



<p><b>RETURN BIDS TO: RETOURNER LES SOUMISSIONS À:</b></p> <p><b>Bid Receiving - Environment Canada / Réception des soumissions – Environnement Canada</b></p> <p><b>Electronic Copy:</b> ec.soumissions-bids.ec@canada.ca</p> <p><b>BID SOLICITATION DEMANDE DE SOUMISSIONS</b></p> <p><b>PROPOSAL TO: ENVIRONMENT CANADA</b></p> <p>We offer to perform or provide to Canada the services detailed in the document including any attachments and annexes, in accordance with the terms and conditions set out or referred to in the document, at the price(s) provided.</p> <p><b>SOUMISSION À: ENVIRONNEMENT CANADA</b></p> <p>Nous offrons d'effectuer ou de fournir au Canada, aux conditions énoncées ou incluses par référence dans le document incluant toutes pièces jointes et annexes, les services détaillés dans le document, au(x) prix indiqué(s).</p>	<p><b>Title – Titre</b> Marine Water Quality Monitoring Atlantic Region Annual Sampling Requirement for Nova Scotia, 2021 – 2024</p>		
	<p><b>EC Bid Solicitation No. /SAP No. – N° de la demande de soumissions EC / N° SAP</b> 5000050331-1</p>		
	<p><b>Date of Bid solicitation (YYYY-MM-DD) – Date de la demande de soumissions (AAAA-MM-JJ)</b> 2021-01-06</p>		
	<p><b>Bid Solicitation Closes (YEAR-MM-DD) - La demande de soumissions prend fin (AAAA-MM-JJ)</b>  at – à 15:00 on – le 2021-02-15</p>	<p><b>Time Zone – Fuseau horaire</b>  Eastern Standard Time (EST)</p>	
	<p><b>F.O.B – F.A.B</b> Destination</p>		
	<p><b>Address Enquiries to - Adresser toutes questions à</b> Alyssa Festeryga</p>		
	<p><b>Telephone No. – N° de téléphone</b> 902-426-9150</p>	<p><b>Fax No. – N° de Fax</b> NA</p>	
	<p><b>Delivery Required (YEAR-MM-DD) – Livraison exigée (AAAA-MM-JJ)</b> See herein.</p>		
	<p><b>Destination - of Services / Destination des services</b> Nova Scotia</p>		
	<p><b>Security / Sécurité</b> See herein.</p>		
<p><b>Vendor/Firm Name and Address - Raison sociale et adresse du fournisseur/de l'entrepreneur</b></p>			
<p><b>Telephone No. – N° de téléphone</b></p>	<p><b>Fax No. – N° de Fax</b></p>		
<p><b>Name and title of person authorized to sign on behalf of Vendor/Firm: (type or print) / Nom et titre de la personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b></p>			
<p><b>Signature</b></p>	<p><b>Date</b></p>		

## **TABLE OF CONTENTS**

### **Marine Water Quality Monitoring Atlantic Region Annual Sampling Requirement for Nova Scotia, 2021 – 2024**

#### **PART 1 - GENERAL INFORMATION**

1. Introduction
2. Summary
3. Debriefings

#### **PART 2 - BIDDER INSTRUCTIONS**

1. Reissue of Bid Solicitation
2. Standard Instructions, Clauses and Conditions
3. Submission of Bids
4. Former Public Servant – Competitive Bid
5. Enquiries – Bid Solicitation
6. Applicable Laws
7. Basis for Canada's Ownership of Intellectual Property

#### **PART 3 - BID PREPARATION INSTRUCTIONS**

1. Bid Preparation Instructions

#### **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

1. Evaluation Procedures
2. Basis of Selection

#### **PART 5 - CERTIFICATIONS**

1. Certifications Required Precedent to Contract Award
2. Certifications Required with the Bid

#### **List of Attachments:**

Attachment 1 to Part 4, Mandatory Technical Criteria And Point Rated Technical Criteria

#### **PART 6 - RESULTING CONTRACT**

1. Statement of Work
2. Standard Clauses and Conditions
3. Security Requirement
4. Term of Contract
5. Authorities
6. Proactive Disclosure of Contracts with Former Public Servants
7. Payment
8. Invoicing Instructions
9. Certifications
10. Applicable Laws
11. Priority of Documents
12. Insurance Requirements
13. Translation of Documents
14. Ownership

- 15. Identification Protocol Responsibilities
- 16. Intellectual Property Infringement and Royalties
- 17. PWGSC SACC Manual Clauses

**List of Annexes:**

- Annex A Statement of Work
- Annex B Basis of Payment
- Annex C Federal Contractors Program for Employment Equity - Certification
- Annex D Insurance requirements

**List of Appendices:**

- Appendix 1 IDENTIFICATION OF SAMPLING AREAS
- Appendix 2 ECCC MARINE SAMPLING STATION MAPS
- Appendix 3 ECCC MARINE WATER QUALITY SAMPLING PROTOCOL
- Appendix 4 EVALUATION REPORT OF WATER SAMPLE COLLECTION

# **Marine Water Quality Monitoring Atlantic Region Annual Sampling Requirement for Nova Scotia, 2021-2024**

## **PART 1 - GENERAL INFORMATION**

### **1. Introduction**

The bid solicitation is divided into seven parts plus attachments and annexes, as follows:

Part 1 General Information: provides a general description of the requirement;

Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;

Part 3 Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;

Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;

Part 5 Certifications: includes the certifications to be provided;

Part 6 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Attachments include the Mandatory Technical Criteria And Point Rated Technical Criteria

The Annexes include the Statement of Work, the Basis of Payment, the Federal Contractors Program for Employment Equity - Certification, Insurance Requirements, and any other annexes.

The Appendices include the Identification Of Sampling Areas, the ECCC Marine Sampling Station Maps, the ECCC Marine Water Quality Sampling Protocol, and the Evaluation Report Of Water Sample Collection.

### **2. Summary**

2.1 Environment Canada has a requirement to carry out annual bacteriological water quality surveys of bivalve molluscan shellfish growing areas in order to evaluate whether the classified harvest areas continue to meet the Canadian Shellfish Sanitation Program (CSSP) and (American) National Shellfish Sanitation Program [NSSP] classification standards, as detailed in the Statement of Work, Annex A to the bid solicitation. The period of the contract is from Contract Award Date to March 31, 2022.

2.2 Bidders must provide a list of names, or other related information as needed, pursuant to section 01 Integrity Provisions of Standard Instructions 2003.

2.3 For services requirements, bidders in receipt of a pension or a lump sum payment must provide the required information as detailed in article 3 of Part 2 of the bid solicitation.

2.4 The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP) and the Canadian Free Trade Agreement (CFTA).

2.5 There is a Federal Contractors Program (FCP) for employment equity requirement associated with this procurement; see Part 5 - Certifications, Part 6 - Resulting Contract Clauses and the annex named Federal Contractors Program for Employment Equity - Certification.

### **3. Debriefings**

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

## **PART 2 - BIDDER INSTRUCTIONS**

### **1. Reissue of Bid Solicitation**

This bid solicitation cancels and supersedes previous bid solicitation number 5000050331 dated September 16, 2020 with a closing of October 16, 2020 at 14:00 Atlantic Daylight Time (ADT). A debriefing or feedback session will be provided upon request to bidders/offerors/suppliers who bid on the previous solicitation.

### **2. Standard Instructions, Clauses and Conditions**

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the PWGSC *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2019-03-04) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

The standard instructions 2003 are modified as follows:

#### **Under “Text” at 02:**

**Delete:** “Procurement Business Number”

**Insert:** “Deleted”

#### **At Section 02 Procurement Business Number**

**Delete:** In its entirety

**Insert:** “Deleted”

#### **At Section 05 Submission of Bids, Subsection 05 (2d):**

**Delete:** In its entirety

**Insert:** “send its bid only to Environment Canada (EC) as specified on page 1 of the bid solicitation or to the address specified in the bid solicitation;”

#### **At Section 06 Late Bids:**

**Delete:** “PWGSC”

**Insert:** “Environment Canada”

#### **At Section 07 Delayed Bids:**

**Delete:** “PWGSC”

**Insert:** “Environment Canada”

#### **At Section 08 Transmission by Facsimile, Subsection 08 (1):**

**Delete:** In its entirety

**Insert:** “Bids may be submitted by facsimile if specified in the bid solicitation.”

#### **At Section 12 Rejection of Bid, Subsection 12 (1) a. and b.:**

**Delete:** In their entirety

**Insert:** “Deleted”

#### **At Section 17 Joint Venture, Subsection 17 (1) b.:**

**Delete:** "the Procurement Business Number of each member of the joint venture,"

**Insert:** "Deleted"

**At Section 20 Further Information, Subsection 20 (2):**

**Delete:** In its entirety

**Insert:** "Deleted"

At Section 05 Submission of Bids, Subsection 05 (4):

**Delete:** "sixty (60) days"

**Insert:** "one hundred and twenty (120) days"

### **3. Submission of Bids**

Bids must be submitted to Environment Canada (EC) at the address and by the date, time and place indicated on page 1 of the bid solicitation.

### **4. Former Public Servant – Competitive Bid**

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

#### **Definitions**

For the purposes of this clause, "former public servant" is any former member of a department as defined in the *Financial Administration Act*, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the *Public Service Superannuation Act* (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the *Supplementary Retirement Benefits Act*, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the *Canadian Forces Superannuation Act*, R.S., 1985, c.C-17, the *Defence Services Pension Continuation Act*, 1970, c.D-3, the *Royal Canadian Mounted Police Pension Continuation Act*, 1970, c.R-10, and the *Royal Canadian Mounted Police Superannuation Act*, R.S., 1985, c.R-11, the *Members of Parliament*

*Retiring Allowances Act*, R.S., 1985, c.M-5, and that portion of pension payable to the *Canada Pension Plan Act*, R.S., 1985, c.C-8.

### **Former Public Servant in Receipt of a Pension**

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes** ( ) **No** ( )

If so, the Bidder must provide the following information, for all FPS in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

### **Work Force Adjustment Directive**

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes** ( ) **No** ( )

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

## **5. Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the

question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

## **6. Applicable Laws**

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Nova Scotia.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

## **7. Basis for Canada's Ownership of Intellectual Property**

Environment Canada has determined that any intellectual property rights arising from the performance of the Work under the resulting contract will belong to Canada, on the following grounds:

- (6.4.1) the main purpose of the contract, or of the deliverables contracted for, is to generate knowledge and information for public dissemination;

## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **1. Bid Preparation Instructions**

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (2 hard copies or 1 soft copy in PDF format)

Section II: Financial Bid (2 hard copies or 1 soft copy in PDF format)

Section III: Certifications (2 hard copies or 1 soft copy in PDF format)

If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders; and
- 3) print on both sides of the paper.

#### **Note for electronic submission of bids:**

In order to be considered, bids must be received no later than 1500h (3 p.m.) (Eastern Time) on the date and time indicated on the cover page to herein as the "Closing Date." Bids received after the Closing Date will be considered non-responsive and will not be considered for contract award. Bids submitted by email must be submitted ONLY to the following email address:

Email Address: [ec.soumissions-bids.ec@canada.ca](mailto:ec.soumissions-bids.ec@canada.ca)

Attention: Alyssa Festeryga

Solicitation Number: 5000050331-1

Bidders should ensure that their name, address, Closing Date of the solicitation and Solicitation Number are clearly indicated in the body of their email. Bids and supporting information may be submitted in either English or French.

The total size of the email, including all attachments, must be less than 15 megabytes (MB). It is each Bidder's responsibility to ensure that the total size of the email does not exceed this limit.

Bids sent by fax will not be accepted.

It is important to note that emails systems can experience systematic delays and, at times, large attachments may cause systems to hold or delay transmission of emails. It is solely the Bidder's responsibility to ensure that the Contracting Authority receives a bid on time, in the mailbox that has been identified for bid receipt purposes. Date stamps for this form of transmission are not acceptable.

### **Section I: Technical Bid**

In their technical bid, bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Part 4, Evaluation Procedures, contains additional instructions that bidders should consider when preparing their technical bid.

### **Section II: Financial Bid**

Bidders must submit their financial bid in accordance with the Basis of Payment in Annex B. The total amount of Applicable Taxes must be shown separately.

Bidders should include the following information in their financial bid:

- (a) Their legal name; and
- (b) The name of the contact person (including this person's mailing address, phone and facsimile numbers and email address) authorized by the Bidder to enter into communications with Canada with regards to their bid; and any contract that may result from their bid.

### **Section III: Certifications**

Bidders must submit the certifications required under Part 5.

#### **1.1 Exchange Rate Fluctuation**

C3011T (2013-11-06), Exchange Rate Fluctuation

## **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

### **1. Evaluation Procedures**

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### **1.1 Technical Evaluation**

Except where expressly provided otherwise, the experience described in the bid must be the experience of the Bidder itself (which includes the experience of any companies that formed the Bidder by way of a merger but does not include any experience acquired through a purchase of assets or an assignment of contract). The experience of the Bidder's affiliates (i.e. parent, subsidiary or sister corporations), subcontractors, or suppliers will not be considered.

#### **1.2 Technical Evaluation**

Mandatory and point rated technical evaluation criteria are included in Attachment 1 to Part 4.

#### **1.3 Financial Evaluation**

##### **1.3.1 Evaluation of Price**

The price of the bid will be evaluated in Canadian dollars, the Applicable Taxes excluded, Canadian customs and excise taxes included.

For evaluation purposes only, the price of the bid will be determined as described under the Financial Proposal instructions in Annex B.

### **2. Basis of Selection**

#### **2.1 Highest Combined Rating of Technical Merit 75% and Price 25%**

SACC Manual Clause A0027T 2012-07-16, Basis of Selection – Highest Combined Rating of Technical Merit and Price

1. To be declared responsive, a bid must:
  - a. comply with all the requirements of the bid solicitation; and
  - b. meet all mandatory criteria;
  - c. meet the minimum number of points in each of the point rated criteria; and
  - d. obtain the required minimum of 154 points overall for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of 220 points.
2. Bids not meeting (a) or (b) or (c) or (d) will be declared non-responsive.
3. The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be **75%** for the technical merit and **25%** for the price.
4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of **75%**.
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of **25%**.
6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined

rating of technical merit and price will be recommended for award of a contract.

**In the event of a tie, the proposal receiving the highest score for the technical evaluation will be selected.**

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 75/25 ratio of technical merit and price, respectively.

The total available points equals 80 and the lowest evaluated price is \$445,000.

<b>Basis of Selection - Highest Combined Rating of Technical Merit (75%) and Price (25%)</b>				
		<b>Bidder 1</b>	<b>Bidder 2</b>	<b>Bidder 3</b>
<b>Overall Technical Score</b>		60/80	65/80	80/80
<b>Bid Evaluated Price</b>		\$455,000.00	\$450,000.00	\$445,000.00
<b>Calculations</b>	<b>Technical Merit Score</b>	$60/80 \times 75 = 56.23$	$65/80 \times 75 = 60.93$	$80/80 \times 75 = 75$
	<b>Pricing Score</b>	$445,000/455,000 \times 25 = 24.45$	$445,000/450,000 \times 25 = 32.73$	$445,000/445,000 \times 25 = 25$
<b>Combined Rating</b>		80.68	93.66	100
<b>Overall Rating</b>		3rd	2nd	1st

**\*\*\* Bidder 3 would be recommended for contract award\*\*\***

**ATTACHMENT 1 TO PART 4,  
MANDATORY TECHNICAL CRITERIA AND POINT RATED TECHNICAL CRITERIA**

**Mandatory Technical Criteria**

The bid must meet the mandatory technical criteria specified below. The Bidder must provide the necessary documentation to support compliance with this requirement.

Bids that fail to meet the mandatory technical criteria will be declared non-responsive. Each mandatory technical criterion should be addressed separately.

<b>Criterion #</b>	<b>Mandatory Criteria</b>	<b>Met/ Not Met</b>
<b>M1</b>	Lab has ISO 17025 certification with scope to perform fecal coliform analysis using A-1 culture medium in fifteen tube, three dilutions (5-5-5) method  Proof of ISO 17025 certification must be submitted with your bid. A photocopy of the document is acceptable.	

**Point-Rated Technical Criteria**

Bids that meet all the mandatory technical criteria will be evaluated and scored as specified in the table below.

Bidders must obtain the following:

- a. meet the minimum number of points in each of the point-rated criteria; and
- b. meet the minimum score of the overall point rated criteria with 70% (154 of a possible 220 points) or higher

	<b><i>Point Rated Evaluation Criteria</i></b>	<b><i>Cross Reference to Proposal (Supplier to insert)</i></b>	<b><i>Maximum Available Points</i></b>	<b><i>Points Received</i></b>
	<b>UNDERSTANDING the Mandate (20 points)</b>			
<b>R1</b>	<p>General background of the Canadian Shellfish Sanitation Program (CSSP) and public health implications of shellfish contamination. This will include the following key components:</p> <ul style="list-style-type: none"> <li>• Description of the program mandate</li> <li>• Federal departments and their responsibilities</li> <li>• Applicable Acts and Regulations</li> <li>• Risks associated with contamination</li> <li>• Monitoring requirements</li> </ul> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> <li>• 20 pts: The Bidder has provided a relevant, detailed and clear description of the Canadian Shellfish Sanitation Program (CSSP) that contains each component.</li> <li>• 15 pts: The Bidder has provided a relevant, detailed and clear description of the Canadian Shellfish Sanitation Program (CSSP) that is lacking in one of the key components.</li> <li>• 10 pts: The Bidder has provided a relevant, detailed and clear description of the Canadian Shellfish Sanitation Program (CSSP) is lacking in two of the key components.</li> <li>• 5 pts: The Bidder has provided a relevant, detailed and clear description of the Canadian Shellfish Sanitation Program (CSSP) that is lacking in three of the key components.</li> <li>• 1 pt: The Bidder has provided a relevant, detailed and clear description of the Canadian Shellfish Sanitation Program (CSSP) that is lacking in four of the key components.</li> <li>• 0 pt: The Bidder has provided a relevant,</li> </ul>		<b>20</b>	

	detailed and clear description of the Canadian Shellfish Sanitation Program (CSSP) that is lacking in five of the key components.			
<b>WORK PLAN (90 points)</b>				
<b>R2</b>	The Bidder will demonstrate its ability to deliver samples to the laboratory within a maximum of eight (8) hours from the sample site.		<b>5</b>	
<b>R3</b>	The Bidder will demonstrate its ability to analyze samples within two (2) hours of receipt at the laboratory.		<b>5</b>	
<b>R4</b>	<p>The Bidder will provide the following information for a completed contract of similar size and scope, including any risks or constraints.</p> <ul style="list-style-type: none"> <li>• proposed work plan, methodology, and approach</li> <li>• sample plan</li> <li>• laboratory plan</li> </ul> <p>The information must include:</p> <ul style="list-style-type: none"> <li>• Name of client organization</li> <li>• Start and end dates</li> <li>• Client reference and contact information</li> <li>• The proposed work plan, methodology, and approach used to meet project scope and objectives. Including the following key components: <ul style="list-style-type: none"> <li>○ scope and objectives</li> <li>○ approach and methodology</li> <li>○ breakdown of project into logistical tasks</li> <li>○ planning and details of each task</li> <li>○ estimation of the level of effort and allocation of personnel required to complete the work</li> <li>○ availability of assigned personnel, equipment, and adequate backup</li> </ul> </li> <li>• The sample plan used to ensure that samples were transported from the sample site to the laboratory within the maximum allowed time. Including the following key components: <ul style="list-style-type: none"> <li>○ laboratory coordination</li> <li>○ holding time</li> <li>○ holding temperature</li> <li>○ sample storage</li> <li>○ record keeping</li> <li>○ communication</li> </ul> </li> <li>• The laboratory plan used to ensure samples were received, processed, and results supplied within the maximum</li> </ul>		<b>80</b>	

	<p>allowed time. Including the following key components:</p> <ul style="list-style-type: none"> <li>○ flexibility of lab to deliver results in response to field delays</li> <li>○ how the lab maintains sample integrity</li> <li>○ work load/Laboratory capacity for processing samples</li> <li>○ contingency planning</li> </ul> <p>The contract must have a <b>minimum duration of twelve (12) months.</b></p> <p>The contract must have been completed within the <b>last five (5) years.</b></p> <p>The contract must have a minimum total contract value of \$250,000.00.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> <li>● Proposed Work Plan, Methodology, and Approach – 5 points per bullet for a maximum of 30 points <ul style="list-style-type: none"> <li>○ scope and objectives</li> <li>○ approach and methodology</li> <li>○ breakdown of project into logistical tasks</li> <li>○ planning and details of each task</li> <li>○ estimation of the level of effort and allocation of personnel required to complete the work</li> <li>○ availability of assigned personnel, equipment, and adequate backup</li> </ul> </li> <li>● Sample Plan – 5 points per bullet for a maximum of 30 points <ul style="list-style-type: none"> <li>○ laboratory coordination</li> <li>○ holding time</li> <li>○ holding temperature</li> <li>○ sample storage</li> <li>○ record keeping</li> <li>○ communication</li> </ul> </li> <li>● Laboratory Plan – 5 points per bullet for a maximum of 20 points <ul style="list-style-type: none"> <li>○ flexibility of lab to deliver results in response to field delays</li> <li>○ how the lab maintains sample integrity</li> <li>○ work load/Laboratory capacity for processing samples</li> <li>○ contingency planning</li> </ul> </li> </ul>			
<b>PROBLEM SOLVING (20 points)</b>				

R5	<p>The Bidder will demonstrate in its proposal, details on possible problems and the proposed solutions to ensure data integrity is maintained. This will include the following key components:</p> <ul style="list-style-type: none"> <li>• Description of the problem</li> <li>• Details on data integrity</li> <li>• Corrective action identified</li> <li>• Implications of not addressing the issue</li> <li>• Details to minimize down time</li> </ul> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> <li>• 20 pts: The Bidder has provided a relevant, detailed and clear description of five possible problems and proposed solutions that contains each component.</li> <li>• 15 pts: The Bidder has provided a relevant, detailed and clear description of four possible problems and proposed solutions that contains each component.</li> <li>• 10 pts: The Bidder has provided a relevant, detailed and clear description of three possible problems and proposed solutions that contains each component.</li> <li>• 5 pts: The Bidder has provided a relevant, detailed and clear description of two possible problems and proposed solutions that contains each component.</li> <li>• 1 pt: The Bidder has provided a relevant, detailed and clear description of one possible problem and proposed solution that contains each component.</li> <li>• 0 pt: The Bidder has provided no relevant, detailed and clear description of possible problems and proposed solutions.</li> </ul>		20	
<b>EQUIPMENT (30 points)</b>				
R6	<p>The Bidder will demonstrate in its proposal, details on the sampling equipment to be utilized. This will include the following key components:</p> <ul style="list-style-type: none"> <li>• Type, size of boat and outboard motors</li> <li>• Boat(s) capable of sampling very shallow waters yet of sufficient speed to meet sampling requirements and sea worthy to occasionally sample during rough sea conditions</li> <li>• Boat design allows one to safely take water samples from the bow area</li> <li>• Crewing requirements</li> <li>• Truck(s) capable of towing boats</li> <li>• All equipment will be available within 1 week of contract award</li> </ul> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> <li>• 30 pts: The Bidder has provided a relevant,</li> </ul>		30	

	<p>detailed and clear description of the sampling equipment that will be used for each component.</p> <ul style="list-style-type: none"> <li>• 25 pts: The Bidder has provided a relevant, detailed and clear description of the sampling equipment that will be used that is lacking in one of the key components.</li> <li>• 20 pts: The Bidder has provided a relevant, detailed and clear description of the sampling equipment that will be used that is lacking in two of the key components.</li> <li>• 15 pts: The Bidder has provided a relevant, detailed and clear description of the sampling equipment that will be used that is lacking in three of the key components.</li> <li>• 10 pts: The Bidder has provided a relevant, detailed and clear description of the sampling equipment that will be used that is lacking in four of the key components.</li> <li>• 5 pts: The Bidder has provided a relevant, detailed and clear description of the sampling equipment that will be used that is lacking in five of the key components.</li> <li>• 0 pt: The Bidder has provided a relevant, detailed and clear description of the sampling equipment that will be used that is lacking in all of the key components.</li> </ul>			
<b>EXPERIENCE AND EDUCATION (50 points)</b>				
<p><b><i>The proposal will include:</i></b></p> <ul style="list-style-type: none"> <li>• <i>A company profile with detailed project listing of relevance to this project,</i></li> <li>• <i>The Project Team and each member's contribution to the project,</i></li> <li>• <i>Resumes for each member of the Project Team. Resumes should clearly demonstrate: education, specific project related training and certifications, related work experience and skills obtained from conducting similar studies.</i></li> </ul>				
<b>R7</b>	<p>The Bidder will demonstrate in its proposal, the experience of the organization in conducting water quality studies (sampling) projects in the coastal marine environment.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> <li>• 15 pts: 5 to 10 years of experience</li> <li>• 10 pts: 2 to 5 years of experience</li> <li>• 5 pts: 1 to 2 years of experience</li> <li>• 0 pt: no experience</li> </ul>		<b>15</b>	
<b>R8</b>	<p>The Bidder will demonstrate in its proposal, the experience of the Project Manager in leading and coordinating water quality studies (sampling) in the coastal marine environment.</p> <p>Points will be awarded as follows:</p>		<b>15</b>	

	<ul style="list-style-type: none"> <li>• 15 pts: 5 to 10 years of experience</li> <li>• 10 pts: 2 to 5 years of experience</li> <li>• 5 pts: 1 to 2 years of experience</li> <li>• 0 pt: no experience</li> </ul>			
<b>R9</b>	<p>The Bidder will demonstrate in its proposal, the experience of the Project Team, excluding the project manager, in conducting water quality studies (sampling) in the coastal marine environment.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> <li>• 10 pts: 10 years of combined experience</li> <li>• 5 pts: 5 to 10 years of combined experience</li> <li>• 1 pts: 2 to 5 years of combined experience</li> <li>• 0 pt: no experience</li> </ul>		<b>10</b>	
<b>R10</b>	<p>The Bidder will demonstrate in its proposal the educational background of the assigned personnel. Educational background includes post-secondary study in the field of science or environmental science. Relevant certifications might include training in first aid, driving and boating.</p> <p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> <li>• 10 pts: 80-100% of personnel assigned to project have an educational background in science or environmental studies and relevant certifications.</li> <li>• 5 pts: 50-79% of personnel assigned to project have an educational background in science or environmental studies and relevant certifications.</li> <li>• 1 pts: 20-49% of personnel assigned to project have an educational background in science or environmental studies and relevant certifications.</li> <li>• 0 pt: 0-19% of personnel assigned to project have an educational background in science or environmental studies and relevant certifications.</li> </ul>		<b>10</b>	
<b>ENVIRONMENTAL CONSIDERATIONS (10 points)</b>				
<b>R11</b>	<p>The Bidder will demonstrate in its proposal, environmental considerations while fulfilling the requirements of the proposal. This will include the following key components:</p> <ul style="list-style-type: none"> <li>• equipment,</li> <li>• supplies,</li> <li>• processes</li> </ul>		<b>10</b>	

	<p>Points will be awarded as follows:</p> <ul style="list-style-type: none"> <li>• 10 pts: The Bidder has provided a description of how environmental considerations will be fulfilled that includes all of the key components.</li> <li>• 5 pts: The Bidder has provided a description of how environmental considerations will be fulfilled that is lacking in one of the key components.</li> <li>• 1 pt: The Bidder has provided a description of how environmental considerations will be fulfilled that is lacking in two of the key components</li> <li>• 0 pts: The Bidder has not provided a description of how environmental considerations will be fulfilled.</li> </ul>			
	<b>Total</b>		<b>220 points</b>	

## **PART 5 - CERTIFICATIONS**

Bidders must provide the required certifications and associated information to be awarded a contract.

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default in carrying out any of its obligations under the Contract, if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority may render the bid non-responsive or constitute a default under the Contract.

### **1. Certifications Required Precedent to Contract Award**

#### **1.1 Integrity Provisions - Associated Information**

By submitting a bid, the Bidder certifies that the Bidder and its Affiliates are in compliance with the provisions as stated in Section 01 Integrity Provisions - Bid of Standard Instructions 2003. The associated information required within the Integrity Provisions will assist Canada in confirming that the certifications are true.

#### **1.2 Federal Contractors Program for Employment Equity - Bid Certification**

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

### **2. Additional Certifications Required Precedent to Contract Award**

The certifications listed below should be completed and submitted with the bid but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the bid non-responsive.

#### **2.1 Status and Availability of Resources**

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

## **2.2 Education and Experience**

*PWGSC SACC Manual* clause A3010T (2010-08-16) Education and Experience

## **PART 6 - RESULTING CONTRACT**

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

### **Marine Water Quality Monitoring Atlantic Region Annual Sampling Requirement for Nova Scotia, 2021 – 2024**

#### **1. Statement of Work**

The Contractor must perform the Work in accordance with the Statement of Work at Annex A and the Contractor's technical bid dated \_\_\_\_\_.

#### **2. Standard Clauses and Conditions**

All clauses and conditions identified in the Contract by number, date and title are set out in the PWGSC *Standard Acquisition Clauses and Conditions Manual* (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

##### **2.1 General Conditions**

2010B (2018-06-21), General Conditions - Professional Services (Medium Complexity), as modified below, apply to and form part of the Contract.

General conditions 2010B is modified as follows:

##### **At Section 12 Transportation Costs**

**Delete:** In its entirety

**Insert:** "Deleted"

##### **At Section 13 Transportation Carriers' Liability**

**Delete:** In its entirety.

**Insert:** "Deleted"

##### **At Section 18, Confidentiality:**

**Delete:** In its entirety

**Insert:** "Deleted"

##### **Insert Subsection: "35 Liability"**

"The Contractor is liable for any damage caused by the Contractor, its employees, subcontractors, or agents to Canada or any third party. Canada is liable for any damage caused by Canada, its employees or agents to the Contractor or any third party. The Parties agree that no limitation of liability or indemnity provision applies to the Contract unless it is specifically incorporated in full text in the Articles of Agreement. Damage includes any injury to persons (including injury resulting in death) or loss of or damage to property (including real property) caused as a result of or during the performance of the Contract."

#### **A. For professional services requirements where the deliverables are copyrightable works:**

##### **At Section 19 Copyright**

**Delete:** In its entirety

**Insert:** 1. In this section:

"Material" means anything that is created or developed by the Contractor as part of the Work under the Contract, and in which copyright subsists.

"Background Information" means all Intellectual Property that is not Foreground Information that is incorporated into the Work or necessary for the performance of the Work and that is proprietary to or the confidential information of the Contractor, its subcontractors or any other third party;

"Foreground Information" means all Intellectual Property first conceived, developed, produced or reduced to practice as part of the Work under the Contract;

2. Material that is created or developed by the Contractor as part of the Work under the Contract belongs to Canada. The Contractor must incorporate the copyright symbol and either of the following notices, as appropriate: © Her Majesty the Queen in right of Canada (year) or © Sa Majesté la Reine du chef du Canada (année).
3. At the request of the Contracting Authority, the Contractor must provide to Canada, at the completion of the Work or at such other time as the Contracting Authority may require, a written permanent waiver of moral rights as defined in the [Copyright Act](#), R.S., 1985, c. C-42, in a form acceptable to the Contracting Authority, from every author that contributed to the Work. If the Contractor is an author, the Contractor permanently waives the Contractor's moral rights.
4. All Intellectual Property Rights in the Material belongs to Canada as soon as they come into existence. The Contractor has no right in or to any such Intellectual Property except any right that may be granted in writing by Canada.
5. The Contractor also grants to Canada a non-exclusive, perpetual, irrevocable, worldwide, fully-paid and royalty-free license to use the Background Information to the extent that this information is required by Canada to exercise its rights to use the Material. This license cannot be restricted in any way by the Contractor providing any form of notice to the contrary, including the wording on any shrink-wrapped license attached to any deliverable.

### **3. Security Requirement**

3.1 There is no security requirement applicable to this Contract.

### **4. Term of Contract**

#### **4.1 Period of the Contract**

The period of the Contract is from date of Contract to March 31, 2022 inclusive.

#### **4.2 Option to Extend the Contract**

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to two (2) additional one year period(s) under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor at least five (5) calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

### **5. Authorities**

#### **5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Name: Alyssa Festeryga  
Title: Procurement Officer  
Environment Canada  
Procurement and Contracting Division  
Address: 45 Alderney Drive, Dartmouth NS B2Y 2N6

Telephone: 902-426-9150  
E-mail address: [alyssa.festeryga@canada.ca](mailto:alyssa.festeryga@canada.ca)

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

## 5.2 Technical Authority – To be inserted at Contract Award

The Technical Authority for the Contract is:

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone: \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_  
E-mail address: \_\_\_\_\_

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

## 5.3 Contractor's Representative – To be completed by Bidder

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Organization: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone: \_\_\_\_ - \_\_\_\_ - \_\_\_\_\_  
E-mail address: \_\_\_\_\_

## 6. Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a *Public Service Superannuation Act* (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

## 7. Payment

### 7.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price of \_\_\_\_\_ (to be inserted at contract award) per water sample. Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

## **7.2 Limitation of Expenditure**

- (a) Canada's total liability to the Contractor under the Contract must not exceed \$ \_\_\_\_\_. Customs duties are included and the Applicable Taxes are extra.
- (b) No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
  - (i) when it is 75 percent committed, or
  - (ii) four (4) months before the contract expiry date, or
  - (iii) as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,

whichever comes first.

- (c) If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

## **7.3 Progress Payments**

**7.3.1** Canada will make progress payments in accordance with the payment provisions of the Contract, no more than once a month, for cost incurred in the performance of the Work, up to ninety percent (90%) of the amount claimed and approved by Canada if:

- (a) an accurate and complete claim for payment in the form of an itemized account and any other documents required by the Contract is submitted in accordance with the invoicing provisions of the Contract;
- (b) the amount claimed is in accordance with the basis of payment;
- (c) the total amount for all progress payments paid by Canada does not exceed ninety percent (90%) percent of the total amount to be paid under the Contract;
- (d) all such documents have been verified by Canada;
- (e) the work delivered has been accepted by Canada.

**7.3.2** The balance of the amount payable will be paid in accordance with the payment provisions of the Contract upon completion and delivery of all work required under the Contract if the Work has been accepted by Canada and a final claim for the payment is submitted.

**7.3.3** Progress payments are interim payments only. Canada may conduct a government audit and interim time and cost verifications and reserves the rights to make adjustments to the Contract from time to time during the performance of the Work. Any overpayment resulting from progress payments or otherwise must be refunded promptly to Canada.

#### **7.4 PWGSC SACC Manual Clauses**

A9117C (2007-11-30) T1204 - Direct Request by Customer Department

### **8. Invoicing Instructions**

**8.1** The Contractor must submit invoices monthly in accordance with the section entitled "Invoice Submission" of the general conditions.

### **9. Certifications**

#### **9.1 Compliance**

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

#### **9.2 Federal Contractors Program for Employment Equity - Default by the Contractor**

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "FCP Limited Eligibility to Bid" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

### **10. Applicable Laws – To be completed by Bidder**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in \_\_\_\_\_.

### **11. Priority of Documents**

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) 2010B General Conditions - Professional Services (Medium Complexity) 2018-06-21) as modified;
- (c) Annex A, Statement of Work;
- (d) Annex B, Basis of Payment;
- (e) Annex C, Federal Contractors Program for Employment Equity - Certification

- (f) Annex D, Insurance Requirements;
- (g) the Contractor's bid dated \_\_\_\_\_. – To be completed by Bidder

## **12. Insurance Requirements – Specific requirement**

The Contractor must comply with the insurance requirements specified in Annex D. The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract.

The Contractor is responsible for deciding if additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any additional insurance coverage is at the Contractor's expense, and for its own benefit and protection.

The Contractor must forward to the Contracting Authority within ten (10) days after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. For Canadian-based Contractors, coverage must be placed with an Insurer licensed to carry out business in Canada, however, for Foreign-based Contractors, coverage must be placed with an Insurer with an A.M. Best Rating no less than "A-". The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

## **13. Translation of Documentation**

The Contractor agrees that Canada may translate in the other official language any documentation delivered to Canada by the Contractor that does not belong to Canada. The Contractor acknowledges that Canada owns the translation and that it is under no obligation to provide any translation to the Contractor. Canada agrees that any translation must include any copyright notice and any proprietary right notice that was part of the original. Canada acknowledges that the Contractor is not responsible for any technical errors or other problems that may arise as a result of the translation.

## **14. Ownership**

1. Unless provided otherwise in the Contract, the Work or any part of the Work belongs to Canada after delivery and acceptance by or on behalf of Canada.
2. However if any payment is made to the Contractor for or on account of any Work, either by way of progress or milestone payments, that work paid for by Canada belongs to Canada upon such payment being made. This transfer of ownership does not constitute acceptance by Canada of the Work or any part of the Work and does not relieve the Contractor of its obligation to perform the Work in accordance with the Contract.
3. Despite any transfer of ownership, the Contractor is responsible for any loss or damage to the Work or any part of the Work until it is delivered to Canada in accordance with the Contract. Even after delivery, the Contractor remains responsible for any loss or damage to any part of the Work caused by the Contractor or any subcontractor.
4. Upon transfer of ownership to the Work or any part of the Work to Canada, the Contractor must, if requested by Canada, establish to Canada's satisfaction that the title is free and clear of all claims, liens, attachments, charges or encumbrances. The Contractor must execute any conveyances and other instruments necessary to perfect the title that Canada may require.

## **15. Identification Protocol Responsibilities**

1. The Contractor will be responsible for ensuring that any of its resources, representatives or subcontractors complies with the following self-identification requirements:

2. Contractors who attend a Government of Canada meeting (whether internal or external to Canada's offices) must identify if they are a Contractor prior to the commencement of the meeting, to ensure that each meeting participant is aware of the fact that the individual is not a Government of Canada employee;
3. During the performance of any Work at a Government of Canada site, the Contractor must be clearly identified at all times as being a Contractor;
4. If a Contractor requires the use of the Government of Canada's e-mail system in the performance of the Work, then the individual must clearly identify him or herself as a Contractor in all electronic mail including the signature block as well as under "Properties". This identification protocol must also be used in all other correspondence, communication, and documentation;
5. If Canada determines that the Contractor are in breach of any obligation stated in this clause, upon written notice from Canada the Contractor must submit a written action plan describing the corrective measures it will implement to eliminate the recurrence of the problem. The Contractor will have five working days to deliver the action plan to the Client or the Contracting Authority, and twenty working days to rectify the underlying problem; and
6. In addition to any other rights it has under the Contract, Canada may terminate the Contract for default if the corrective measures required of the Contractor described above are not met.

#### **16. Intellectual Property Infringement and Royalties**

1. The Contractor represents and warrants that, to the best of its knowledge, neither it nor Canada will infringe any third party's intellectual property rights in performing or using the Work, and that Canada will have no obligation to pay royalties of any kind to anyone in connection with the Work.
2. If anyone makes a claim against Canada or the Contractor concerning intellectual property infringement or royalties related to the Work, that Party agrees to notify the other Party in writing immediately. If anyone brings a claim against Canada, according to Department of Justice Act, R.S., 1985, c. J-2, the Attorney General of Canada must have the regulation and conduct of all litigation for or against Canada, but the Attorney General may request that the Contractor defend Canada against the claim. In either case, the Contractor agrees to participate fully in the defence and any settlement negotiations and to pay all costs, damages and legal costs incurred or payable as a result of the claim, including the amount of any settlement. Both Parties agree not to settle any claim unless the other Party first approves the settlement in writing.
3. The Contractor has no obligation regarding claims that were only made because:
  - a. Canada modified the Work or part of the Work without the Contractor's consent or used the Work or part of the Work without following a requirement of the Contract; or
  - b. Canada used the Work or part of the Work with a product that the Contractor did not supply under the Contract (unless that use is described in the Contract or the manufacturer's specifications); or
  - c. the Contractor used equipment, drawings, specifications or other information supplied to the Contractor by Canada (or by someone authorized by Canada); or
  - d. the Contractor used a specific item of equipment or software that it obtained because of specific instructions from the Contracting Authority; however, this exception only applies if the Contractor has included the following language in its own contract with the supplier of that equipment or software: "[Supplier name] acknowledges that the purchased items will be used by the Government of Canada. If a third party claims that equipment or software supplied under this contract infringes any intellectual property right, [supplier name], if requested to do so by either [Contractor name] or Canada, will defend both [Contractor name] and Canada against that claim at its own expense and will pay all costs, damages and legal fees payable as a result of that infringement." Obtaining this

protection from the supplier is the Contractor's responsibility and, if the Contractor does not do so, it will be responsible to Canada for the claim.

4. If anyone claims that, as a result of the Work, the Contractor or Canada is infringing its intellectual property rights, the Contractor must immediately do one of the following:
  - a. take whatever steps are necessary to allow Canada to continue to use the allegedly infringing part of the Work; or
  - b. modify or replace the Work to avoid intellectual property infringement, while ensuring that the Work continues to meet all the requirements of the Contract; or
  - c. take back the Work and refund any part of the Contract Price that Canada has already paid.

If the Contractor determines that none of these alternatives can reasonably be achieved, or if the Contractor fails to take any of these steps within a reasonable amount of time, Canada may choose either to require the Contractor to do (c), or to take whatever steps are necessary to acquire the rights to use the allegedly infringing part(s) of the Work itself, in which case the Contractor must reimburse Canada for all the costs it incurs to do so.

## **17. PWGSC SACC Manual Clauses**

*PWGSC SACC Manual* clause D5328C ([2014-06-26](#)) Inspection and Acceptance

## **ANNEX A STATEMENT OF WORK**

### **1. Introduction**

- 1.1.** The Canadian Shellfish Sanitation Program (CSSP) has the primary objective of protecting public health from the consumption of contaminated bivalve molluscan shellfish by controlling harvesting of shellfish in Canada. It is the first point of sanitary control. Under the CSSP, commercially harvested shellfish growing areas require annual review of sanitary conditions and bacteriological water quality sampling at key monitoring stations.
- 1.2.** Public health protection is required due to the filter-feeding mechanism of bivalve molluscs (clams, oysters, mussels, etc.) which can concentrate, in their meats, potentially pathogenic bacteria and viruses found in growing waters polluted by fecal matter of human or animal origin. Many consumers prefer to eat shellfish that are partially cooked, such as steamed clams, or raw, as in the case of oysters. Thus, elevated concentrations of live and potentially harmful microorganisms may be ingested.
- 1.3.** A bilateral Memorandum of Understanding between Canada and the United States of America on sanitary control of shellfish was signed in 1948 to ensure wholesomeness of shellfish harvested in both countries. In support of the Agreement, the CSSP Manual of Operations currently requires all classified shellfish harvesting areas to be surveyed annually for water quality. This shellfish growing area survey and classification work is the responsibility of Environment & Climate Change Canada's Shellfish Water Classification Program.

### **2. Objective**

- 2.1.** To carry out annual bacteriological water quality surveys of bivalve molluscan shellfish growing areas in order to evaluate whether the classified harvest areas continue to meet the Canadian Shellfish Sanitation Program (CSSP) and [American] National Shellfish Sanitation Program (NSSP) classification standards. This requirement requires surveying in selected shellfish growing areas throughout Nova Scotia from Cape North to Yarmouth.
- 2.2.** The initial proposed period of work for Nova Scotia would be from date of Contract Award to March 31, 2022. Environment & Climate Change Canada may extend and expand the contract by two (2) option years (April 1, 2022 to March 31, 2023 and April 1, 2023 to March 31, 2024).
- 2.3.** In 2021, samples will be collected at 442 discrete monitoring sites on five (5) occasions (one sample per station per sampling run) in thirty-four (34) shellfish growing area sub-sectors principally from May to December.
- 2.4.** If ECCC exercises the first option year in 2022, samples are to be collected at 442 discrete monitoring sites on five (5) occasions (one sample per station per sampling run) in thirty-four (34) shellfish growing area sub-sectors principally from May to November.
- 2.5.** If ECCC exercises the second option year in 2023, samples are to be collected at 442 discrete monitoring sites on five (5) occasions (one sample per station per sampling run) in thirty-four (34) shellfish growing area sub-sectors principally from May to November.
- 2.6.** Locations of the shellfish growing area sample sites are provided as Appendix 2. Additional sampling runs could be added, in consultation with the Contractor, to the initial sampling plan if required in order to respond to evolving program needs. Collection, analysis, and submission of all water quality data are to be completed and provided to Environment & Climate Change Canada by February 28th each year.

### 3. Tasks

3.1. Collection of marine water samples.

3.2. Bacteriological analyses of water samples for fecal coliform bacteria by an approved CSSP or ISO/ IEC 17025 Accredited Laboratory ; utilizing the Thermotolerant Coliform Direct Test, A-1 Medium (Reference method can be found in : Standard Methods for the Examination of Water and Wastewater, APHA, 2012, 22nd Ed. Section 9221 E, 2).

3.3. Measurement of various physical and meteorological factors.

3.4. Inscribe survey data and analytical results onto laboratory data sheets (supplied by Environment & Climate Change Canada) and also enter this information into the Environment & Climate Change Canada Shellfish Growing Area Database (CSSP Web Tools) computer software (software to be supplied by ECCC). Electronic CSSP Web Tools files are to be provided every two weeks.

3.5. Verification of sampling station position accuracy by plotting GPS data tracks from each sampling run onto an electronic station map and by reporting any significant variance in position (i.e., > 10m).

### 4. Deliverables

4.1. The Contractor must provide the following Deliverables to the Technical Authority by the deadlines listed below.

<b><u>Deliverables</u></b>	<b><u>Deadline 2021</u></b>	<b><u>Deadline 2022</u></b>	<b><u>Deadline 2023</u></b>
<b>Annual sampling plan</b>	Within two weeks of Contract Award Date	Mid April 2022	Mid April 2023
<b>Laboratory results data sheets of individual sampling runs</b>	Weekly	Weekly	Weekly
<b>Data entry on CSSP Web Tools and electronic copy to Technical Authority</b>	Every Two Weeks	Every Two Weeks	Every Two Weeks
<b>Final Dataset - Data entry on CSSP Web Tools and electronic copy to Technical Authority</b>	Two weeks after end of water sampling, or December 15 <sup>th</sup> , whichever is sooner.	Two weeks after end of water sampling, or December 15 <sup>th</sup> , whichever is sooner.	Two weeks after end of water sampling, or December 15 <sup>th</sup> , whichever is sooner.
<b>Comment period ends</b>	February 15, 2022	February 15, 2023	February 15, 2024
<b>Final verified data</b>	February 28, 2022	February 28, 2023	February 28, 2024

### 5. Working Team

5.1. Environment & Climate Change Canada will require that only one person (project manager) from the working team be responsible for communication with the ECCC Technical Authority.

5.2. The members of the working team (i.e. project manager) proposed by the Contractor are expected to remain in their positions for the whole term of the contract. Any change in project leader must be approved by the ECCC Contracting Authority. All modifications in the team composition must also be approved by the ECCC Contracting Authority.

### 6. Water Quality Sampling

- 6.1.** The 2021 deliverables will include approximately 2189 water quality samples from thirty-four (34) shellfish growing areas as outlined in Appendix 1. This mandate may be expanded for two (2) additional years (2022 and 2023).
- 6.2.** The Contractor must provide all equipment and materials to conduct the work. A detailed list of the equipment provided must be included in the contractor's proposal. It is anticipated that the water quality sampling contractor will need to be on the water 1 - 3 hours per sampling day.
- 6.3.** Shellfish subsector descriptions and the number of water quality stations to sample are presented in Appendix 1. These subsectors will be the focus of detailed classification and must be sampled principally from May to November each year of the contract, when possible, according to a survey schedule established in consultation with the Technical Authority. Subsector maps showing sampling station locations can be provided as Appendix 2. Subsectors are not to be subdivided in any way. The laboratory capacity is to be adequate to analyze all samples collected on any given day.
- 6.4.** If additional sampling runs are to be added to the present plan, the Technical Authority will submit to the ECCC Contracting Authority a document detailing the supplementary sampling required. Upon its receipt from the ECCC Contracting Authority, the Contractor will submit a confirmation of capability and cost to the ECCC Contracting Authority for the additional sampling runs.
- 6.5. Water Sampling Procedure**
  - 6.5.1.** Water samples will be collected at the surface (20 cm) at each station according to strict ECCC sampling protocols (see Appendix 3). Water samples are to be collected and analyzed preferably within an eight (8) hour period. If an extension to the eight (8) hour sampling time period is anticipated, the Contractor is required to obtain approval from the Technical Authority prior to the sampling run. Sample holding times are a critical quality control point. Under all circumstances, sample analysis is to be performed as soon as possible after samples are received at the laboratory.
  - 6.5.2.** When planning a sampling program the Contractor is required to take various factors into consideration. The shellfish areas will be sampled according to a randomly selected pre-determined schedule (weather permitting). A consistent method of dealing with variations to the sampling schedule will be carried out as detailed in the contractor's proposal. Utilizing a randomized schedule will make it possible to encounter various hydrological, meteorological, or land-use conditions. Moreover, a 2-3 week minimum period should be respected between each sampling run in a same area, unless specifically authorized or requested by the Technical Authority.
  - 6.5.3.** Sample station location maps will be provided by ECCC and all stations must be verified utilising a Global Positioning System (GPS) and relevant visual reference points. Acceptable coordinate systems will be either UTM Grid Reference or Lat/Long (in decimal degree). The Contractor is required to validate the correct position of each sampling station utilizing a GPS device during every sampling run in each survey area. Changes to locations of sampling stations will be authorized only in consultation with the Technical Authority.
  - 6.5.4.** For verification purposes, all sampling runs must be tracked by GPS, and each sample station tagged (with a corresponding waypoint clearly labeled) at the time of sampling. The sampling run data track must be subsequently downloaded to a computer and the points sampled compared for precision against an electronic map (or database) of pre-established sampling station locations. Any position variances greater than ten (10) metres are to be reported to the Technical Authority before the next scheduled sampling run.
  - 6.5.5.** A field log book must be used to record field observations and information relative to each sampling run as per the ECCC Sampling Protocol (Appendix 3). All field log books must be kept and provided to Environment & Climate Change Canada at the end of each sampling season.

## **6.6. Survey Procedure Evaluation**

**6.6.1.** Sampling quality control will be conducted by Environment & Climate Change Canada. Training and “onboard” field audits of water quality sampling activities will be scheduled in consultation with the Contractor. The CSSP Evaluation Report of Field Activity is included in Appendix 4, and Environment & Climate Change Canada reserves the right to add other control points as required.

## **6.7. Health and Safety**

**6.7.1.** For safety reasons, ECCC requires that each boat have 2 (two) properly trained crew members onboard at all times during surveys: a chief operator and a sampler. All chief boat operators must be licensed for and be familiar with small craft operation in coastal waters. They must also be proficient in reading marine charts, radio operation, Atlantic coast weather report interpretation and routine boat/motor maintenance. In the event of mechanical breakdowns, the chief operator must be prepared to expedite repairs or acquire a replacement boat so that sampling will proceed uninterrupted. The sampler must also be familiar with the above procedures in the event that the operator is not capable of performing them. All boat operators must meet Transport Canada regulations that pertain to the activity and class of vessel utilized to conduct the work. Proof of boat operator certification will be provided to ECCC prior to the commencement of sampling.

**6.7.2.** While conducting this work on behalf of ECCC, the Contractor and employees will be expected to respect “rules of the road” as applied to appropriate boating behavior. This includes speed restrictions in harbours and in the vicinity of Aquaculture sites and other floating operations. Common sense must be applied to the behavior carried out by the sampling crews while conducting work on behalf of Environment & Climate Change Canada.

**6.7.3.** It is to be anticipated that unfavourable weather conditions will be encountered periodically during the course of conducting surveys. The decision to suspend a sampling run, due to dangerous weather conditions or any other potentially hazardous condition lies completely with the Contractor and the chief boat operator. If a sampling run is rescheduled due to inclement weather or unforeseen mechanical difficulties, this decision should be communicated to the Technical Authority as soon as possible.

**6.7.4.** Past experience of ECCC field staff conducting sampling in Nova Scotia would suggest the sampling conditions (extent of survey area, influence of tide & wind, and the need to navigate in very shallow near shore waters) favours the use of a shallow draught 4.3 metre (14 ft) to 6.1 metre (19 ft) runabout or rigid hull inflatable watercraft equipped with a 50 to 90-HP motor. Deep-V cruisers are not suitable for this type of work as most sample sites are located in the intertidal zone. All boats are to be capable of being trailered with vehicles provided by the contractor. The craft used must be fitted with all equipment required by Canadian Laws, according to its class and commercial use.

**6.7.5.** In addition, it is the responsibility of the Contractor to assure the occupational health and safety (OHS) of his employees who perform sampling in marine environments. For example, the Contractor should identify the risks associated with the task, establish safe work procedures, provide appropriate training to his employees, and ensure that they have access to the security and personal protective equipment required to operate tasks that they must perform.

**6.7.6.** The Contractor must comply with the safety conditions for small commercial vessels recommended by Transport Canada (TC). The Contractor must demonstrate (with supporting evidence) to the ECCC Technical Authority that all crafts used for the sampling and quality control (evaluation) have been inspected by TC (notice of inspection for small vessels) before the start of operations and satisfy TC standards, to assure the security of everyone on board.

**6.7.7.** Marine safety information can be found on the following Government of Canada Internet sites:

**6.7.7.1.** *Canada Shipping Act, 2001* (S.C. 2001, c. 26) - <http://lois-laws.justice.gc.ca/eng/acts/C-10.15/>

- 6.7.7.2. *Small Vessel Regulations* (SOR/2010-91) - <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-91/>
- 6.7.7.3. Vessel Registration Office - <http://www.tc.gc.ca/eng/marinesafety/oep-vesselreg-menu-728.htm>
- 6.7.7.4. General information on the equipment and water safety for small vessels - <http://www.tc.gc.ca/eng/marinesafety/debs-small-vessels-menu-2258.htm>
- 6.7.7.5. General information on small vessels: <http://www.tc.gc.ca/marinesafety/menu.htm>
- 6.7.7.6. Small Commercial Vessel Safety Guide - TP 14070 E (2010) - <http://www.tc.gc.ca/eng/marinesafety/tp-tp14070-menu-1648.htm>
- 6.7.7.7. Small vessel monitoring and inspection program: <http://www.tc.gc.ca/eng/marinesafety/debs-small-vessels-inspection-309.htm>
- 6.7.7.8. Small Vessel Compliance Program (SVCP) Detailed Compliance Report): <http://www.tc.gc.ca/eng/marinesafety/tp-tp15111-menu-3955.htm>

## 7. Laboratory Analysis

7.1. Water quality samples must be processed in an ISO/ IEC 17025:2005 accredited laboratory. The Contractor will demonstrate in the proposal submission which laboratory facility will be used and provide copies of relevant laboratory accreditation certificates. For laboratories awaiting their accreditation certificates, the Contractor will provide proof of accreditation inspection and a written letter from the accrediting body confirming that certificates will be issued before contract award date.

7.2. The following web sites should be consulted as references:

7.2.1. Standards Council of Canada <http://www.scc.ca/>

7.2.2. Canadian Association for Laboratory Accreditation-CALA (<http://www.cala.ca/>).

7.3. The Contractor will be responsible for paying all costs associated with the water sample collection, transportation, and analysis.

7.4. Methodology

7.4.1. The conventional bacteriological analysis method of fifteen fermentation tubes with three dilutions (5-5-5), using A-1 culture medium, will be employed (APHA, 2012, 22nd Ed. Standard Methods for the Examination of Water and Wastewater Section 9221 E, 2. Thermotolerant Coliform Direct Test (A-1 Medium) p. 9-74 to 9-75). The indicator to be measured is the most probable number (MPN) fecal coliform level per 100 mL of sample water. The laboratory must ensure the quality of its analyses by performing a method validation, various internal quality controls and participation in an external proficiency testing program. Laboratories must meet the quality control requirements outlined in the CSSP checklist, Appendix 4 and ISO /IEC 17025 Standard. in accordance with guidelines included in the following manuals: Recommended Procedures for the Examination of Sea Water and Shellfish (Fourth Ed., 1970) and Standard Methods for the Examination of Water and Wastewater (APHA, 2012, 22nd Ed. Section 9221 E, 2.).

7.5. Quality Assurance Program

7.5.1. ISO/ IEC 17025:2005 requires laboratories to implement and maintain a Laboratory Quality Assurance Program. In addition, the laboratory must participate in an external Proficiency Testing program at least once a year, and within the first two months of processing samples. Results of this participation must be provided to the ECCC Technical Authority for review.

7.6. Laboratory Space and Equipment

7.6.1. The Contractor must provide sufficient laboratory space and necessary equipment to carry out the present requirement. All laboratory facilities and equipment must meet requirements as per ISO/IEC 17025:2005 Standards.

**7.6.2.** Supplies, material and personal protective equipment necessary for sampling and bacteriological analysis will be provided by the contractor.

#### **7.7. Disposal of Waste and Biohazardous Material**

**7.7.1.** When disposing of used or unused culture media and contaminated laboratory materials the Contractor must ensure all waste is sterilized / neutralized and confined (bagged/ boxed) before disposing according to local waste disposal regulations. The Contractor should use environmentally safe and recyclable products where possible.

#### **7.8. Laboratory Location**

**7.8.1.** Water samples should be collected and analyzed within an eight (8) hour period. Sample analysis is to be performed as soon as possible after samples are received at the laboratory.

**7.8.2.** The laboratory water supply must meet Canadian drinking water standards (CDWS). To meet this requirement, the Contractor must provide proof that the supplied water meets the CDWS. In addition, the Contractor must provide the Technical Authority with a report of chemical analyses of the reagent grade water at the discharge outlet of the laboratory's water purification / treatment system, one month after the start of the field sampling work; in each year of the contract. The chemical analysis must be conducted by an accredited laboratory for trace dissolved metals (specifically chromium, cadmium, copper, nickel lead and zinc), and heavy metals.

**7.8.3.** Reagent grade water must also be tested routinely for chlorine, conductivity, pH and heterotrophic plate count.

#### **7.9. Laboratory Evaluation/ Audit**

**7.9.1.** Laboratory evaluations will be carried out by Environment & Climate Change Canada or ISO/ IEC 17025 auditors (as appropriate) at least once a year. Additional control points and/ or inspections can be added by Environment & Climate Change Canada, if deemed necessary.

### **8. Data Compilation and Survey Reports**

#### **8.1. Sampling Plan**

**8.1.1.** An annual sampling plan on field and laboratory activities must be provided to the Technical Authority at least two (2) weeks prior to the commencement of each field season. If, for reasons beyond the control of the field team, the survey area scheduled to be sampled cannot be carried out as planned, a notice of this situation must be given to the Technical Authority on the same day.

**8.1.2.** In addition, the Contractor must provide a list of georeferenced launching sites to be used for sampling each subsector.

#### **8.2. Report and Data Entry**

**8.2.1.** The laboratory bacteriological results sheets for each sampling run will be provided to the Technical Authority weekly by e-mail (scan), fax or in person. This laboratory information, together with any supporting field notes, must be entered into the CSSP Web Tools data management system. Environment & Climate Change Canada will provide this software to the Contractor to use exclusively for the purpose of the contract. Environment & Climate Change Canada will retain all rights, ownership and exclusive control of this software. Electronic updates of the CSSP Web Tools must be provided every two weeks to the Technical Authority

### **9. Various**

**9.1.** All meetings will be held in French or English and all the written reports must be presented in English. Report format will be determined later.

- 9.2. Project monitoring will be ensured through periodic meetings or conference-calls at which time work progress will be presented: before work begins, during the sampling period, and upon completion of the field work. Other meetings or conference-calls may be added as the project progresses.
- 9.3. An appropriate level of priority will be placed on the delivery of these project deliverables to avoid possible conflicts with other work.
- 9.4. Environment & Climate Change Canada reserves the right to modify the sampling of certain subsectors and to redistribute the work to other subsectors to be done in the same area while respecting the sampling schedule and the need to prevent any additional cost.
- 9.5. Environment & Climate Change Canada reserves the right to reduce the number of samples in a given sampling plan during the course of the mandate. This may occur if the allocated financial resources of the program are reduced. The total cost of the contract will be reduced accordingly.
- 9.6. Bacteriological analysis results and any other information obtained from the surveys are confidential and remain the property of Environment & Climate Change Canada.
- 9.7. Should additional sampling surveys be added to the planned schedule, each additional sample will be paid in accordance with the contract's Basis of Payment.

## **10. Bibliographical References**

- 10.1. APHA (American Public Health Association) 1970. Recommended Procedures for the Examination of Seawater and Shellfish, Fourth Edition, Greenberg, A.E. et D.A. Hunt (ed.), Washington, D.C., 144 pages.
- 10.2. Official Methods of Analysis of the Association of Official Analytical Chemistry, Thirteenth Edition, 1980, AOAC.
- 10.3. Standard Methods for the Examination of Water and Wastewater, APHA, 2012, 22nd Ed. Section 9221 E, 2.
- 10.4. Canadian Shellfish Sanitation Program Manual, Government of Canada, 2019.  
<http://www.inspection.gc.ca/food/food-specific-requirements-and-guidance/fish/canadian-shellfish-sanitation-program/eng/1527251566006/1527251566942>

**ANNEX B  
BASIS OF PAYMENT**

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price of \_\_\_\_\_ (to be inserted by the Bidder) per water sample. Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

The per-water sample price is all-inclusive, including but not limited to professional fees (labor), materials and equipment required to perform the Work, administrative fees (e.g. insurance, training), and any travel that is at the Contractor's discretion.

**Financial Proposal**

The estimated number of samples is provided to Bidders to assist them in preparing their bids. The inclusion of this data in this bid solicitation does not represent a commitment by Canada that Canada's future usage of the service identified in this bid solicitation will be consistent with this data. It is provided purely for information purposes

<b>Year 1</b>			
<b>For the period from Contract Award Date to March 31, 2022</b>			
<b>Deliverable</b>	<b>Firm Price per Sample</b>	<b>Estimated Number of Samples</b>	<b>Total (Firm Price per Sample X Estimated Number of Samples)</b>
Water Sample – sampled, analyzed, and reported for		2189	
<b>Subtotal – Year 1</b>			
<b>Option Year 1</b>			
<b>For the period from April 1, 2022 to March 31, 2023</b>			
Water Sample – sampled, analyzed, and reported for		2189	
<b>Subtotal – Option Year 1</b>			
<b>Option Year 2</b>			
<b>For the period from April 1, 2023 to March 31, 2024</b>			
Water Sample – sampled, analyzed, and reported for		2189	
<b>Subtotal – Option Year 2</b>			
<i>Total</i>			
<i>Taxes (indicate rate) _____</i>			
<b>Total Estimated Contract Value</b>			

**ANNEX C**  
**FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION**

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit Employment and Social Development Canada (ESDC)-Labour's website.

Date: \_\_\_\_\_ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- A1. The Bidder certifies having no work force in Canada.
- A2. The Bidder certifies being a public sector employer.
- A3. The Bidder certifies being a federally regulated employer being subject to the *Employment Equity Act*.
- A4. The Bidder certifies having a combined work force in Canada of less than 100 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).
- A5. The Bidder has a combined workforce in Canada of 100 or more employees; and
- A5.1. The Bidder certifies already having a valid and current Agreement to Implement Employment Equity (AIEE) in place with ESDC-Labour.

**OR**

- A5.2. The Bidder certifies having submitted the Agreement to Implement Employment Equity (LAB1168) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- B1. The Bidder is not a Joint Venture.

**OR**

- B2. The Bidder is a Joint venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)

## ANNEX D INSURANCE REQUIREMENTS

1. The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$2,000,000 per accident or occurrence and in the annual aggregate.
2. The Commercial General Liability policy must include the following:
  - a. Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.
  - b. Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.
  - c. Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.
  - d. Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.
  - e. Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.
  - f. Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
  - g. Employees and, if applicable, Volunteers must be included as Additional Insured.
  - h. Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program)
  - i. Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.
  - j. Notice of Cancellation: The Contractor will provide the Contracting Authority thirty (30) days prior written notice of policy cancellation or any changes to the insurance policy.
  - k. If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.
  - l. Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.
  - m. Non-Owned Automobile Liability - Coverage for suits against the Contractor resulting from the use of hired or non-owned vehicles.
  - p. Amendment to the Watercraft Exclusion to extend to incidental repair operations on board watercraft.
  - q. Sudden and Accidental Pollution Liability (minimum 120 hours): To protect the Contractor for liabilities arising from damages caused by accidental pollution incidents.
  - r. Litigation Rights: Pursuant to subsection 5(d) of the [Department of Justice Act](#), S.C. 1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgement of receipt.

**For the province of Quebec, send to:**

*Director Business Law Directorate,  
Quebec Regional Office (Ottawa),  
Department of Justice,*

*284 Wellington Street, Room SAT-6042,  
Ottawa, Ontario, K1A 0H8*

**For other provinces and territories, send to:**

*Senior General Counsel,  
Civil Litigation Section,  
Department of Justice  
234 Wellington Street, East Tower  
Ottawa, Ontario K1A 0H8*

A copy of the letter must be sent to the Contracting Authority. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Contractor's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Contractor's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

**APPENDIX 1  
IDENTIFICATION OF SAMPLING AREAS**

**2021**

<b>Shellfish Area</b>	<b>Location Emplacement</b>	<b># Stations # Stations</b>	<b># Runs # Sortie</b>	<b># Samples #échantillons</b>
06-010-001	North Hbr./ Aspy Bay	9	5	45
06-010-002	South Hbr/ Aspy Bay	7	5	35
06-030-001	St. Ann's Hbr/Bay	25	5	125
07-010-005	Baddeck Bay (St. Pat. Channel)	17	5	85
07-010-006	Nyanza Bay (St. Pat. Channel)	17	5	85
07-010-007	Little Narrows	23	5	115
07-010-008	Whycocomagh Bay	22	5	110
07-020-010	MacKinnons Harbour	7	5	35
07-020-011	North Basin/ The Boom	21	5	105
07-020-012	Denys Basin	13	5	65
07-020-013	Malagawatch Hbr.	9	5	45
07-030-004	St. Peters Inlet/ Chapel Is.	14	5	70
07-030-005	St. Peters Inlet	18	5	90
07-040-002	East Bay/ Big Pd.	6	5	30
07-040-005	Eskasoni	16	5	80
08-020-003	Morien Bay	13	5	65
08-030-001	Mira Bay	14	5	70
09-010-001	Framboise Cove	7	2	14
09-020-003	Lennox Is. / Louisdale	27	5	135
09-020-007	Arichat Hbr.	8	5	40
09-020-010	Lennox Passage (West)	9	5	45
14-040-009	Little Hbr Lake	5	5	25
15-030-003	G.Etang/Argyle Sound	12	5	60
15-040-001	Argyle R.	12	5	60
15-040-002	Morris Is.	8	5	40
15-040-003	Widgegum Is./Eel Lake	29	5	145
15-040-004	Tusket R.	12	5	60
15-040-005	Goose Bay	6	5	30
15-040-006	Little R. Hbr.	10	5	50
15-040-007	Chebogue Hbr.	13	5	65
16-020-003	Comeauville-Belliveau C	15	5	75
16-030-001	Weymouth Hbr./Sissiboo R.	3	5	15
16-030-002	Gilberts Cove	5	5	25
16-030-003	Head of St. Marys Bay	10	5	50

**442**

**2189**

**2022**

<b>Shellfish Area</b>	<b>Location Emplacement</b>	<b># Stations # Stations</b>	<b># Runs # Sortie</b>	<b># Samples #échantillons</b>
06-010-001	North Hbr./ Aspy Bay	9	5	45
06-010-002	South Hbr/ Aspy Bay	7	5	35
06-030-001	St. Ann's Hbr/Bay	25	5	125
07-010-005	Baddeck Bay (St. Pat. Channel)	17	5	85
07-010-006	Nyanza Bay (St. Pat. Channel)	17	5	85
07-010-007	Little Narrows	23	5	115
07-010-008	Whycocomagh Bay	22	5	110
07-020-010	MacKinnons Harbour	7	5	35
07-020-011	North Basin/ The Boom	21	5	105
07-020-012	Denys Basin	13	5	65
07-020-013	Malagawatch Hbr.	9	5	45
07-030-004	St. Peters Inlet/ Chapel Is.	14	5	70
07-030-005	St. Peters Inlet	18	5	90
07-040-002	East Bay/ Big Pd.	6	5	30
07-040-005	Eskasoni	16	5	80
08-020-003	Morien Bay	13	5	65
08-030-001	Mira Bay	14	5	70
09-010-001	Framboise Cove	7	2	14
09-020-003	Lennox Is. / Louisdale	27	5	135
09-020-007	Arichat Hbr.	8	5	40
09-020-010	Lennox Passage (West)	9	5	45
14-040-009	Little Hbr Lake	5	5	25
15-030-003	G.Etang/Argyle Sound	12	5	60
15-040-001	Argyle R.	12	5	60
15-040-002	Morris Is.	8	5	40
15-040-003	Widgegum Is./Eel Lake	29	5	145
15-040-004	Tusket R.	12	5	60
15-040-005	Goose Bay	6	5	30
15-040-006	Little R. Hbr.	10	5	50
15-040-007	Chebogue Hbr.	13	5	65
16-020-003	Comeauville-Belliveau C	15	5	75
16-030-001	Weymouth Hbr./Sissiboo R.	3	5	15
16-030-002	Gilberts Cove	5	5	25
16-030-003	Head of St. Marys Bay	10	5	50

**442**

**2189**

**2023**

<b>Shellfish Area</b>	<b>Location Emplacement</b>	<b># Stations # Stations</b>	<b># Runs # Sortie</b>	<b># Samples #échantillons</b>
06-010-001	North Hbr./ Aspy Bay	9	5	45
06-010-002	South Hbr/ Aspy Bay	7	5	35
06-030-001	St. Ann's Hbr/Bay	25	5	125
07-010-005	Baddeck Bay (St. Pat. Channel)	17	5	85
07-010-006	Nyanza Bay (St. Pat. Channel)	17	5	85
07-010-007	Little Narrows	23	5	115
07-010-008	Whycocomagh Bay	22	5	110
07-020-010	MacKinnons Harbour	7	5	35
07-020-011	North Basin/ The Boom	21	5	105
07-020-012	Denys Basin	13	5	65
07-020-013	Malagawatch Hbr.	9	5	45
07-030-004	St. Peters Inlet/ Chapel Is.	14	5	70
07-030-005	St. Peters Inlet	18	5	90
07-040-002	East Bay/ Big Pd.	6	5	30
07-040-005	Eskasoni	16	5	80
08-020-003	Morien Bay	13	5	65
08-030-001	Mira Bay	14	5	70
09-010-001	Framboise Cove	7	2	14
09-020-003	Lennox Is. / Louisdale	27	5	135
09-020-007	Arichat Hbr.	8	5	40
09-020-010	Lennox Passage (West)	9	5	45
14-040-009	Little Hbr Lake	5	5	25
15-030-003	G.Etang/Argyle Sound	12	5	60
15-040-001	Argyle R.	12	5	60
15-040-002	Morris Is.	8	5	40
15-040-003	Widgegum Is./Eel Lake	29	5	145
15-040-004	Tusket R.	12	5	60
15-040-005	Goose Bay	6	5	30
15-040-006	Little R. Hbr.	10	5	50
15-040-007	Chebogue Hbr.	13	5	65
16-020-003	Comeauville-Belliveau C	15	5	75
16-030-001	Weymouth Hbr./Sissiboo R.	3	5	15
16-030-002	Gilberts Cove	5	5	25
16-030-003	Head of St. Marys Bay	10	5	50

**442**

**2189**

**APPENDIX 2**  
**ECCC MARINE SAMPLING STATION MAPS**  
**2021-2024**



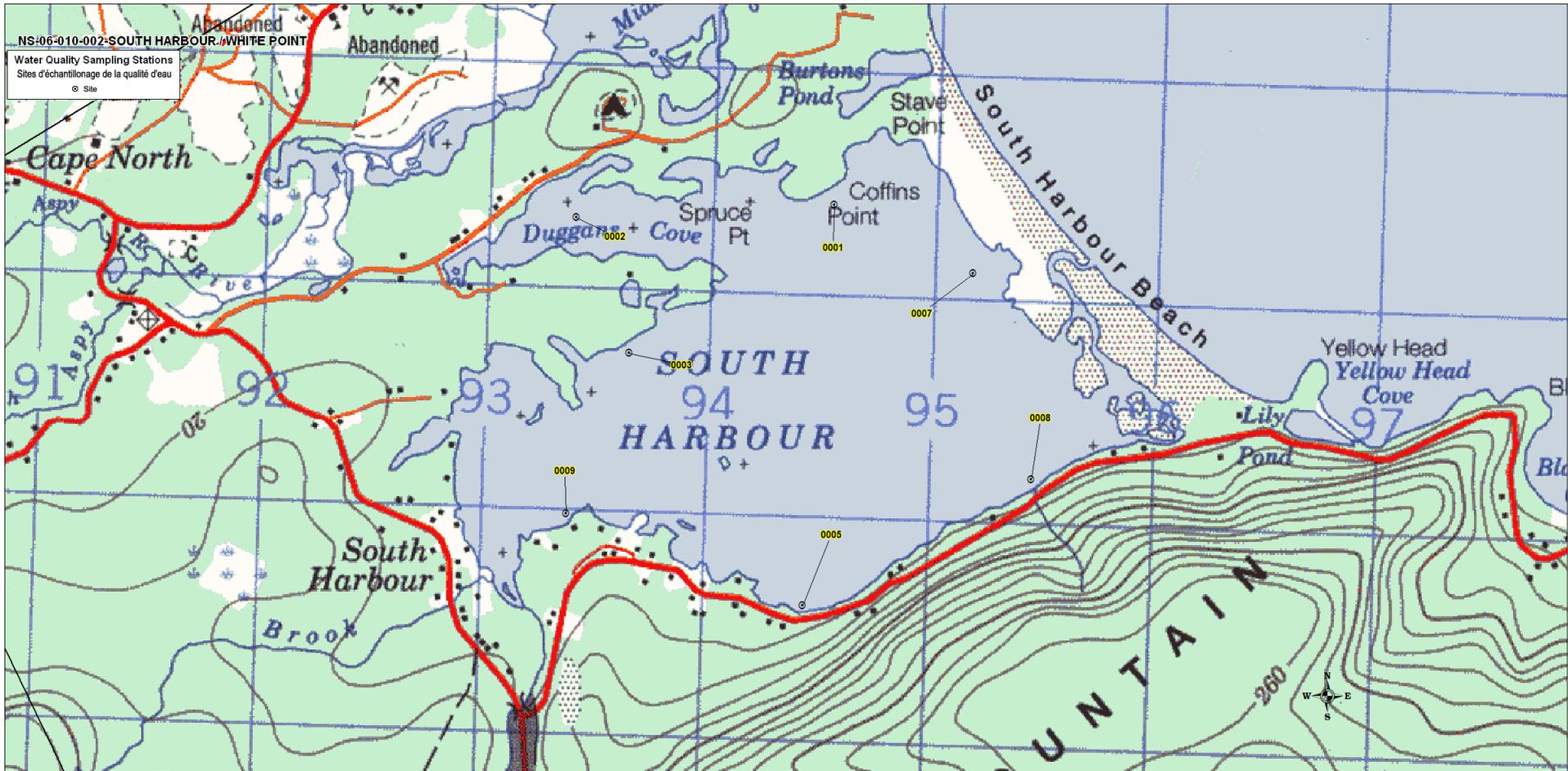
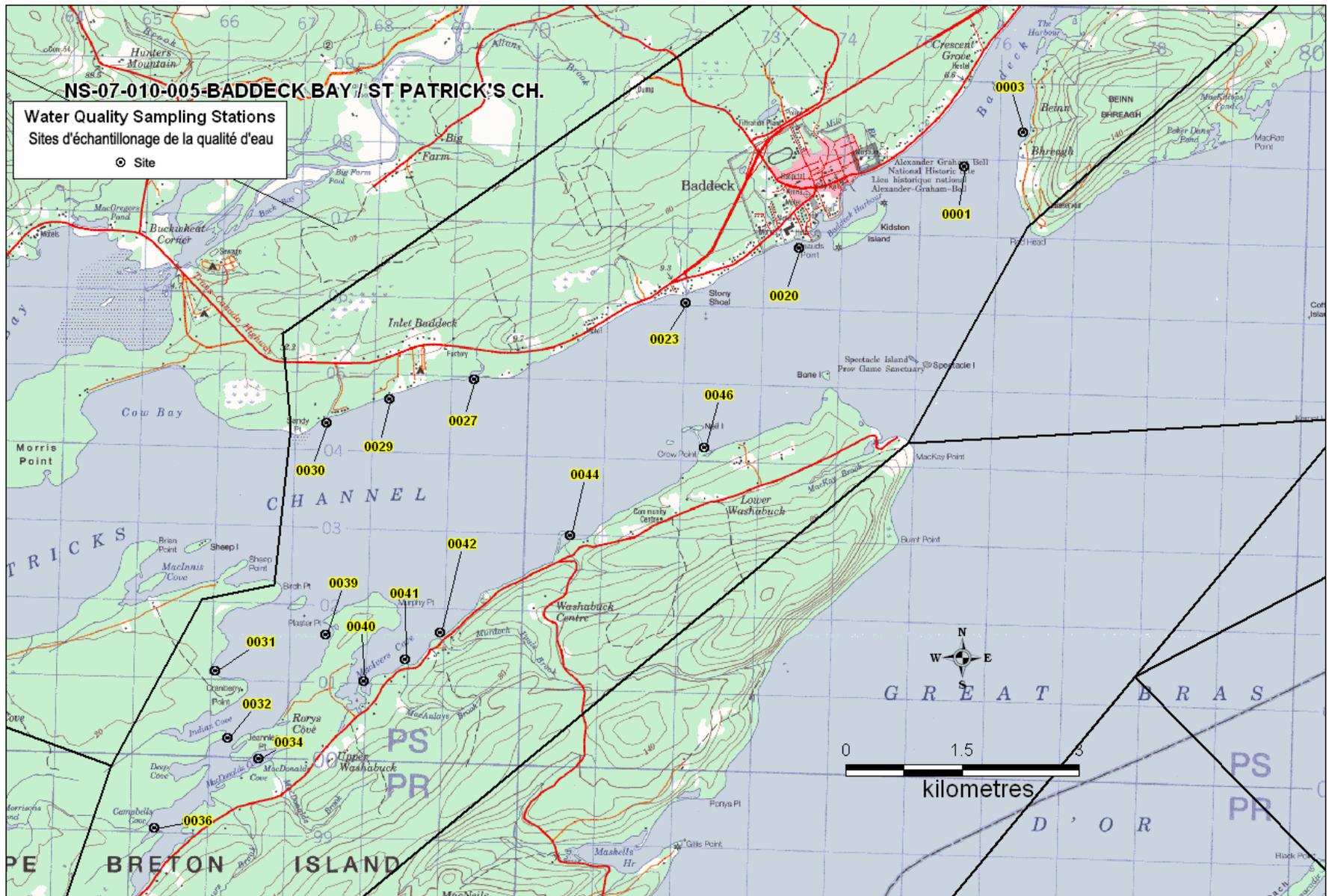
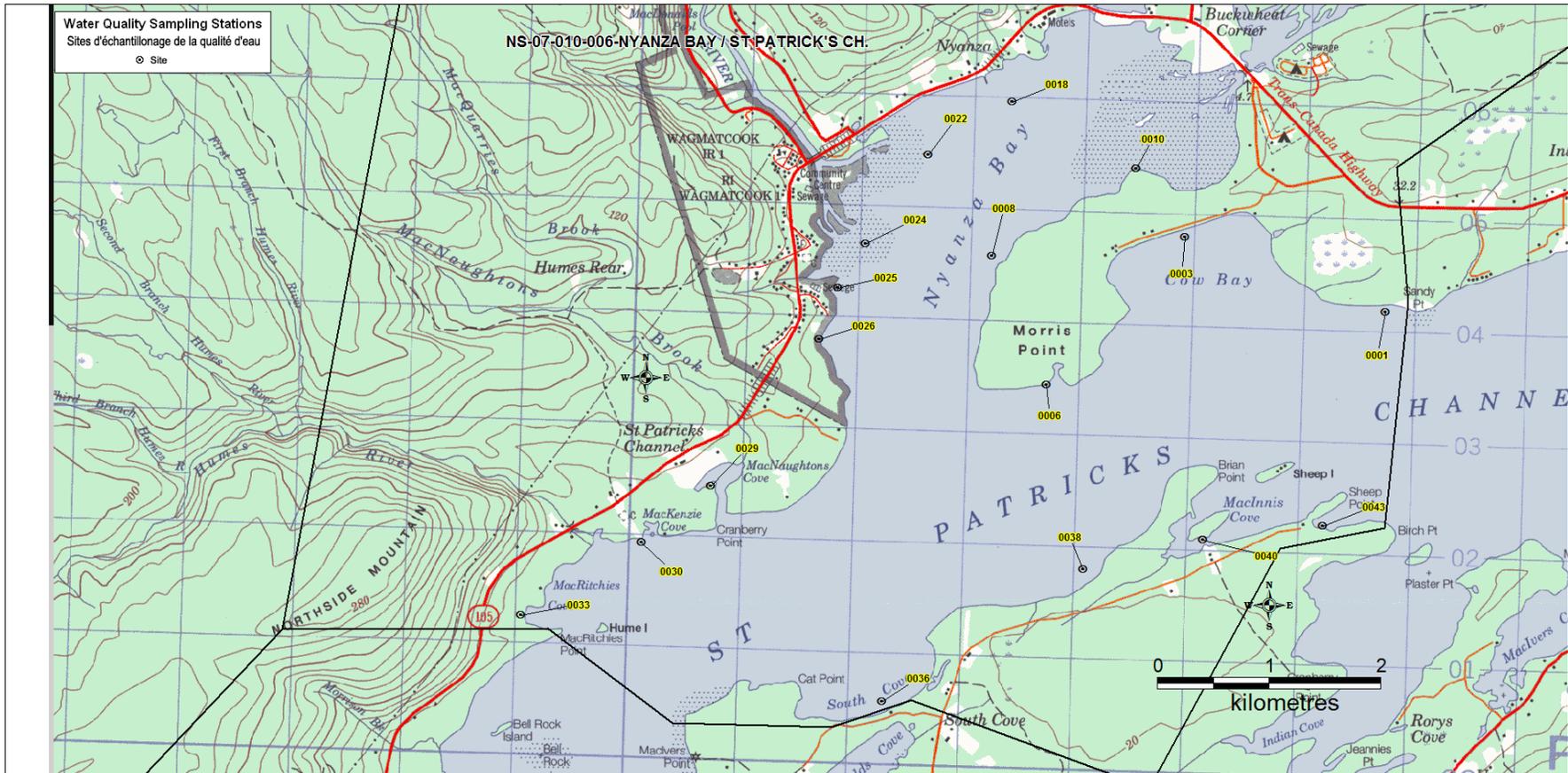


FIGURE 2

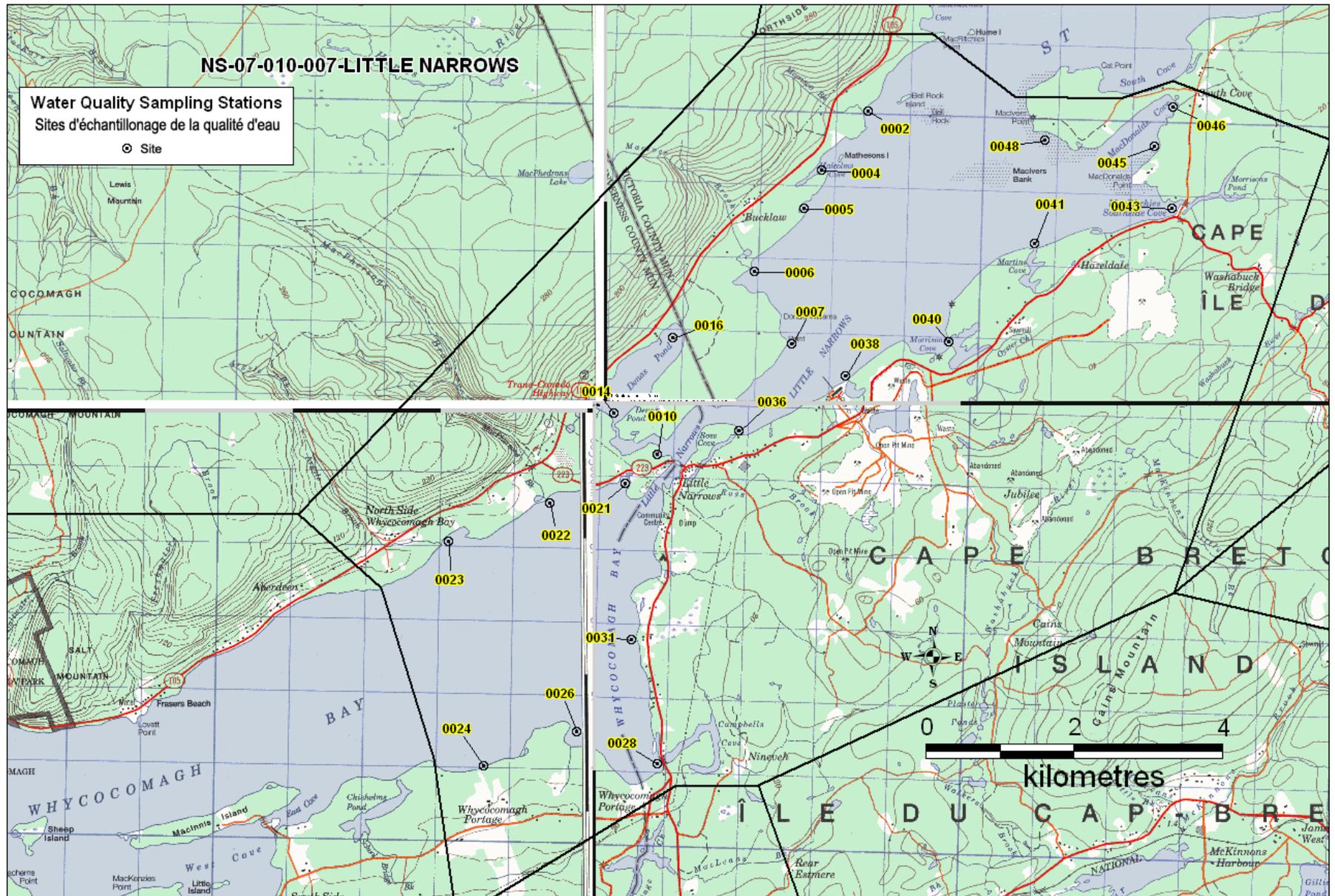




**FIGURE 4**



**FIGURE 5**



**FIGURE 6**



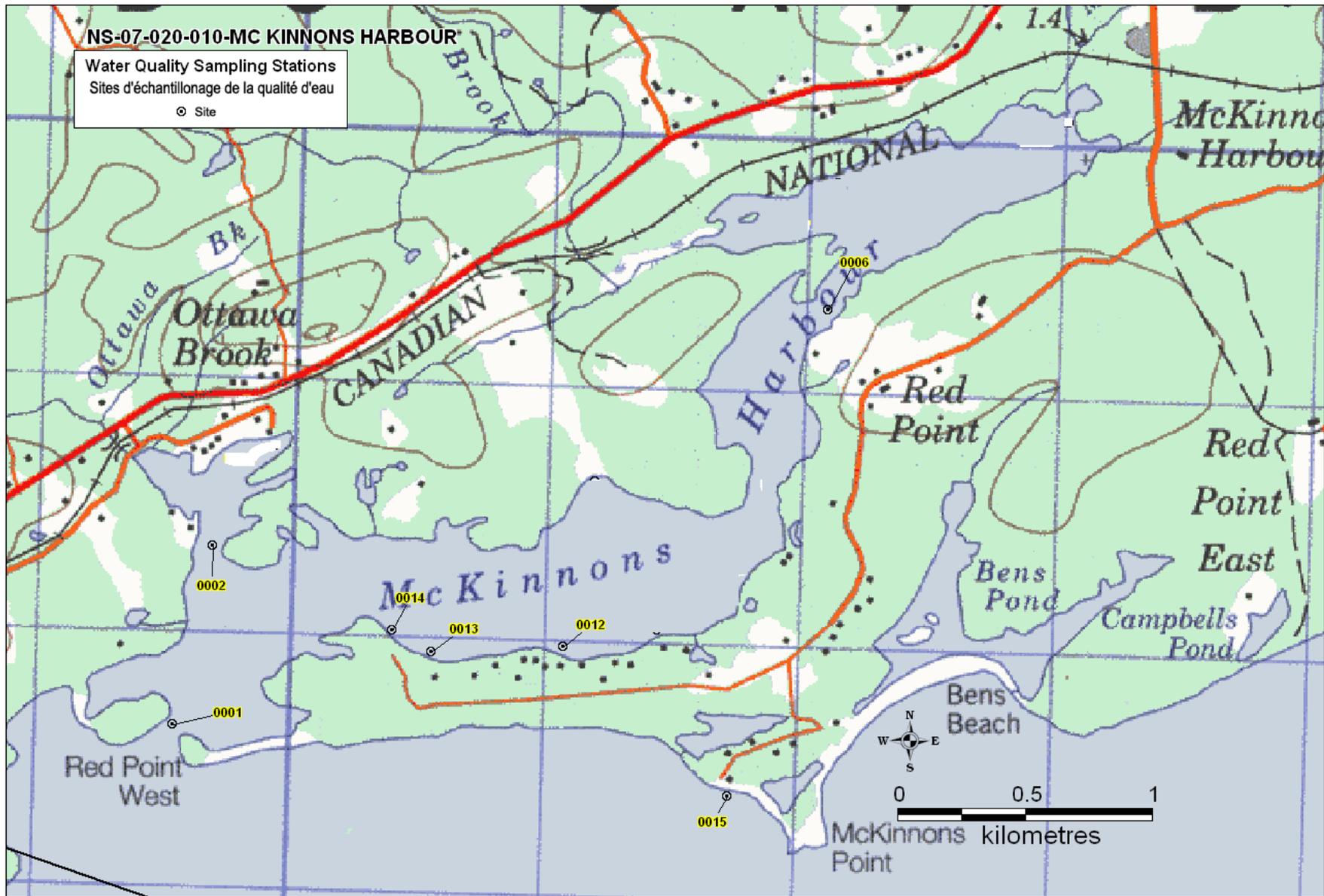
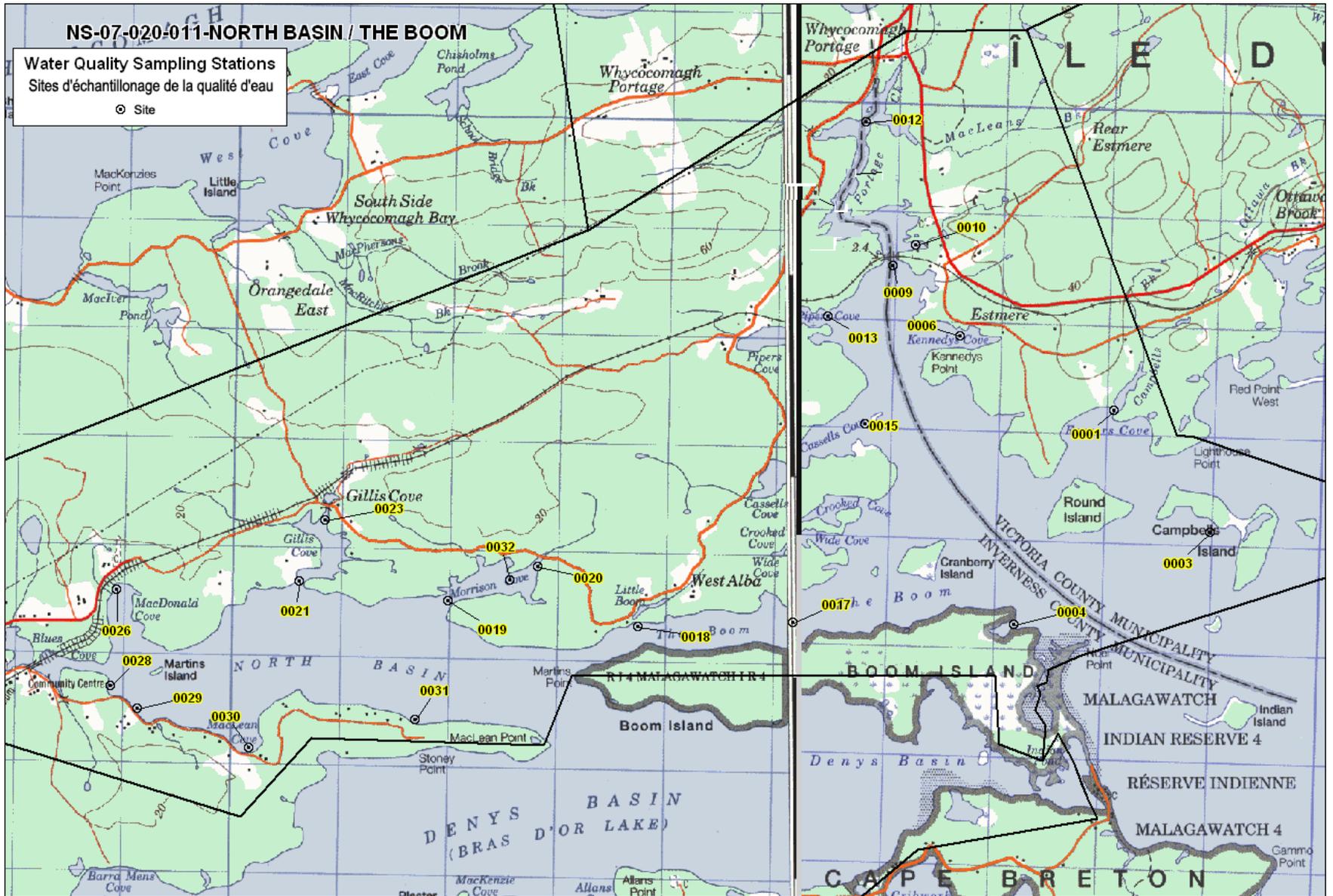
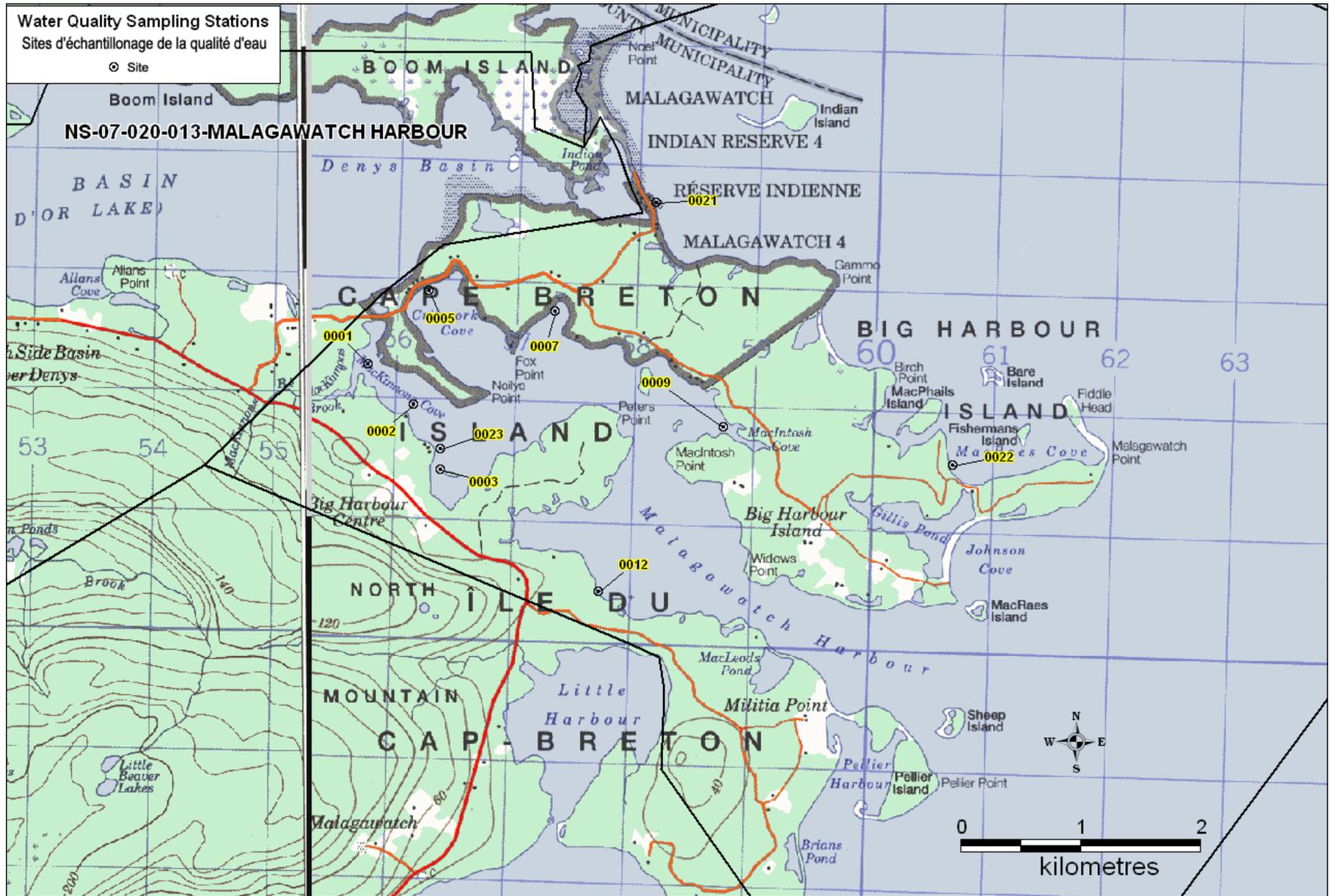


FIGURE 8

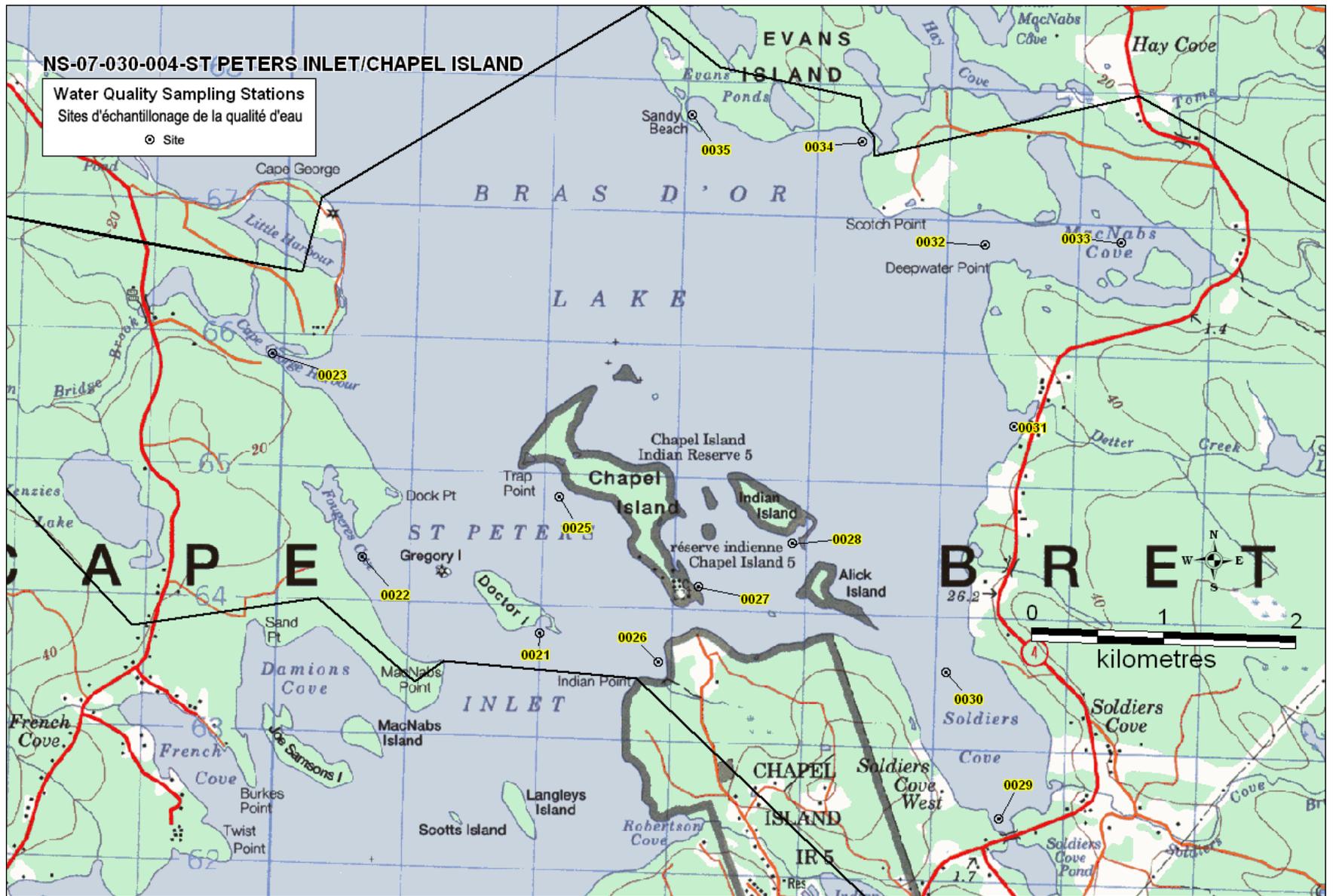


**FIGURE 9**

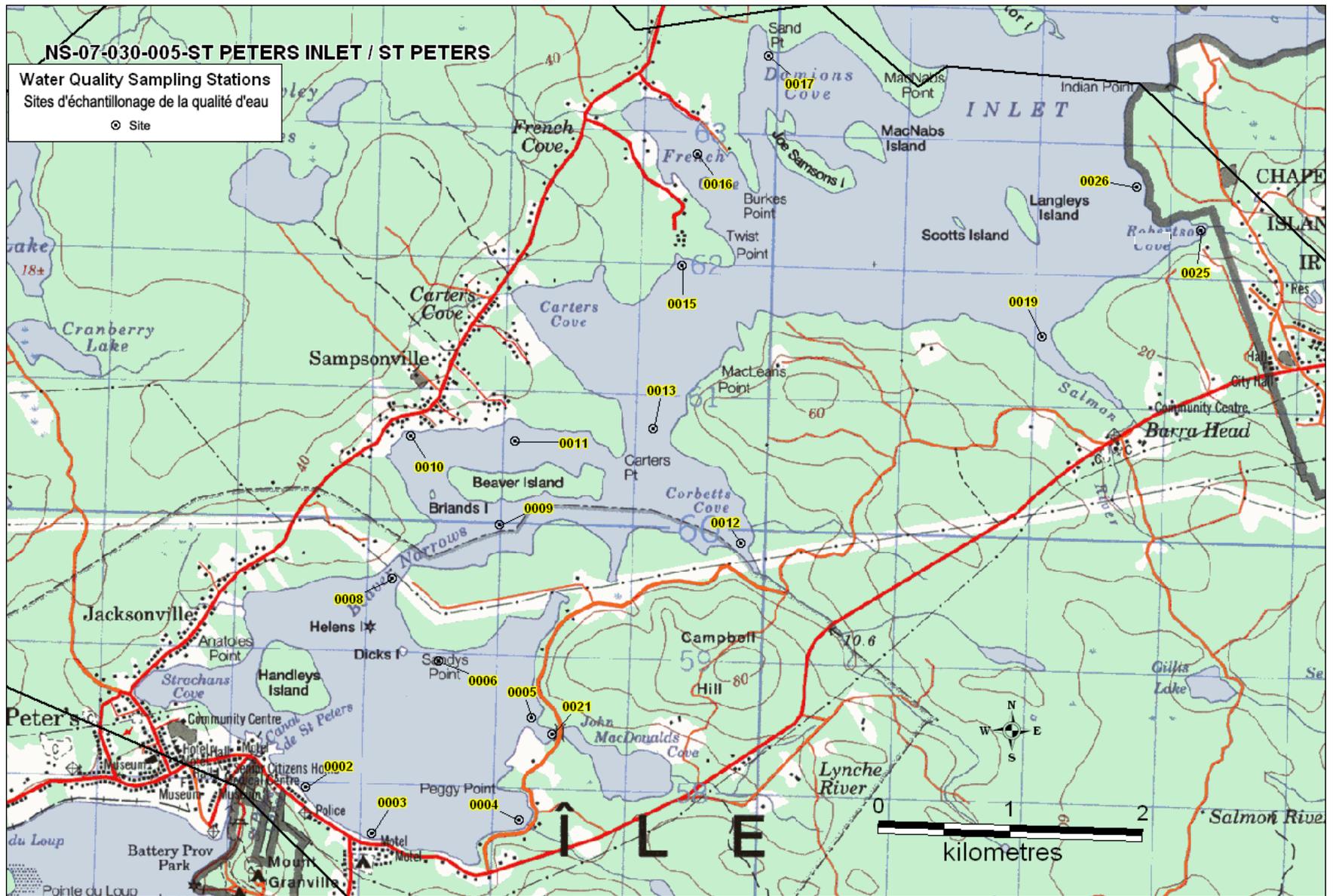




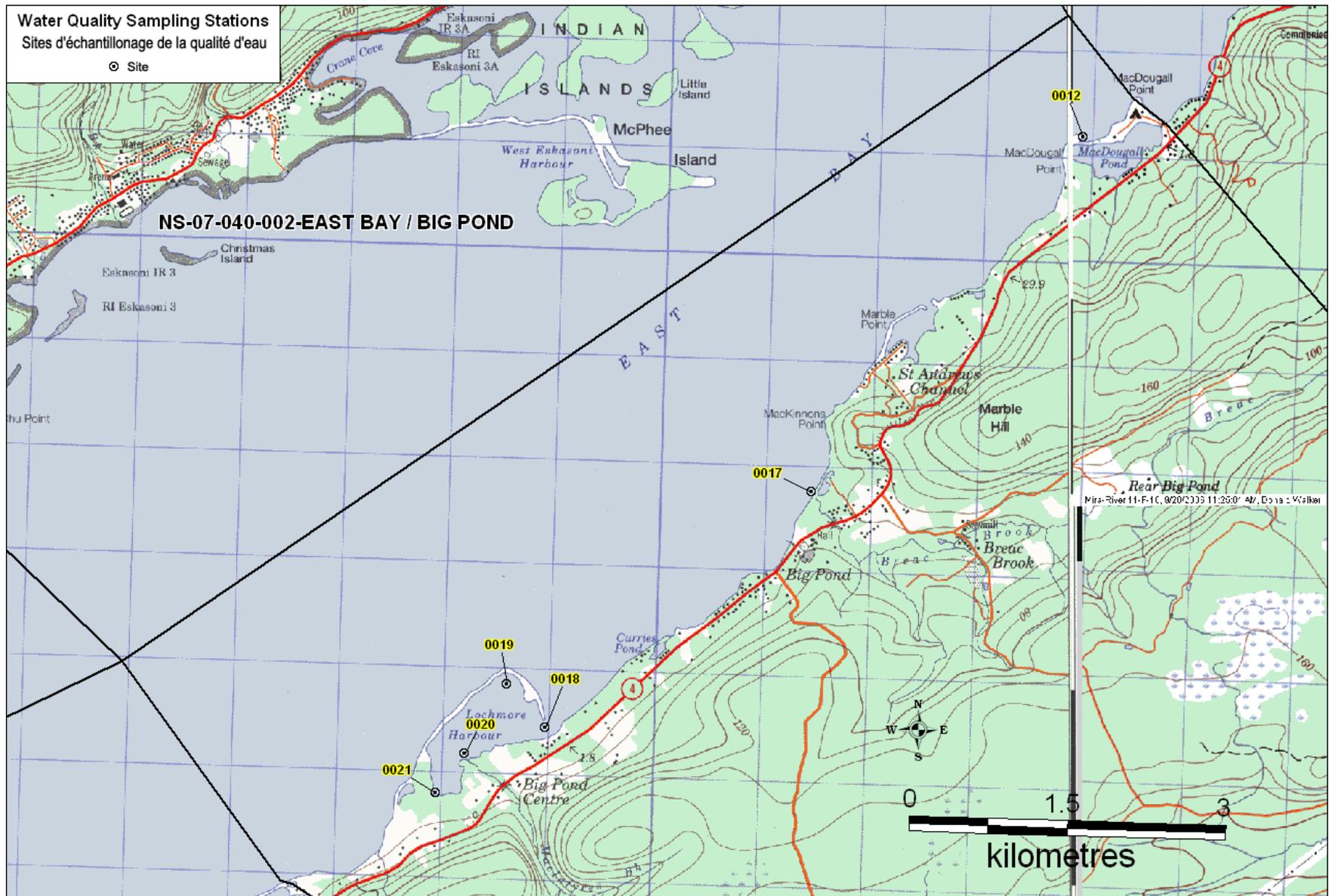
**FIGURE 11**



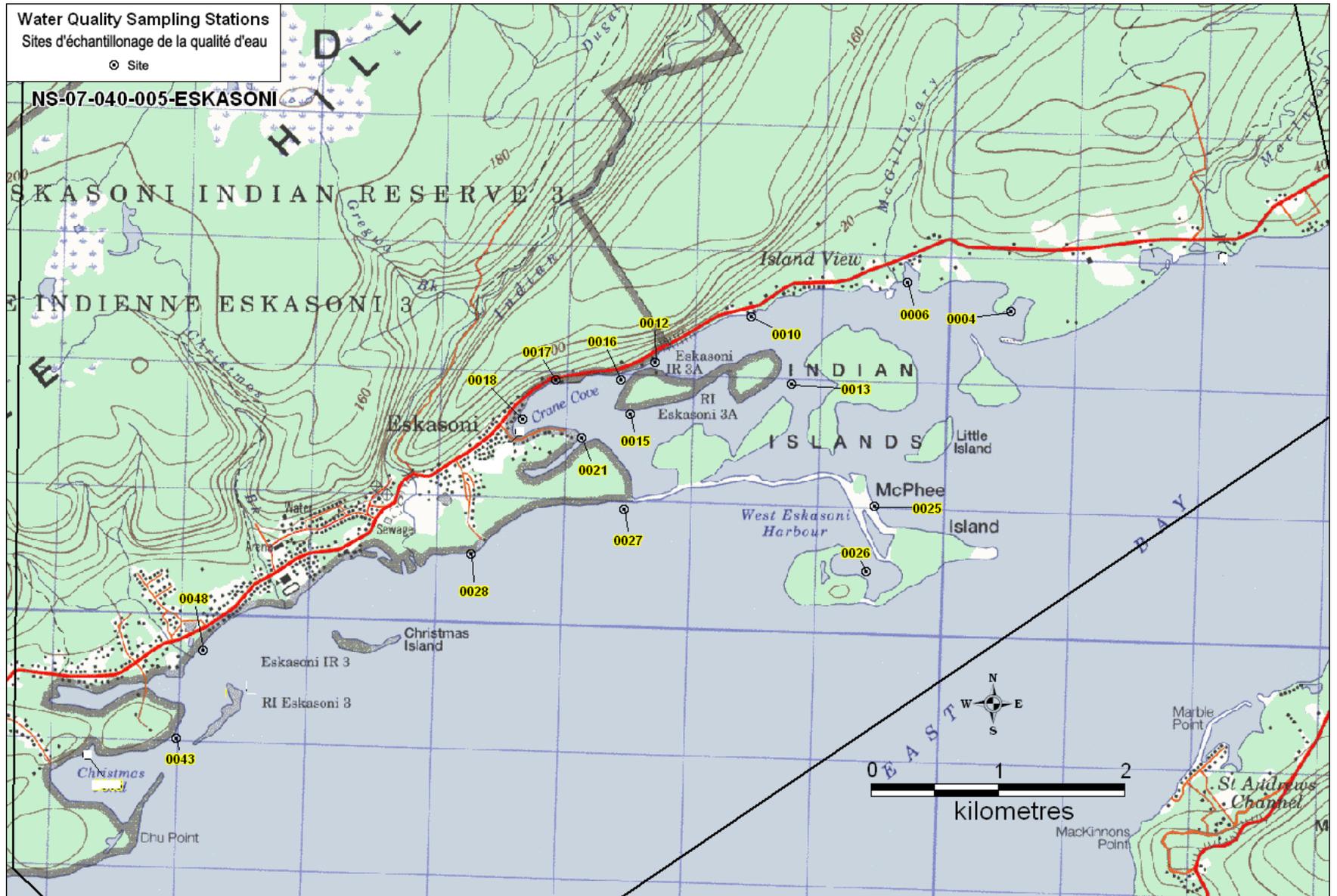
**FIGURE 12**



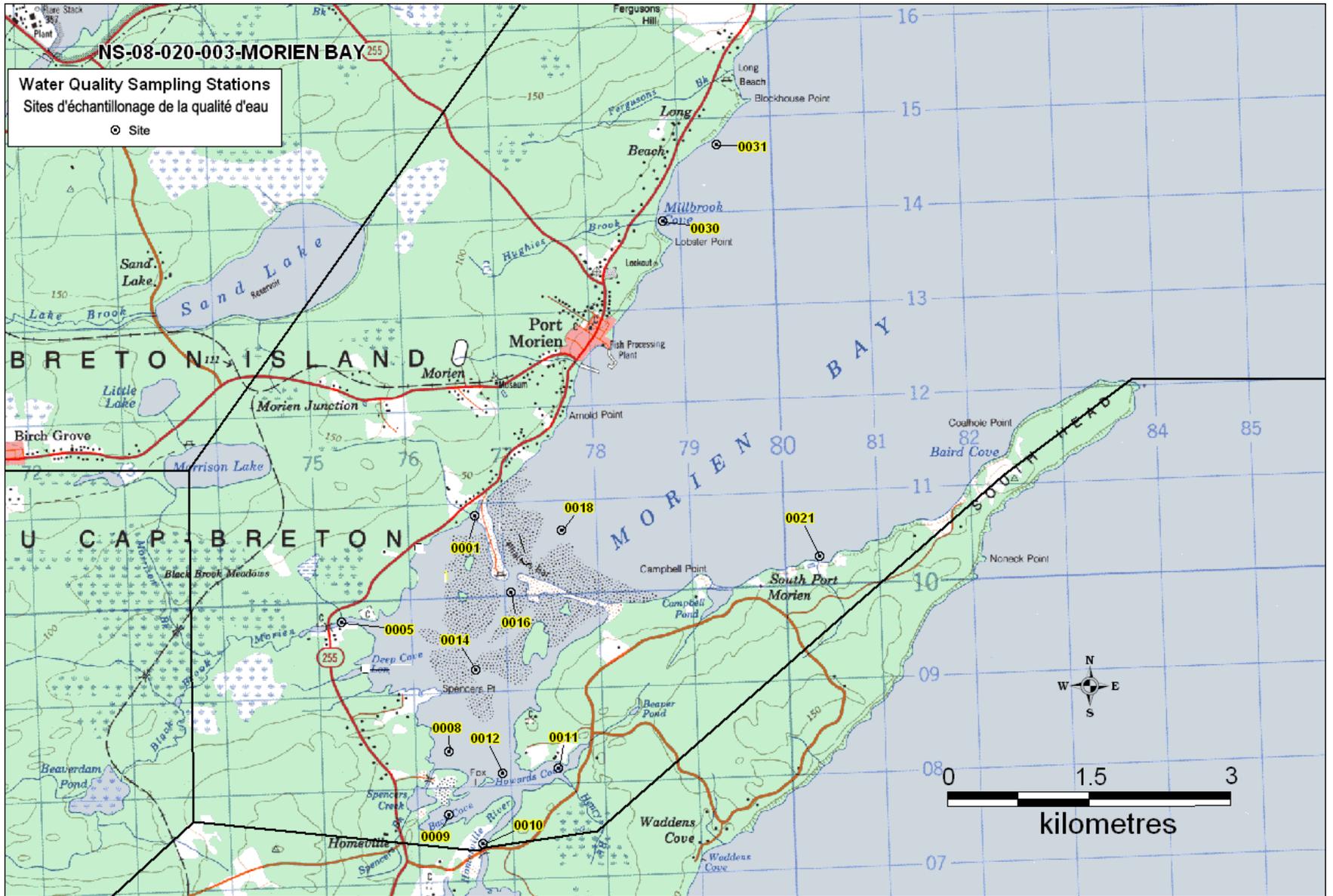
**FIGURE 13**



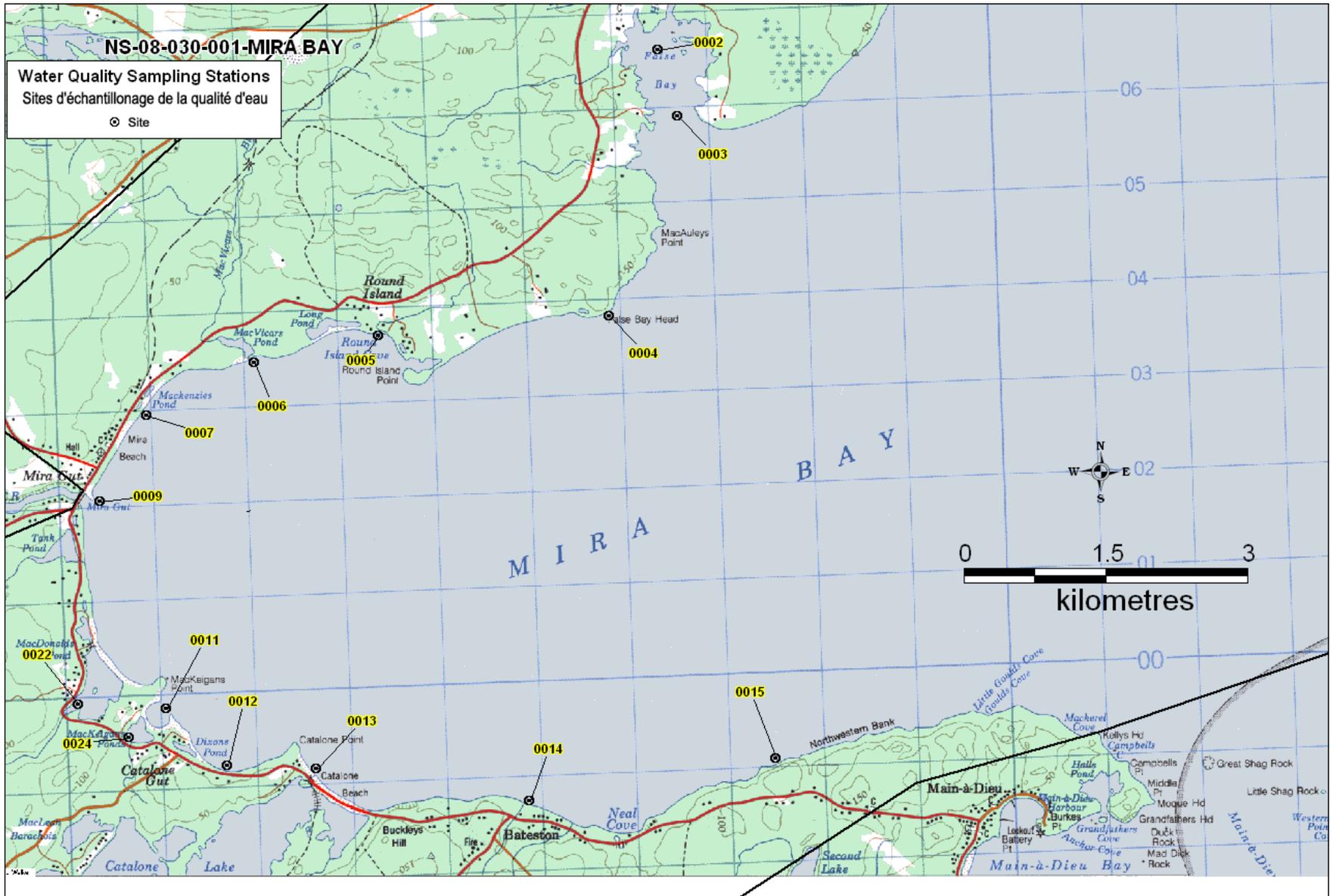
**FIGURE 14**



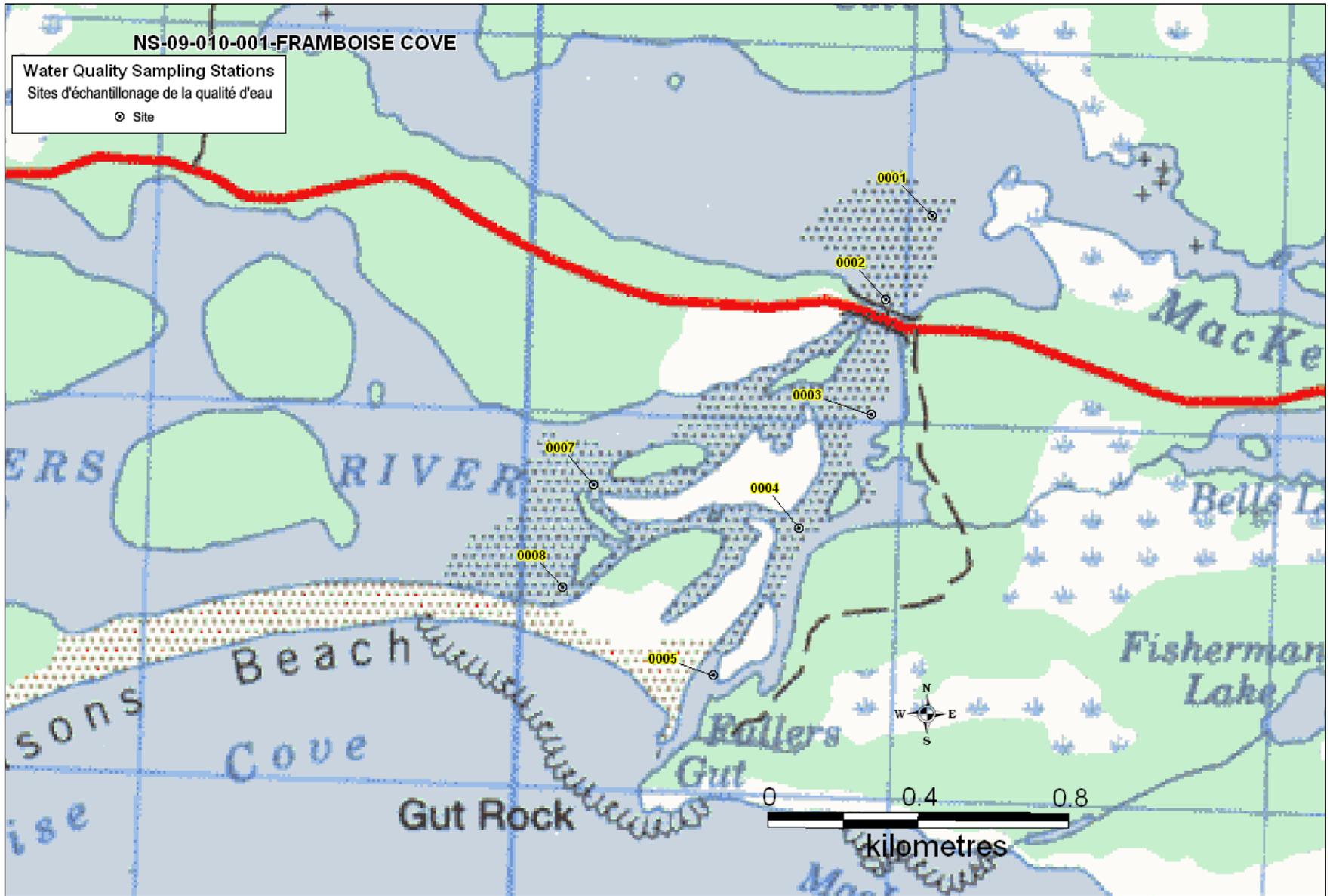
**FIGURE 15**



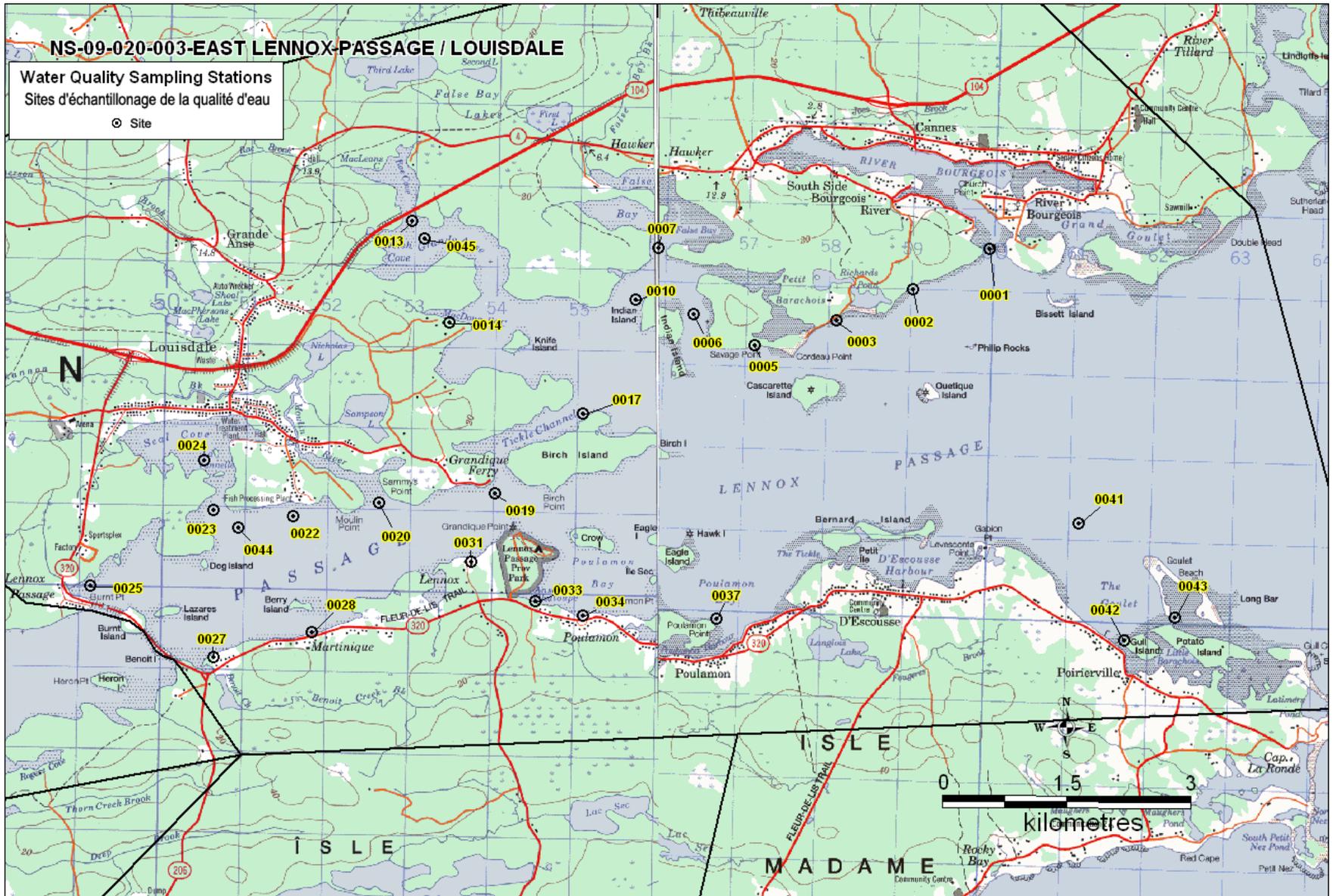
**FIGURE 16**



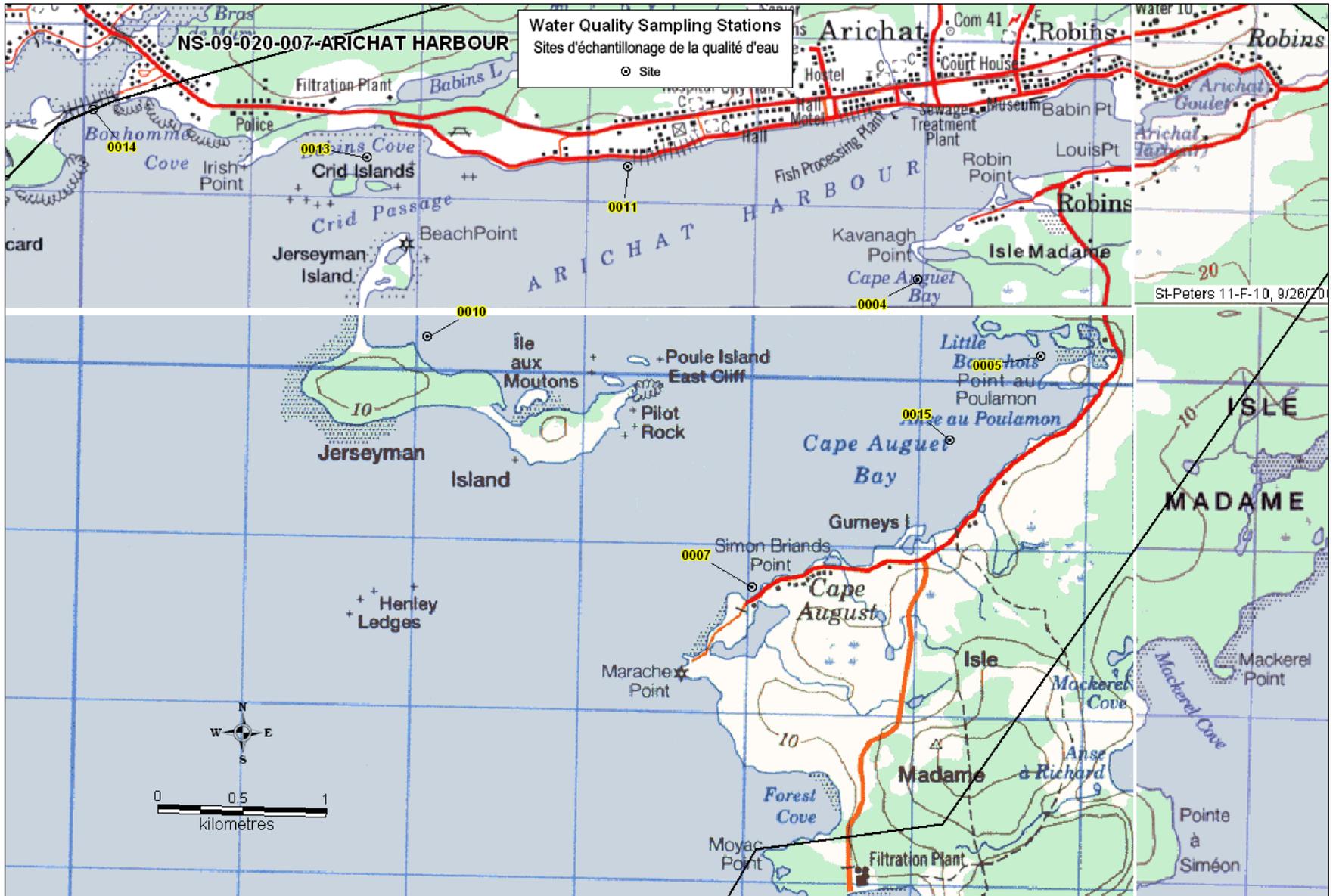
**FIGURE 17**



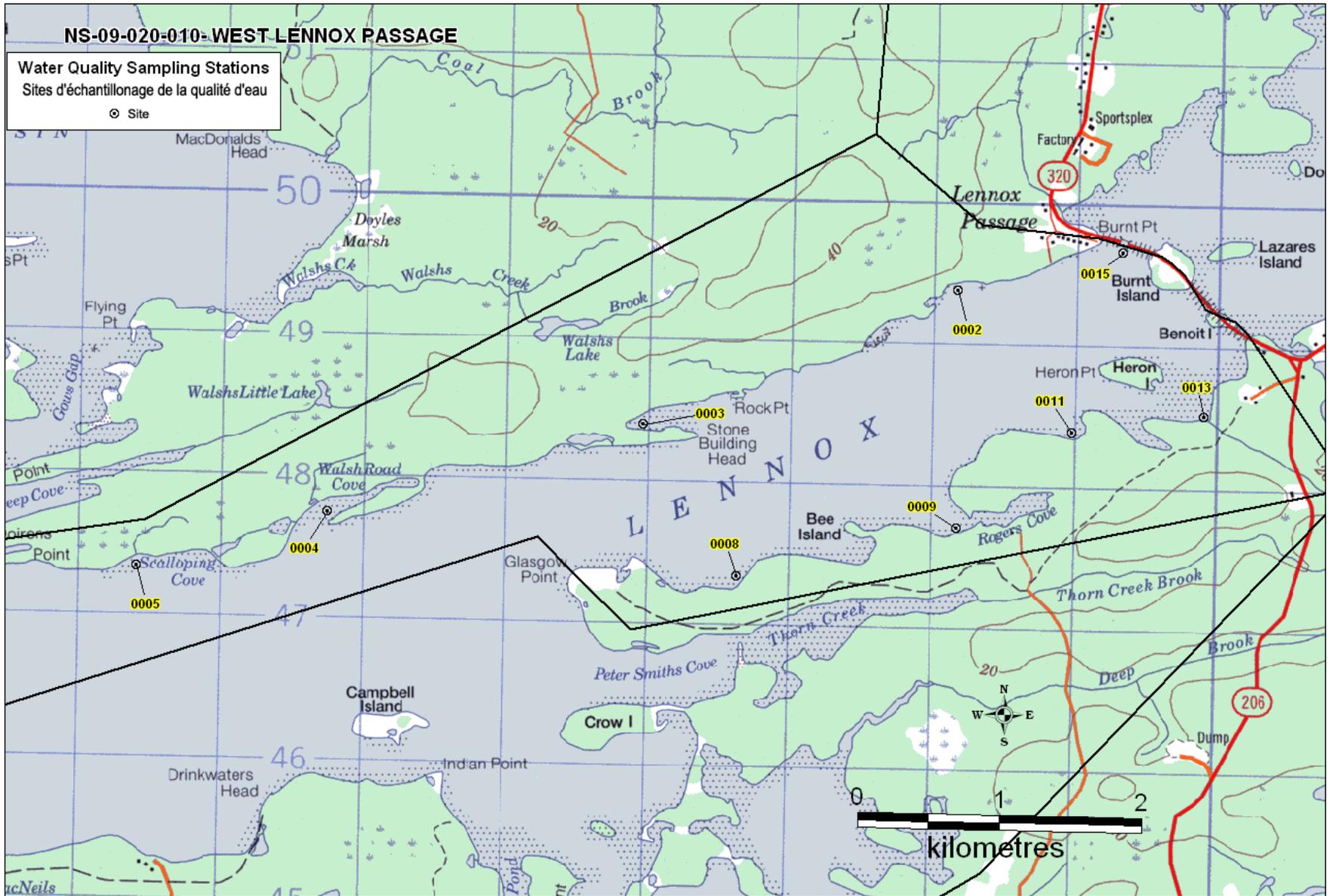
**FIGURE 18**



**FIGURE 19**



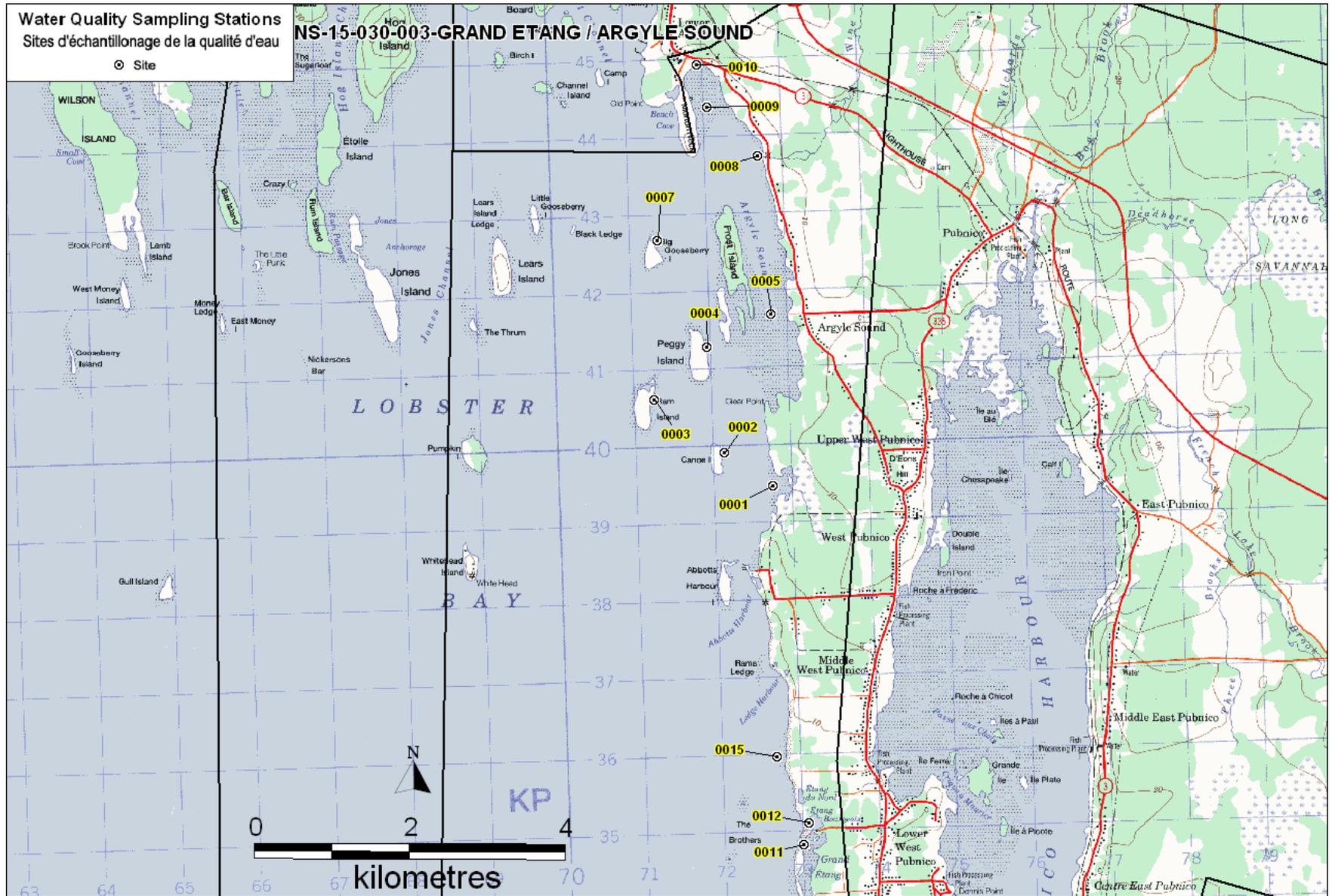
**FIGURE 20**



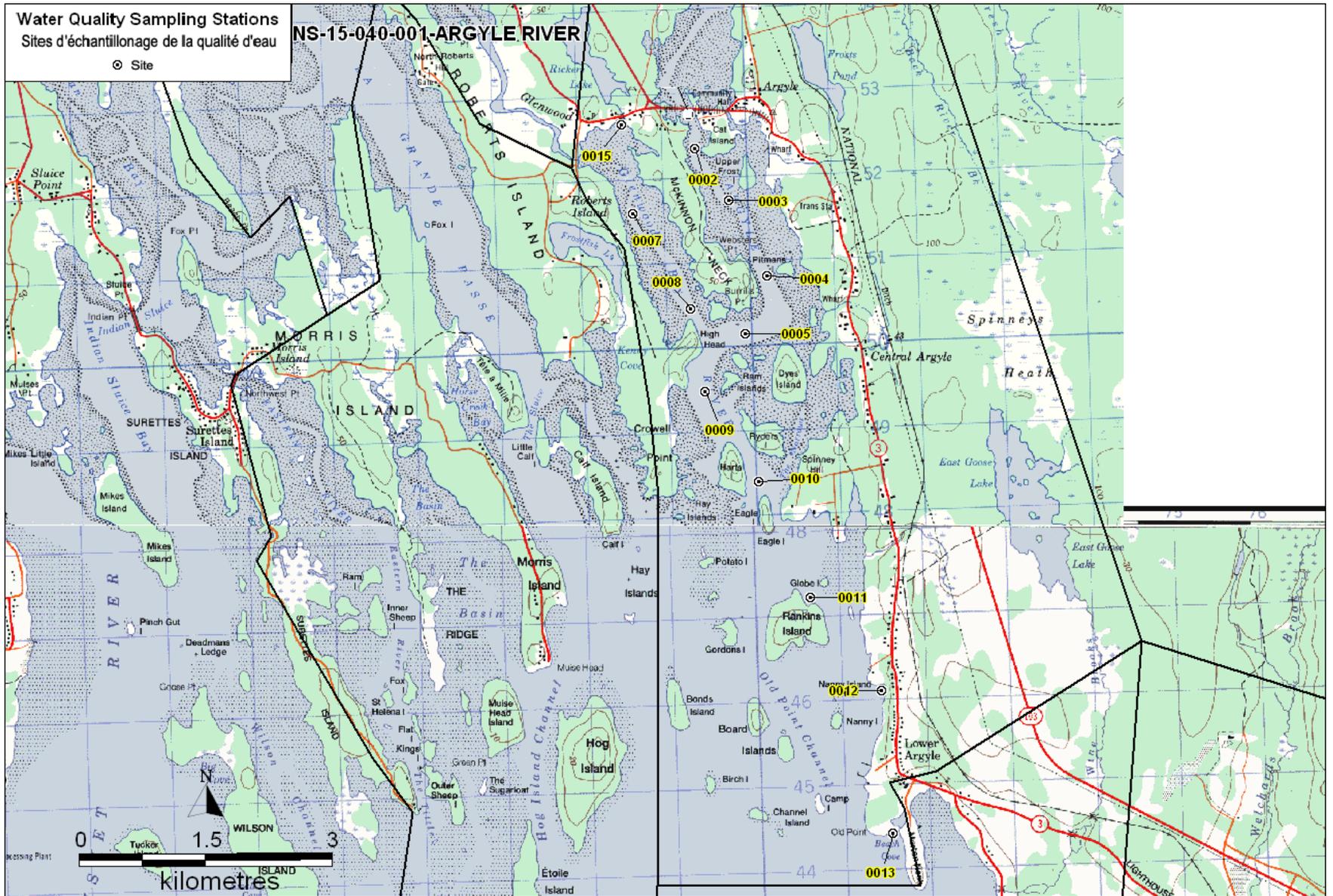
**FIGURE 21**







**FIGURE 23**



**FIGURE 24**



Water Quality Sampling Stations  
Sites d'échantillonnage de la qualité d'eau

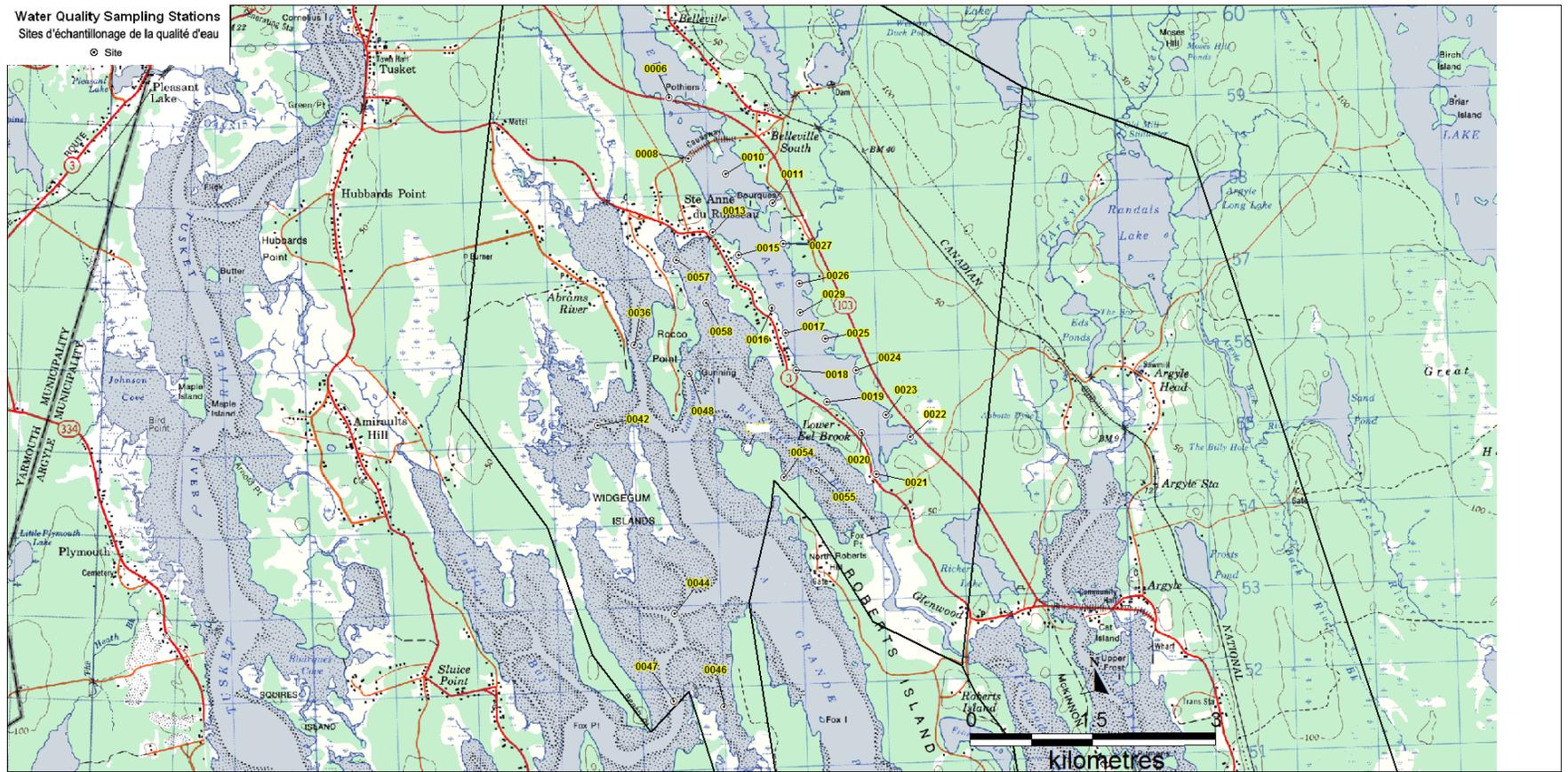
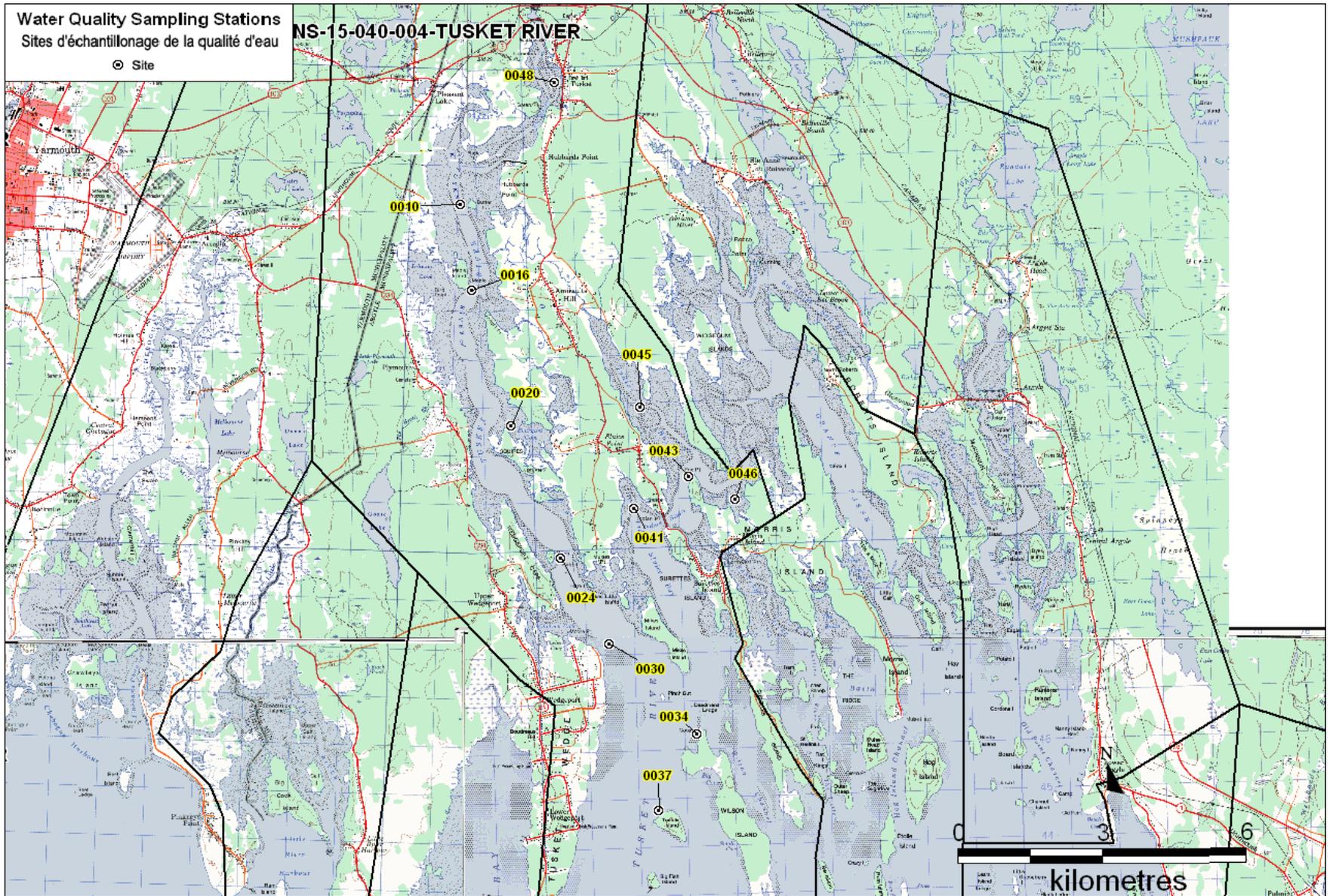
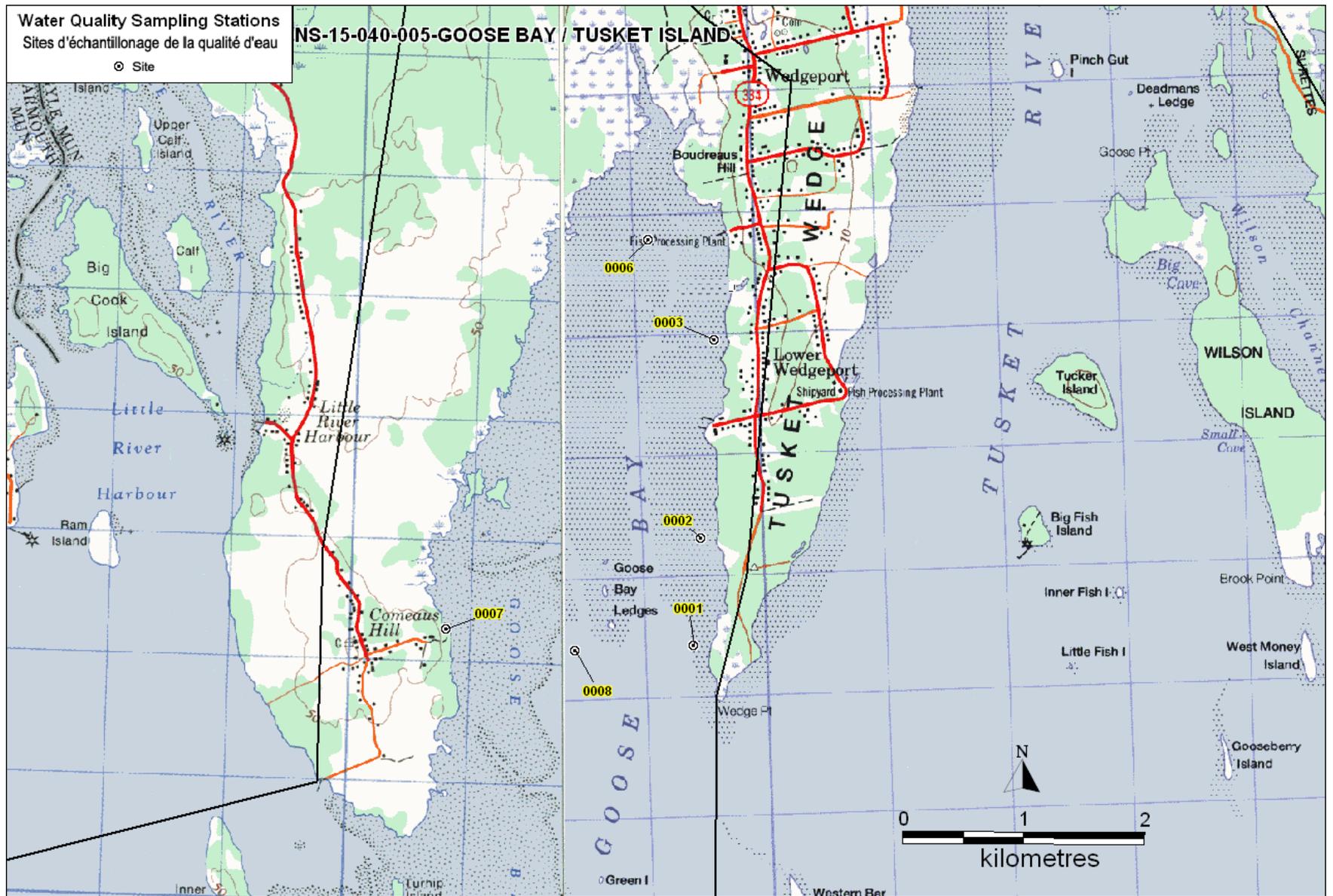


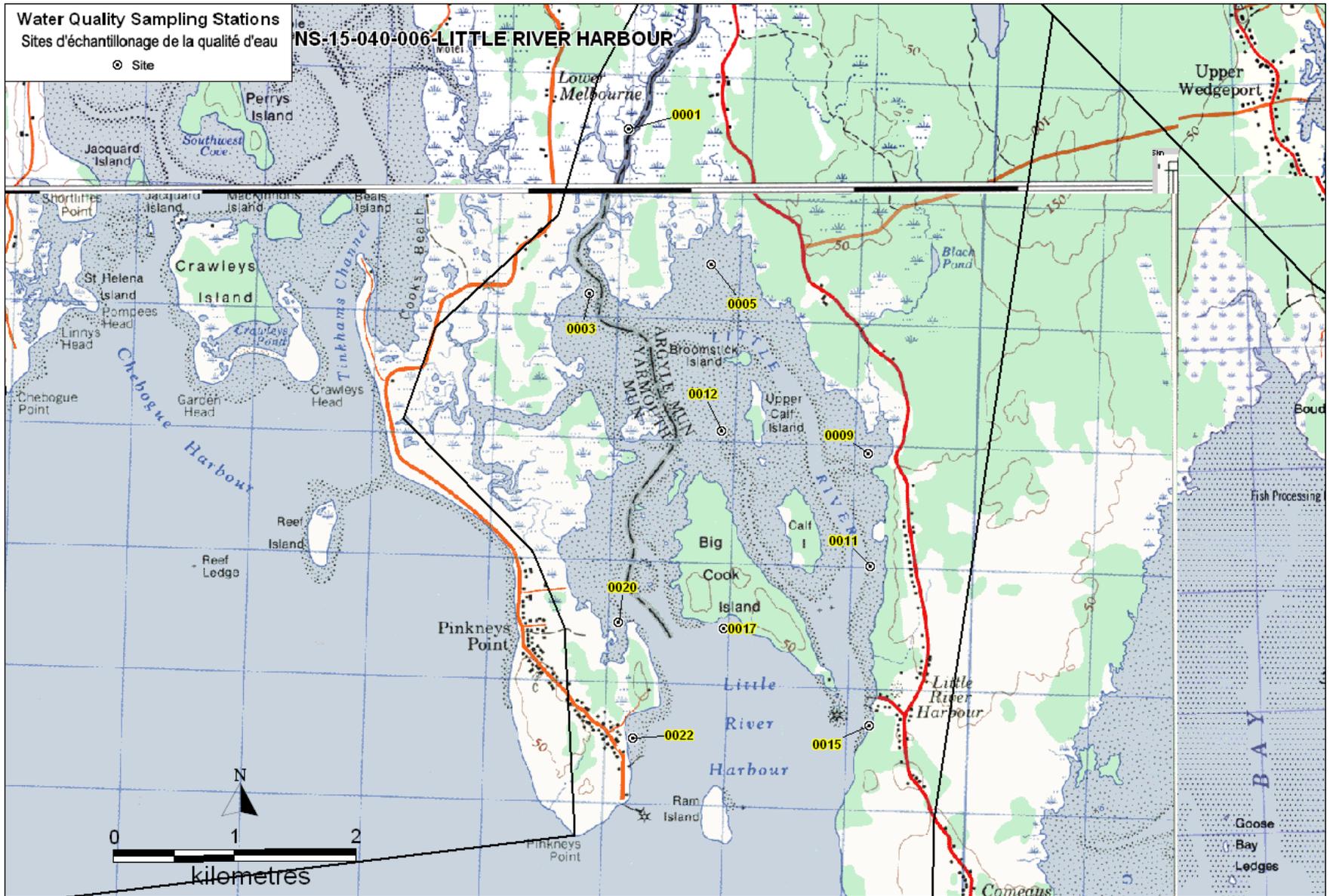
FIGURE 26



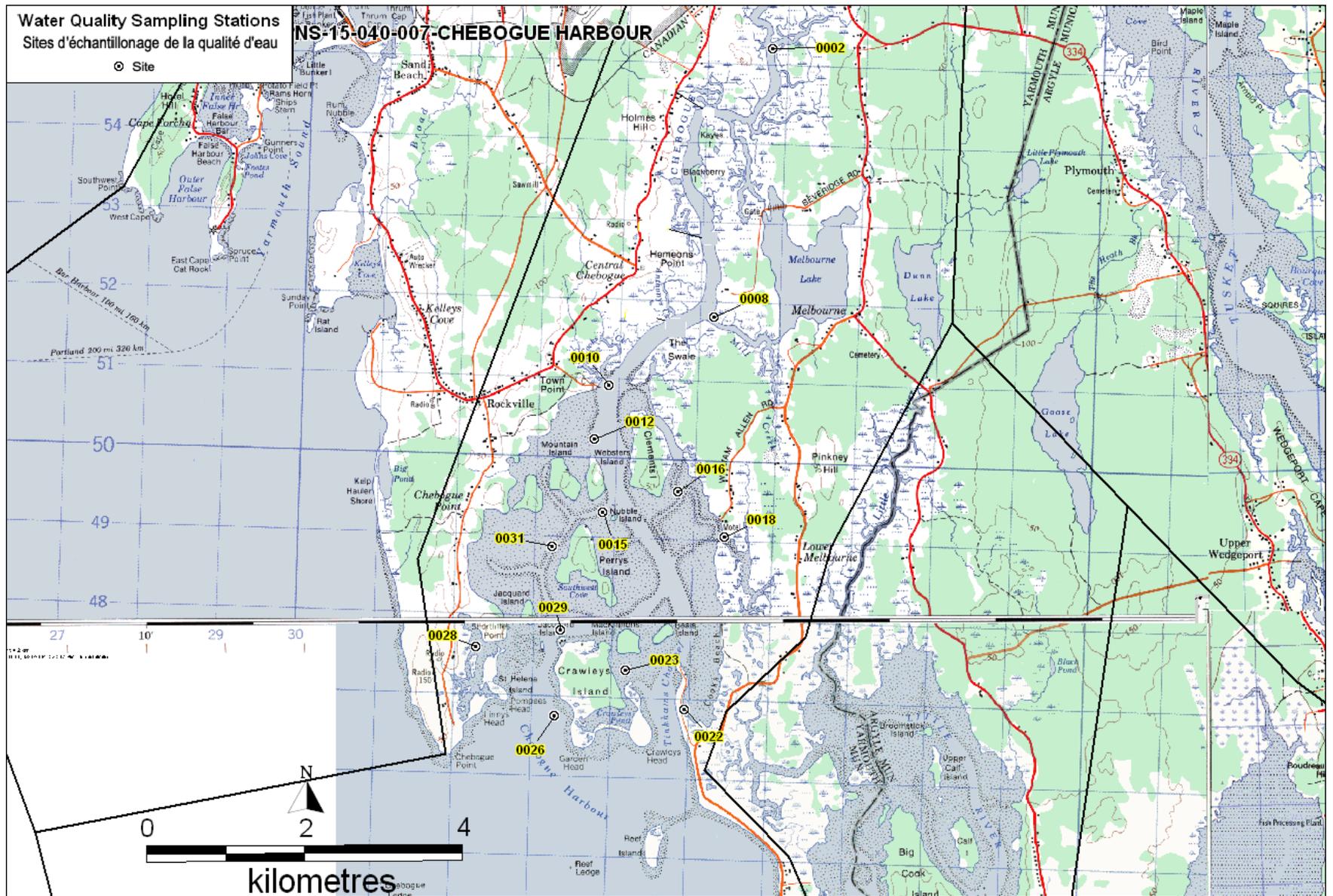
**FIGURE 27**



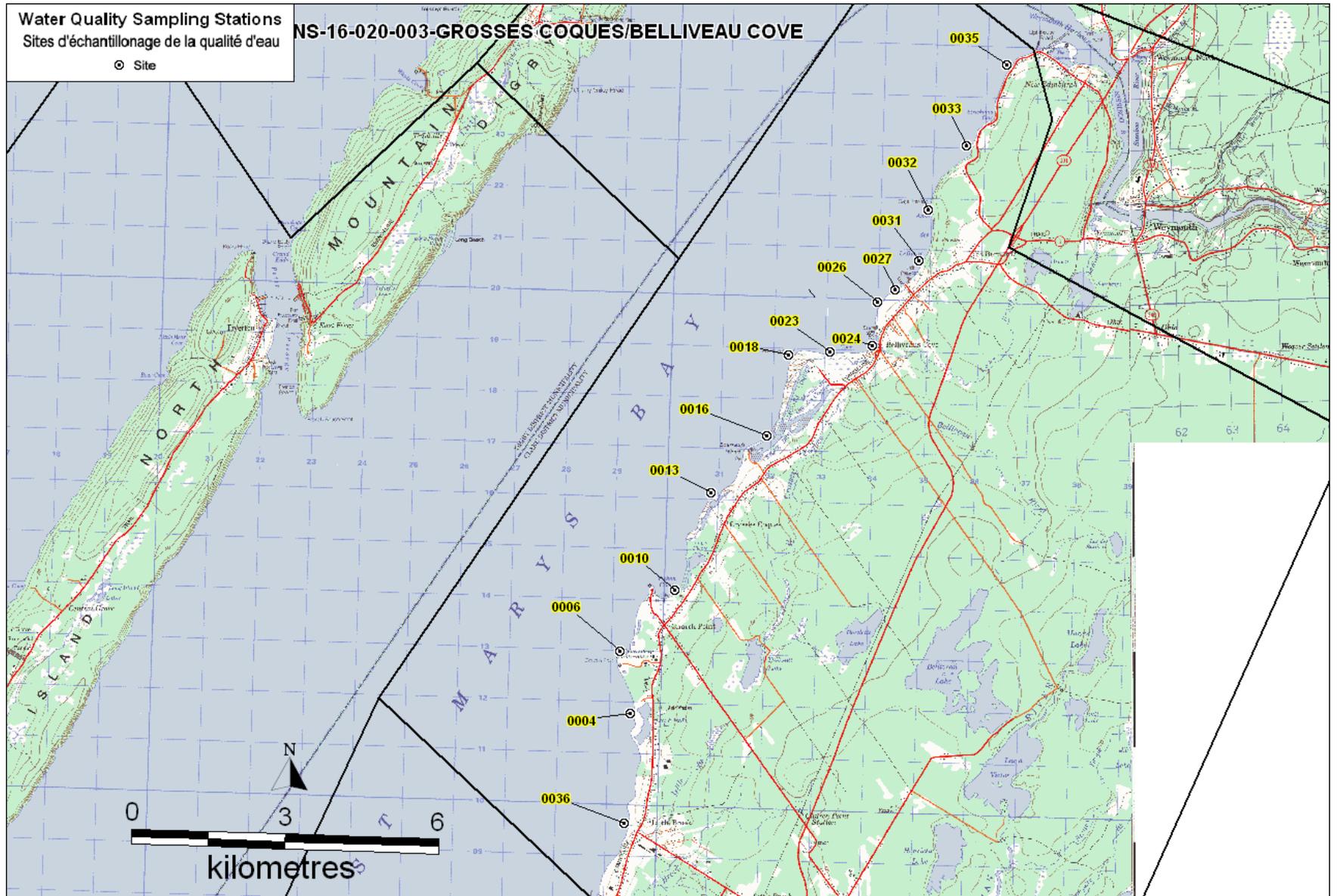
**FIGURE 28**



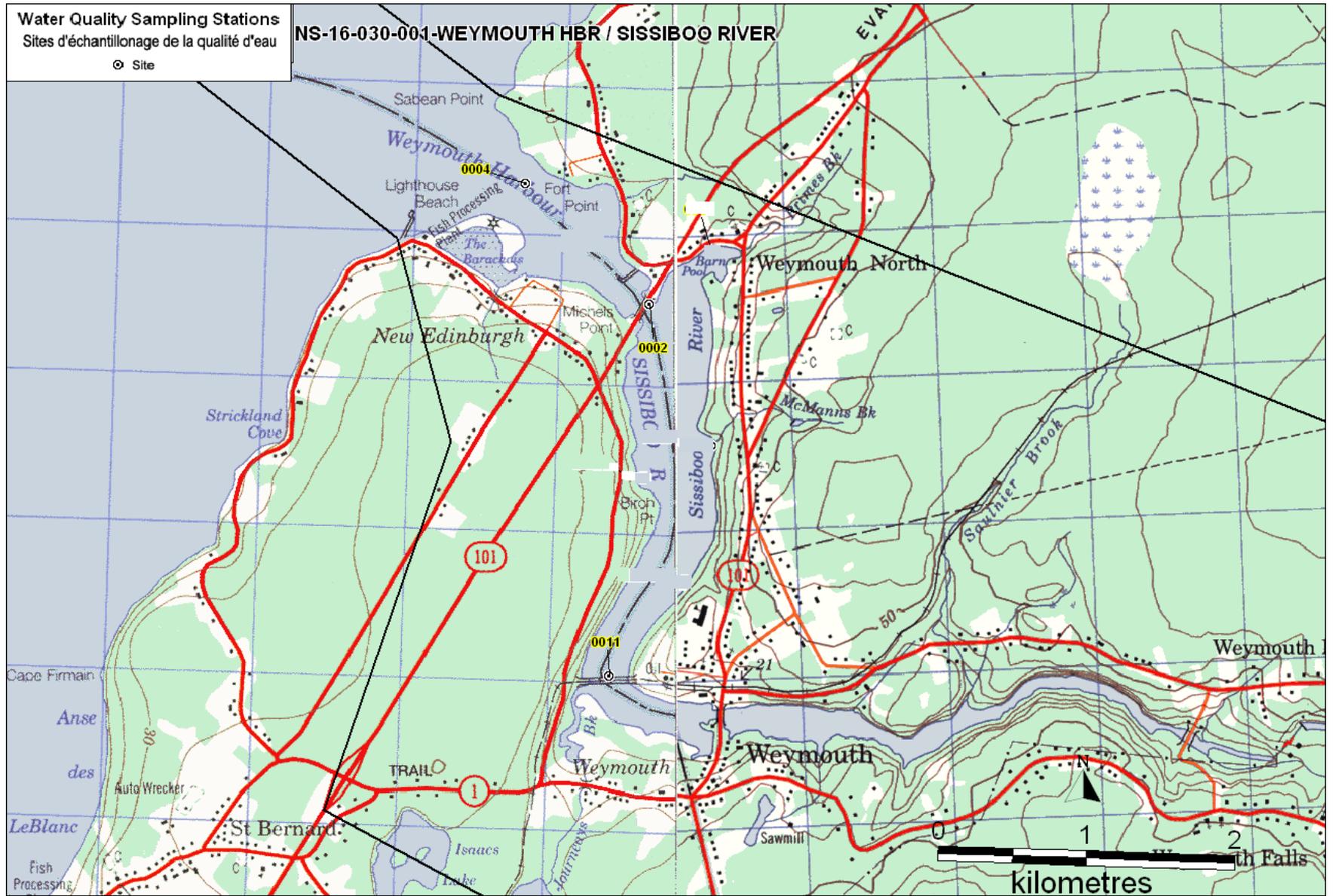
**FIGURE 29**



**FIGURE 30**



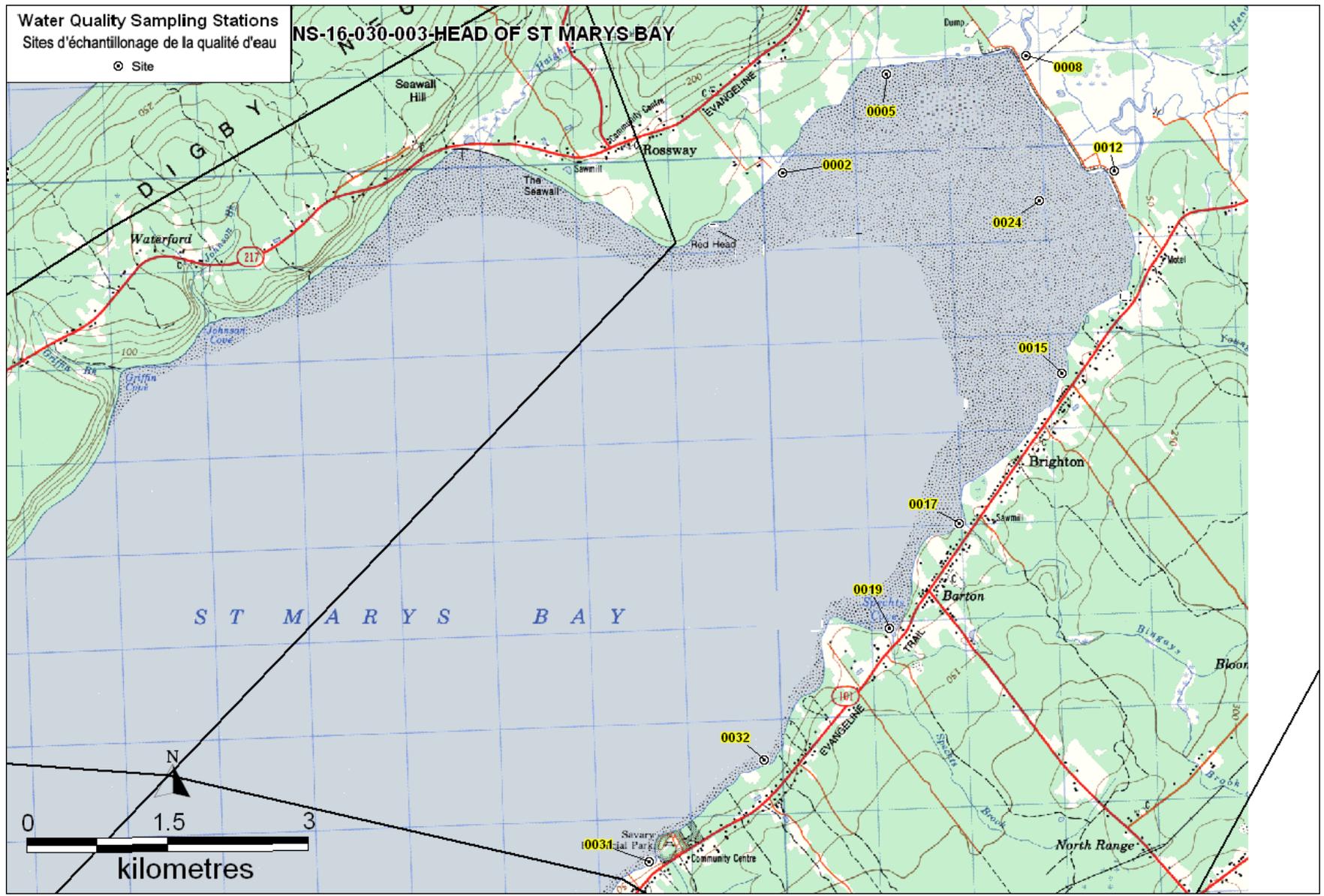
**FIGURE 31**



**FIGURE 32**



**FIGURE 33**



**FIGURE 34**

## APPENDIX 3 ECCC MARINE WATER QUALITY SAMPLING PROTOCOL

### 1. Introduction:

All water samples for bacteriological analyses are collected in sterile 250 mL wide-mouthed bottles (Nalgene or polypropylene) at a depth approximately 20cm below the water surface and held in an insulated cooler on ice or icepacks.

Prior to sampling, the receiving laboratory is notified at least 24 hours in advance to confirm sample numbers. All equipment and supplies are prepared prior to leaving. These include sample bottles, coolers, sampling rod, GPS, chart, sampling station maps with descriptions, field thermometer, pencils, markers, field book, and watch.

Sampling plans determine the location (sub-sectors) and sample sites for the work to be conducted. It is the responsibility of the Project Manager to provide them to the laboratory. Ensuring field/ sampling technicians have appropriate equipment and training is the responsibility of the Project Manager.

Sampling is carried out under various environmental conditions including adverse weather such as heavy periods of precipitation, dry conditions, and different tidal stages. Sampling stations are located through GPS or triangulation and/or using sampling station maps and descriptions. Hydrological conditions including surface water temperature and tidal cycle are recorded as well as meteorological conditions. During sample collection, all relevant information is recorded in a field book. This would include all the items listed under *7. Sample Collection Information Recorded in Field Book* below.

The laboratory requires a temperature blank to determine the temperature at time of collection (measured in field) and at the time of delivery (measured by laboratory staff) to ensure transport temperatures were adequate. All sample bottles are prepared at the laboratory and meet quality control requirements prior to use by field technicians. All samples are identified with location and a *sampling station* number.

After collection, sample is immediately placed in a clean cooler which is maintained between 0°C and 10°C. Samples are delivered to the approved laboratory to ensure sample is processed immediately preferably within 8 hours of collecting the first sample. Samplers ensure that prior to delivery to the laboratory all sample bottles and field books are checked for complete and accurate information. Transport times may be a problem depending on the distance between the sampling sites and laboratory, with the approval of the Project Authority samples may be processed up to 24 hours. Absolutely no samples will be processed after 24 hours without consultation with Project Authority.

### 2. Safety Precautions:

Field staff must undergo appropriate boating and vehicle safety training.

2.1 Eating and Drinking are PROHIBITED while sampling.

2.2 Appropriate hands-on training must be provided and technicians are to be familiar with all equipment and the hazards associated with using them.

- 2.3 If procedures involve contaminated samples, gloves and safety glasses are to be worn.
- 2.4 Technicians must handle samples with caution following the assumption that all samples are potential hazards.
- 2.5 Coolers must be disinfected before and after each use.
- 2.6 Technicians must wash hands effectively, as soon as possible, after handling the samples.
- 2.7 Open cuts/ sores must be bandaged to prevent accidental infection; these bandages should be changed frequently.

### **3. Apparatus:**

- 3.1 Clean insulated cooler with ice/ice packs
- 3.2 250ml wide-mouth sterile sample bottle (Nalgene or polypropylene)
- 3.3 Sampling rod with thermometer, stand alone armor-cased thermometer or Digital Meter
- 3.4 Field log book
- 3.5 Sampling map
- 3.6 Watch with 24 hour format
- 3.7 Label Tape for Bottles
- 3.8 Pencils, Permanent Marker
- 3.9 Chartplotter, GPS, Compass
- 3.10 Applicable Personal Protective Equipment (PPE)

### **4. Interferences:**

- 4.1 Sample bottles must remain closed at all times (opened only just prior to use) to decrease probability of contamination. Occurrences of the cap becoming loose or removed unintentionally increase the chance of cross contamination of the sample and will not be truly representative of the natural environment. Caps should be placed facing down, to minimize the risk of airborne contamination. Accidentally opened bottles should not be used and shall be returned to the lab for re-sterilization. If lots of bottles are found to have numerous loose caps, the Lab Manager should be notified immediately and corrective action taken as soon as possible.
- 4.2 Significant amounts of algae in the water sample may yield higher results. *Fecal coliforms* may attach to the algae and invalidate the results. Ensure to note presence of algae.
- 4.3 Samples should be taken when the boat is facing the waves and / or wind so the water sample taken does contain possible contamination from the underside of the boat.
- 4.4 If the ice melts in the cooler it should be drained away to ensure no cross contamination occurs. The melted ice may contain bacteria from the outside of the bottles and could possibly get underneath the sample bottle caps and contaminate the sample. Also, the samples in the cooler should not be covered with ice.
- 4.5 Initiate the bacteriological examination of water samples immediately after collection and preferably within 8 hours after collection. Under no circumstances however, shall bacteriological examination results from water samples held longer than 24 hours without the approval of the Project Authority, be considered valid for classification purposes.
- 4.6 Samples are stored in a cooler which is maintained between 0°C and 10°C until analysis. No other method of sample preservation is acceptable. If samples do not arrive at the laboratory between 0°C and 10°C, the Project Authority should be notified immediately. Corrective action such as continued holding on ice / ice packs or refrigeration may be employed if time permits before samples are required to be

- analyzed; however, explanations of non-conformances are to be recorded on the appropriate data analysis forms.
- 4.7 Samples should, if possible, be delivered to the laboratory within 6 hours of collection of first sample to allow for 2 hours of processing. Samples outside this parameter are recorded on the data sheets. No samples will be processed if beyond 24 hours after collection without the approval of the Project Authority.
  - 4.8 If the sampling location is deemed inaccurate, another sample will be taken in the correct location.
  - 4.9 Weather may prevent or interfere with sampling and in this instance the area will be re-sampled as soon as possible to ensure similar environmental conditions.
  - 4.10 Ensure there is adequate headspace in the sample bottle for proper mixing. If the bottle is full, the sample cannot be mixed properly to get a representative sample. Technician must aseptically transfer the sample into a larger sterile bottle.
  - 4.11 Sample bottles/ caps that are broken or cracked could allow for cross contamination. All staff should inspect bottles prior to use.

## **5. Procedure:**

- ### Water Quality Sampling Protocol
- 5.1 Prepare a clean, insulated cooler with an appropriate number of sterile, labelled, sample collection bottles and enough ice or ice packs suitable to maintain samples in the range of 0°C to 10°C.
  - 5.2 Field technicians record growing area identification, date of survey, sampler's names, current weather conditions, tidal state, and sample station numbers.
  - 5.3 Navigate to sample station locations using the station map, station descriptions, and GPS / compass as required to ensure accuracy and consistency.
  - 5.4 Upon reaching sample station, select a sterile sample bottle and label with station information (it may be preferable to label sample bottles prior to launching). Insert bottle into the sampling rod and dip into seawater to rinse. Remove the bottle cap and hold such that it's interior faces down and does not contact any surface.
  - 5.5 Plunge the sampling rod into undisturbed water up to the 20 cm mark. Allow several seconds to fill and withdraw sample. Pour off excess water to allow for an approximate 1 inch air space for subsequent agitation in the laboratory (maintain a minimum of 200 ml sample size).
  - 5.6 Replace the bottle cap aseptically ensuring that neither its interior, nor the bottle neck contacts any surface. Place bottle in cooler.
  - 5.7 Record the temperature either from integrated thermometer on the sample bar or if a digital meter is used in the field, plunge to a 20 cm depth, then observe both the temperature and salinity readings and record.
  - 5.8 Record sample time and any other relevant observations such as presence of birds, boat / cabin activity, high flow rates, spills, or other possible pollution sources.
  - 5.9 Repeat steps 5.1.3 through 5.1.8 for all sample stations.
  - 5.10 An extra sample is to be taken at the first sample station to serve as a temperature control for later laboratory use. Label as 'temperature control' or TC.
  - 5.11 After completion of the sampling run, initiate the bacteriological examination of water samples immediately after collection, preferably within 8 hours. Under no circumstances however, shall bacteriological examination results be held longer than 24 hours be considered valid for classification purposes without the approval of the Project Authority.
  - 5.12 Samples are transported in a cooler which is maintained between 0°C and 10°C until examined. No other method of sample preservation is acceptable. Do not cover sample

bottles with ice but ensure bottles are placed into the ice to ensure adequate transportation temperatures.

- 5.13 Upon return to the laboratory, transfer custody of the samples to the laboratory staff and record sampling run information. Laboratory staff will ensure samples are acceptable. Also ensure that information from the field log book is copied to the appropriate data analysis form. It is very important to remember to use aseptic technique to collect and process samples and to show accountability through the entire sample collection and analysis procedure.
- 5.14 After removal of all samples from cooler, dispose of ice in sink and spray cooler (and icepacks if applicable) with appropriate disinfectant. Rinse with water and wipe dry.

## **6. Acceptance Criteria and Corrective Actions:**

- 6.1 All sample bottle quality assurance must be completed and in compliance prior to use. If sample bottles are out of compliance, they are re-washed and sterilized until all parameters are met. The sample bottles may only then be used.
- 6.2 The temperature control must be within 0°C and 10°C upon return to the laboratory. If samples do not arrive at the laboratory between 0°C and 10°C, the Lab Manager should be notified immediately. Non-conformances are to be recorded on the appropriate data analysis forms. If samples are deemed out of compliance by the Lab Manager and cannot be analyzed, they must be discarded. Discarding of samples depends on factors such as the temperature trend of the sample and if transport time was insufficient to cool samples to the accepted parameter (i.e. did temperature of sample decrease during transport).
- 6.3 Sample must have a minimum of 200mL and maximum of 250mL. If sample bottle does not adequate headspace for mixing, refer to Section 4.10 above.

## **7. Sample Collection Information Recorded in Field Book:**

- date of each survey
- growing area identification
- name of location or site
- state of tide
- station number
- time of each sample
- water temperature (at each station)
- water temperature blank
- precipitation in last 24 – 48 hours
- sun (% cloud cover)
- wind: direction and speed
- air temperature (optional)
- height of waves(optional)
- turbidity (optional)
- other potential pollution sources (birds, anchored vessels, marine mammals, etc.)
- sampler's names

## REFERENCES

1.	Compendium of Methods for the Microbiological Examination of Foods, 2nd Edition, APHA, 1984.
2.	Good Laboratory Practice.
3.	Interim Guides for the Depuration of the Northern Quahog <i>Mercenaria mercenaria</i> , Northeast Marine Health Sciences Laboratory, North Kingstown, RI, 1968.
4.	NBS Monograph 150, U.S. Department of Commerce, Washington, D.C., 1976.
5.	Official Methods of Analysis of the Association of Official Analytical Chemists, 15th Edition, 1990.
6.	Proceeding 8th National Shellfish Sanitation Workshop, 1974.
7.	Public Health Service, Public Health Report, Reprint #1621, 1947.
8.	Quality Assurance Principles for Analytical Laboratories, Association of Official Analytical Chemists, 1991.
9.	Recommended Procedures for the Examination of Sea Water and Shellfish, 4th Edition, American Public Health Association, 1970.
10.	Shellfish Sanitation Interpretation #SS-39, Interstate Shellfish Sanitation Conference, 1986.
11.	Standard Methods for the Examination of Water and Wastewater, APHA, 2012, 22 <sup>nd</sup> Ed. Section 9221 E, 2
12.	Title 21, Code of Federal Regulations, Part 58, Good Laboratory Practice for Nonclinical Laboratory Study, Washington, D.C.
13.	Standard Methods for the Examination of Dairy Products, 16th Edition, APHA, 1992.

**APPENDIX 4**  
**EVALUATION REPORT OF WATER SAMPLE COLLECTION**  
**Canadian Shellfish Sanitation Program (CSSP)**

**EVALUATION REPORT OF WATER SAMPLE COLLECTION**

**ENVIRONMENT & CLIMATE CHANGE  
CANADA  
SCIENCE & TECHNOLOGY BRANCH  
ATLANTIC REGION – MARINE WATER QUALITY MONITORING**

45 Alderney Dr.,  
Dartmouth, NS  
B2Y 2N6

**EVALUATION REPORT OF FIELD ACTIVITY**

CONTRACTOR: \_\_\_\_\_  
\_\_\_\_\_

DATE OF EVALUATION : \_\_\_\_\_

DATE OF REPORT : \_\_\_\_\_

DATE OF PREVIOUS EVALUATION : \_\_\_\_\_

REPRESENTATIVE CONTRACTORS / SAMPLING-FIELD ACTIVITY :

(name)	Field technician (title)
--------	-----------------------------

(name)	Field assistant (title)
--------	----------------------------

REPRESENTATIVE OF ENVIRONMENT & CLIMATE CHANGE CANADA :

(name)	Coordinator (title)
--------	------------------------

A copy of the checklist has been sent to the  
Field technician before the visit

YES

NO

**SUMMARY OF THE FIELD ACTIVITY EVALUATION**

Visited sectors :

Schedule :

General comments :

<u>DEFICIENCIES</u>			<u>RECOMMENDATIONS</u>		
-			-		
-			-		
-			-		

**CHECKLIST – SAMPLING METHOD**

#	Category		Items	Conform	Deficiencies	Recommendations	Comments
1	General equipment						
		a.	Sample bottles				
		b.	Sampling rod				
3	Stations positioning						
		a.	Method – GPS and visual reference point				
4	Sampling method						
		a.	Method				
		b.	Bottle identification				
		c.	Water temperature control at onset of run				
		d.	Water temperature taken at each sample				
5	Sample transportation						
		a.	Do not exceed 6 hours (from time of first sample)				
		b.	Coolers (enough ice or ice packs) / Water TC at lab $\leq 10^{\circ}\text{C}$				
6	Log book						
		a.	date / hour of beginning and ending of sampling				
		b.	number of the area, sector, subsector and station				
		c.	Hydrological conditions				

			Time of the high tide				
			Tidal phase				
			Water temperature				
			Water depth				
			Salinity				
		d.	Meteorological conditions				
			Rainfall				
			Cloud cover %				
			Wind : direction + speed (beginning/ending)				
			Air temperature (beginning/ending)				
			Sea Condition				
7	Training						
		a.	Pleasure Craft Operator Card				
		b.	Restricted Operator's Certificate (Maritime)				
		c.	Marine Emergencies Duties				
		d.	Standard First Aid (offshore, working area and CPR)				