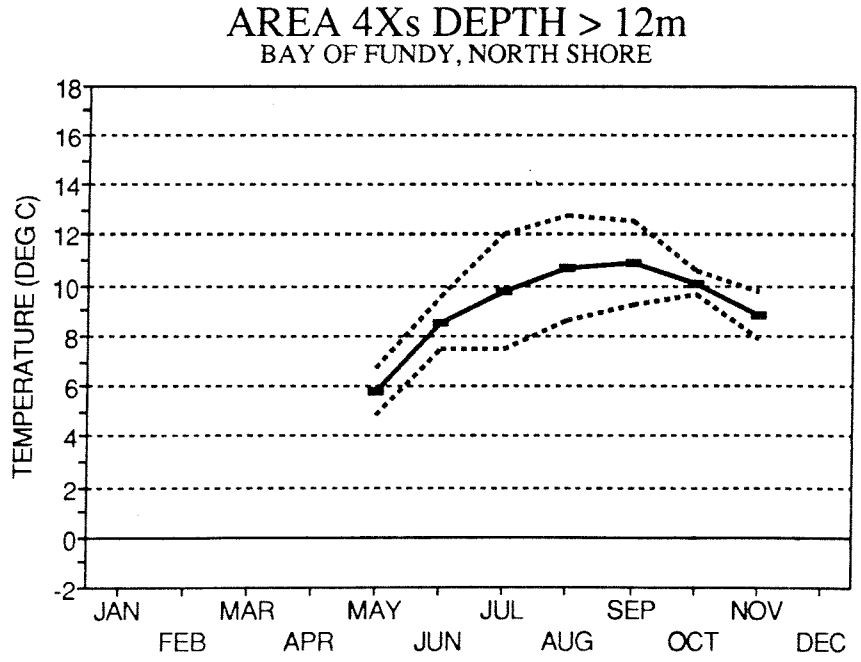
NOV
DEC


AREA 4Xr DEPTH < 12m
BAY OF FUNDY, SOUTH SHORE
TEMPERATURE (DEG C)
18
16
14
12
10
8
6
4
2
0
-2
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


AREA 4Xr DEPTH > 12m
BAY OF FUNDY, SOUTH SHORE
TEMPERATURE (DEG C)
18
16
14
12
10
8
6
4
2
0
-2
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


AREA 4Xs DEPTH < 12m
BAY OF FUNDY, NORTH SHORE
TEMPERATURE (DEG C)
18
16
14
12
10
8
6
4
2
0
-2
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC


AREA 4Xs DEPTH > 12m
BAY OF FUNDY, NORTH SHORE
TEMPERATURE (DEG C)
18
16
14
12
10
8
6
4
2
0
-2
JAN
FEB
MAR
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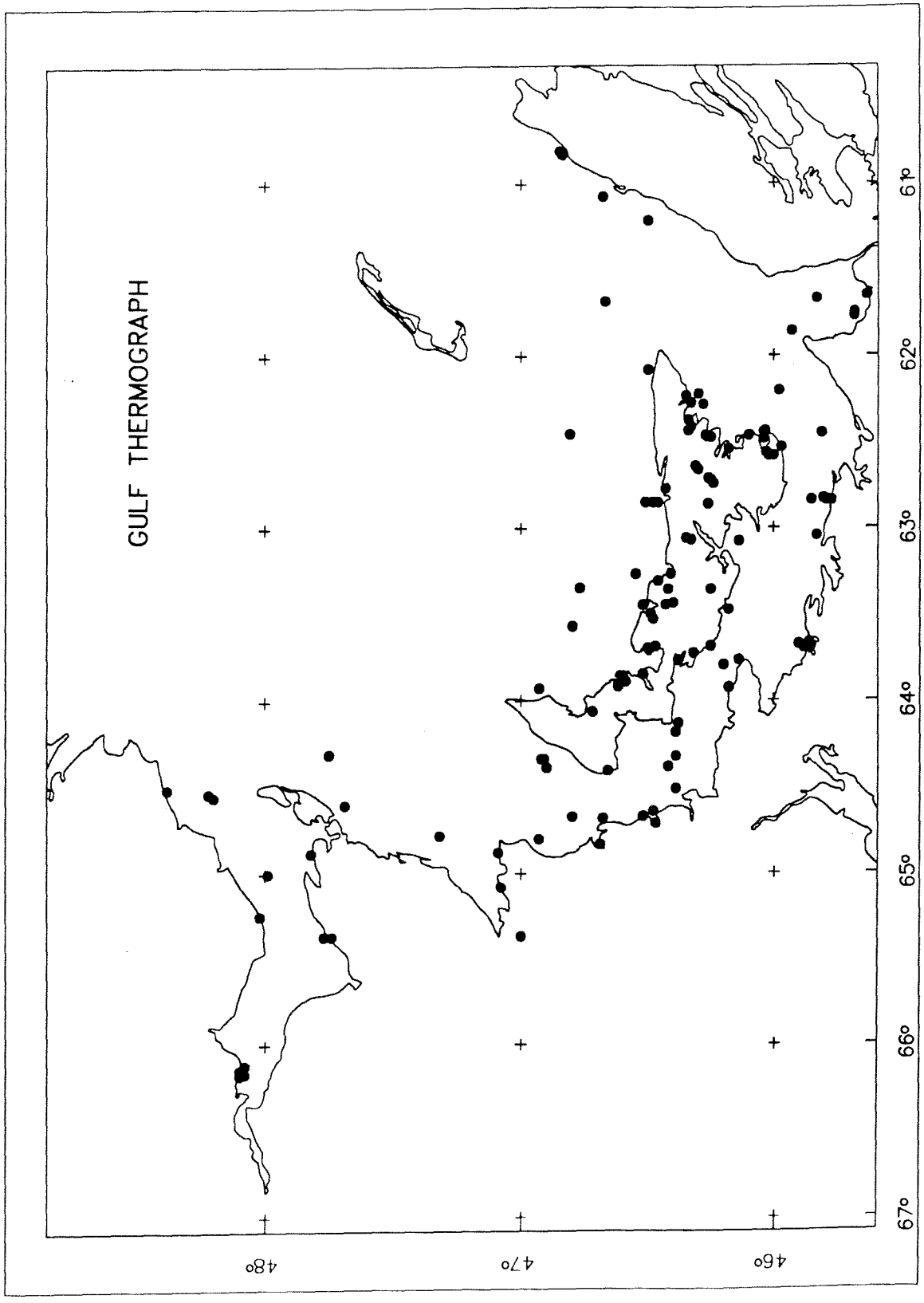
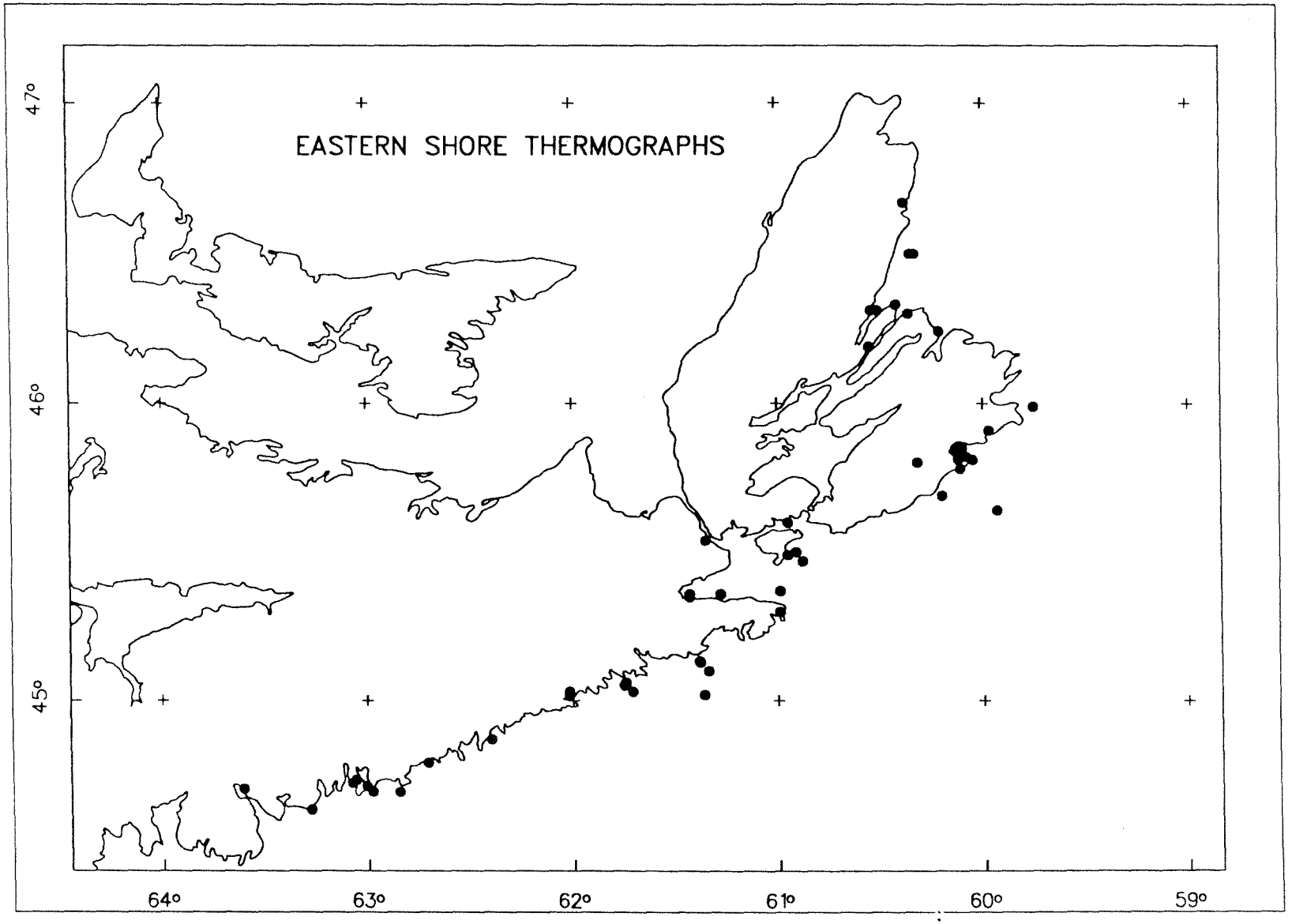
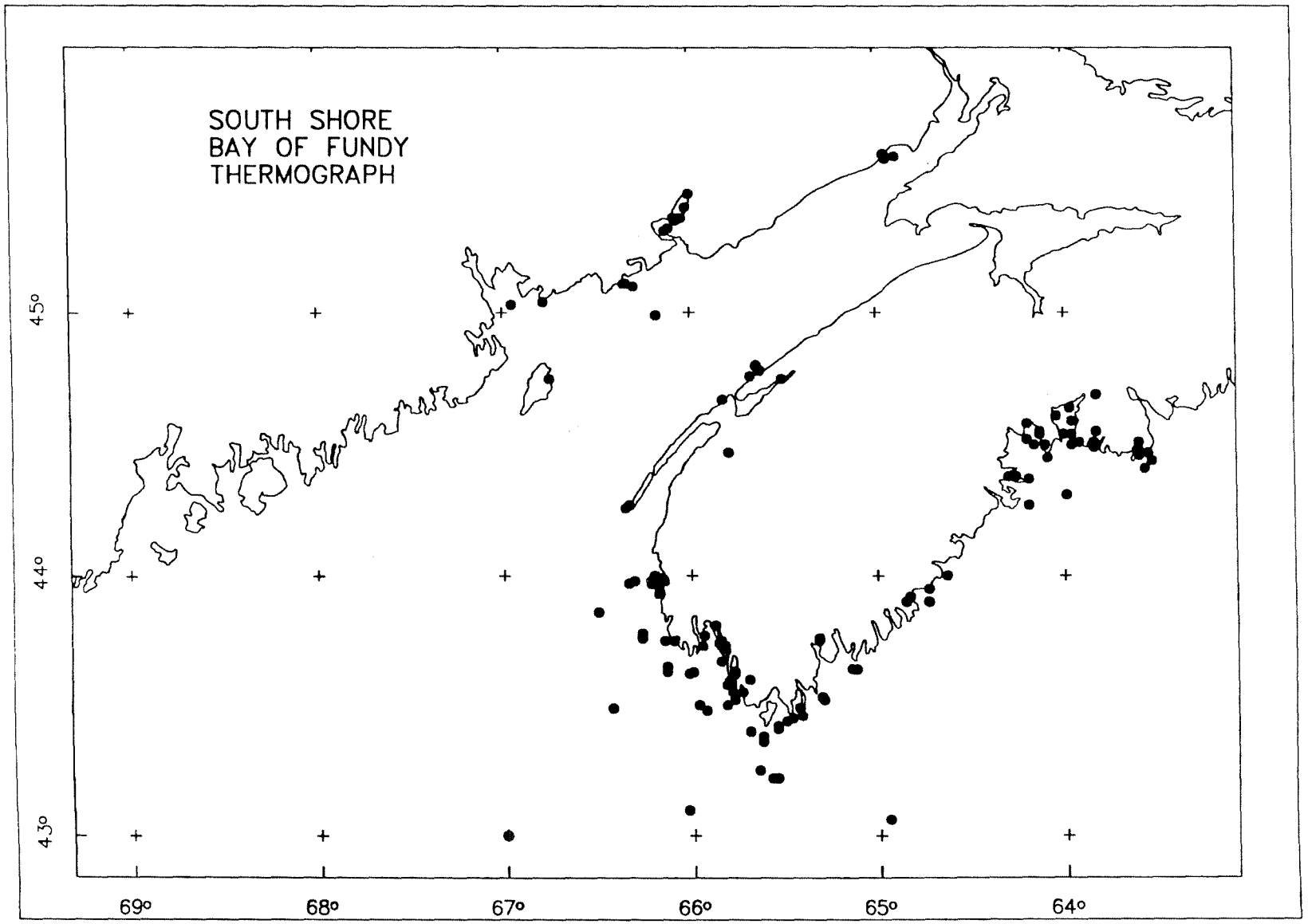
JUL
AUG
SEP
OCT
NOV
DEC

APPENDIX C

This appendix presents a set of maps showing the locations of inshore and offshore temperature records from moored instruments in the Scotia-Fundy and southern Gulf of St. Lawrence regions. Access to these data is available through the Coastal Oceanography division at Bedford Institute of Oceanography.


GULF THERMOGRAPH
61°
62°
63°
64°
65°
66°
67°
46°
47°
48°


EASTERN SHORE THERMOGRAPHS
47°
46°
45°
64°
63°
62°
61°
60°
59°


SOUTH SHORE
BAY OF FUNDY
THERMOGRAPH
45°
44°
43°
69°
68°
67°
66°
65°
64°