

**Canada-Newfoundland and Labrador
Water Quality Monitoring Agreement
Annual Work Schedule –
Resource Commitment & Work Shared Activities
2025-2026**

This document outlines cost and work shared activities to be carried out during the current fiscal year under the Canada-Newfoundland and Labrador Water Quality Monitoring Agreement. The document has been reviewed and approved by the Administrators of the Agreement.

Joanne Volk
Administrator, on behalf of
Environment and Climate Change Canada
Government of Canada

Haseen Khan
Administrator, on behalf of
Department of Environment and Climate Change
Government of Newfoundland and Labrador

Schedule A
Agreement Committees

The following officials are named to administer this Agreement according to Article X under the Canada-Newfoundland and Labrador Water Quality Monitoring Agreement:

Ms. Joanne Volk
Environment and Climate Change Canada, on behalf of Canada

Mr. Haseen Khan
Department of Environment and Climate Change, on behalf of Newfoundland & Labrador

The Administrators will be assisted by a Coordinating Committee consisting of the following:

Ms. Melanie Losier
Environment and Climate Change Canada (Water Quality Monitoring & Surveillance)

Ms. Megan Bauer
Environment and Climate Change Canada (Water Quality Monitoring & Surveillance)

Ms. Annette Tobin
Water Resources Management Division, Newfoundland & Labrador Department of
Environment and Climate Change

Schedule B

Shared Activities for Fiscal Year 2025-2026

Schedule B –Shared Activities 2025-2026

| Activity | Responsible Agency | Remarks | Total Cost |
|---|---|--|---|
| Cost-Shared and Work-Shared Core Ambient Water Quality Monitoring and Data Management Activities | Newfoundland & Labrador Department of Environment and Climate Change <u>and</u> Environment and Climate Change Canada | Refer to Table B.1 and Figure A-1 for sampling locations in Newfoundland Refer to Table B.2 and Figure A-2 for sampling locations in Labrador Refer to Table B.3 for laboratory analysis details Refer to Table B.4 for Shared Activities | \$16,000 payable to NL (Labrador sampling) \$37,734.98 payable to ECCC (Laboratory Services) |
| Additional Cost-Shared Core Activities | Newfoundland & Labrador Department of Environment and Climate Change <u>and</u> Environment and Climate Change Canada | Refer to Table B.5 for Shared Activities | \$27,500 payable to NL (CESI, CABIN, CMP, Data Management) |
| Work-Shared Special Projects | Newfoundland & Labrador Department of Environment and Climate Change <u>and</u> Environment and Climate Change Canada | Refer to Table B.6 for work-shared special projects | N/A |

Table B.1: Index Station Location, Designation and Sampling Frequency 2025-2026 for Newfoundland Stations. Core CESI stations are shaded gray.

EASTERN REGION

| STATION # | DESCRIPTION | LATITUDE | LONGITUDE | DESIGNATION | SAMPLES/ YEAR | CLASSIFICATION |
|------------|---|----------|-----------|-------------|------------------|--|
| NF02ZK0005 | NORTHEAST RIVER NEAR PLACENTIA | 47 16 23 | -53 50 25 | Fed/Prov | 4 | Core CESI / CABIN Annual / Hydrometric |
| NF02ZL0029 | GOULDS BROOK NEAR MAKINSONS | 47 30 17 | -53 17 27 | Fed/Prov | 4 | Core CESI |
| NF02ZM0004 | WATERFORD RIVER AT COMMONWEALTH AVENUE | 47 31 19 | -52 48 29 | Provincial | 4 | Local CESI |
| NF02ZM0009 | WATERFORD RIVER AT KILBRIDE | 47 31 44 | -52 44 40 | Fed/Prov | 4 | Local CESI / Chemical Management Plan / RTWQ / Hydrometric |
| NF02ZM0014 | VIRGINIA RIVER AT THE BOULEVARD | 47 35 02 | -52 41 29 | Provincial | 4 | Local CESI Station |
| NF02ZM0015 | QUIDI VIDI LAKE AT OUTLET | 47 35 04 | -52 40 54 | Provincial | 4 | |
| NF02ZM0016 | RENNIE'S RIVER AT CARNELL DRIVE | 47 34 40 | -52 42 03 | Provincial | 4 | Local CESI |
| NF02ZM0020 | BROAD COVE BROOK NEAR ST. PHILLIPS | 47 34 16 | -52 52 10 | Provincial | 4 | Local CESI |
| NF02ZM0098 | VIRGINIA RIVER AT HEADWATERS | 47 35 56 | -52 45 17 | Provincial | 4 | Local CESI |
| NF02ZM0109 | MUNDY POND AT OUTLET | 47 33 12 | -52 44 07 | Provincial | 4 | |
| NF02ZM0175 | WATERFORD RIVER AT BROOKFIELD ROAD | 47 31 34 | -52 45 48 | Provincial | 4 | Local CESI |
| NF02ZM0176 | SOUTH BROOK AT MOUTH | 47 31 41 | -52 44 48 | Provincial | 4 | Local CESI |
| NF02ZM0177 | RENNIE'S RIVER AT PORTUGAL COVE ROAD | 47 34 28 | -52 42 36 | Provincial | 4 | Local CESI |
| NF02ZM0178 | LEARYS BROOK AT PRINCE PHILIP DRIVE | 47 33 50 | -52 44 55 | Fed/Prov | 4 | Core CESI / RTWQ / Hydrometric / |
| NF02ZM0179 | TRIBUTARY TO VIRGINIA RIVER AT GUZZWELL DRIVE | 47 35 47 | -52 42 06 | Provincial | 4 | Local CESI |

| | | | | | | |
|------------|---|----------|-----------|------------|---|---|
| NF02ZM0180 | VIRGINIA RIVER AT NEWFOUNDLAND DRIVE | 47 35 59 | -52 42 02 | Provincial | 4 | Local CESI |
| NF02ZM0181 | WATERFORD RIVER AT BLACKHEAD ROAD | 47 32 53 | -52 43 09 | Fed/Prov | 4 | Core CESI |
| NF02ZM0182 | WATERFORD RIVER AT BREMIGANS POND DAM | 47 31 07 | -52 51 21 | Provincial | 4 | Local CESI |
| NF02ZM0183 | KELLIGREWS RIVER AT KELLIVIEW CRESCENT | 47 29 37 | -53 00 58 | Provincial | 4 | Local CESI |
| NF02ZM0185 | SOUTH BROOK AT HEADWATERS | 47 29 44 | -52 48 47 | Provincial | 4 | Local CESI |
| NF02ZM0294 | MANUELS RIVER ABOVE MANUELS ACCESS ROAD | 47 31 11 | -52 56 41 | Provincial | 4 | Local CESI / Archaeologically significant |
| NF02ZM0359 | PADDYS POND AT OUTLET | 47 29 17 | -52 53 39 | Provincial | 4 | RTWQ stand-alone station |
| NF02ZN0004 | SALMONIER RIVER AT ST. CATHERINES | 47 11 29 | -53 23 09 | Provincial | 4 | Local CESI |

CENTRAL REGION

| STATION # | DESCRIPTION | LATITUDE | LONGITUDE | DESIGNATION | SAMPLES/ YEAR | CLASSIFICATION |
|------------|--|----------|-----------|-------------|------------------|---------------------------|
| NF02YO0001 | EXPLOITS RIVER AT GRAND FALLS | 48 55 27 | -55 39 35 | Provincial | 4 | Local CESI |
| NF02YO0020 | EXPLOITS RIVER AT ASPEN BROOK | 48 56 56 | -55 54 45 | Provincial | 4 | Local CESI |
| NF02YO0107 | EXPLOITS RIVER NEAR MILLERTOWN | 48 45 38 | -56 34 56 | Fed/Prov | 4 | Core CESI / Hydrometric |
| NF02YO0128 | EXPLOITS RIVER BELOW GRAND FALLS | 48 56 12 | -55 37 03 | Provincial | 4 | Local CESI |
| NF02YO0142 | CORDUROY BROOK NEAR CENTENNIAL PARK | 48 56 24 | -55 39 43 | Provincial | 4 | Local CESI |
| NF02YO0143 | EXPLOITS RIVER AT BOND BRIDGE | 49 01 24 | -55 26 56 | Provincial | 4 | Local CESI |
| NF02YQ0030 | GANDER RIVER AT APPLETON | 48 59 40 | -54 52 00 | Fed/Prov | 4 | Core CESI / Hydrometric |
| NF02YQ0072 | CARELESS BROOK AT RESOURCE ROAD STEEL BRIDGE | 48 54 08 | -54 59 38 | Fed/Prov | 4 | Local CESI / CABIN Annual |

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|------------|---|----------|-----------|------------|---|---|
| NF02YS0001 | TERRA NOVA RIVER AT TERRA NOVA | 48 30 24 | -54 12 36 | Provincial | 4 | Local CESI |
| NF02YS0011 | TERRA NOVA RIVER AT SPENCER BRIDGE | 48 38 26 | -54 02 11 | Fed/Prov | 4 | Core CESI / Hydrometric |
| NF02YS0083 | NORTHWEST RIVER AT TERRA NOVA NATIONAL PARK | 48 23 50 | -54 11 56 | Provincial | 4 | Local CESI / Hydrometric / National Park |

WESTERN REGION

| STATION # | DESCRIPTION | LATITUDE | LONGITUDE | DESIGNATION | SAMPLES/ YEAR | CLASSIFICATION |
|------------|--|----------|-----------|-------------|------------------|--|
| NF02YE0004 | PORTLAND CREEK AT ROUTE 430 | 50 10 57 | -57 36 04 | Provincial | 4 | Local CESI |
| NF02YE0005 | WESTERN BROOK AT ROUTE 430 | 49 49 44 | -57 51 18 | Fed/Prov | 4 | Core CESI |
| NF02YG0001 | MAIN RIVER AT ROUTE 420 | 49 46 15 | -56 54 33 | Fed/Prov | 4 | Core CESI / Canadian Heritage River |
| NF02YL0106 | SOUTH BROOK BELOW TCH | 49 01 06 | -57 37 04 | Provincial | 4 | Local CESI / Hydrometric |
| NF02YG0020 | EAGLE MOUNTAIN BROOK BELOW EAGLE MOUNTAIN POND | 49 49 54 | -57 17 14 | Provincial | 4 | Local CESI |
| NF02YH0018 | LOMOND RIVER AT ROUTE 431 | 49 24 08 | -57 43 48 | Provincial | 4 | Local CESI |
| NF02YJ0004 | PINCHGUT BROOK AT TCH | 48 47 49 | -58 03 42 | Fed/Prov | 4 | Core CESI / CABIN Annual |
| NF02YK0022 | HUMBER CANAL AT MAIN DAM ROAD | 49 09 59 | -57 24 53 | Provincial | 4 | Local CESI |
| NF02YL0011 | HUMBER RIVER AT LITTLE FALLS BRIDGE | 49 20 52 | -57 14 08 | Provincial | 4 | Local CESI |
| NF02YL0012 | HUMBER RIVER AT HUMBER VILLAGE BRIDGE | 48 59 01 | -57 45 37 | Fed/Prov | 4 | Core CESI / RTWQ / Hydrometric |
| NF02YL0013 | CORNER BROOK AT MARGARET BOWATER PARK | 48 56 34 | -57 55 55 | Provincial | 4 | Local CESI |
| NF02YL0029 | WILD COVE BROOK AT ROUTE 440 | 48 58 26 | -57 52 60 | Provincial | 4 | Local CESI |

| | | | | | | |
|------------|---|----------|-----------|------------|---|------------|
| NF02YN0001 | LLOYDS RIVER AT ROUTE 480 | 48 18 28 | -57 42 10 | Fed/Prov | 4 | Core CESI |
| NF02ZA0006 | GRAND CODROY RIVER BELOW OVERFALL BROOK | 47 52 08 | -59 07 05 | Provincial | 4 | Local CESI |

Notes:

1. A total of 48 stations (including 12 core CESI stations) will be sampled during 2025-2026 on the island portion of the province.
2. For statistical analysis it is important that at least four (4) samples are collected from each station representing four seasons in a fiscal year.
3. All Core and local CESI stations should be sampled four (4) times per year. Note: Core CESI stations are now scheduled for 4 samples per year due to reduction in overall sample numbers. The target for 4 samples per year has consistently been met in the past.
4. Total number of samples to be collected from all NL stations is 216 (this includes QA/QC samples); it also includes 48 samples from Core CESI stations. Total number of QA/QC samples to be collected is 24 (this is based on 12 duplicates per year in eastern region, four (4) duplicates per year in central region, and eight (8) duplicates per year in western region).
5. All sampling is carried out by provincial Water Resources Management Division staff.
6. Sampling at all Core CESI sites will include field measurements for pH, conductivity, turbidity, dissolved oxygen and water temperature.

Table B.2: Northern Index Station Location, Designation and Sampling Frequency 2025-2026 for Labrador Stations. Core CESI stations are shaded gray.

LABRADOR REGION

| STATION # | DESCRIPTION | LATITUDE | LONGITUDE | DESIGNATION | SAMPLES/ YEAR | CLASSIFICATION |
|------------|---|----------|-----------|-------------|------------------|---|
| NF02XA0001 | LITTLE MECATINA RIVER ABOVE LAC FOURMONT | 52 13 42 | -61 19 32 | Fed/Prov | 4 | Local CESI / Hydrometric / Transboundary |
| NF03NF0013 | UGJOKTOK RIVER BELOW HARP LAKE | 55 13 60 | -61 17 57 | Fed/Prov | 4 | Core CESI / Hydrometric |
| NF03OA0020 | ASHUANIPI RIVER AT FERGUSON BAY | 53 00 06 | -66 14 30 | Provincial | 4 | Local CESI |
| NF03OC0012 | ATIKONAK RIVER ABOVE PANCHIA LAKE | 52 58 03 | -64 39 40 | Fed/Prov | 4 | Core CESI / Hydrometric |
| NF03OD0011 | EAST METCHIN RIVER AT TLH | 53 26 05 | -63 14 02 | Provincial | 4 | Local CESI / Former Hydrometric |
| NF03OD0012 | WILSON RIVER EAST BRANCH | 53 18 33 | -62 55 11 | Provincial | 4 | Local CESI / Ashkui |
| NF03OE0057 | MUSKRAT FALLS RESERVOIR AT LOWER BROOK | 53 14 52 | -60 47 21 | Fed/Prov | 4 | Local CESI / RTWQ / Hydrometric |
| NF03OE0050 | CHURCHILL RIVER 6.15KMS BELOW LOWER MUSKRAT FALLS | 53 14 16 | -60 40 31 | Fed/Prov | 4 | Local CESI / RTWQ / Hydrometric |
| NF03OE0029 | CHURCHILL RIVER ABOVE GRIZZLE RAPIDS | 52 58 12 | -61 26 43 | Fed/Prov | 4 | Local CESI / RTWQ/ Hydrometric |
| NF03OE0030 | MINIPI RIVER BELOW MINIPI LAKE | 52 36 54 | -61 11 01 | Fed/Prov | 4 | Core CESI / Former RTWQ / Former Hydrometric |
| NF03OE0032 | PINUS RIVER ABOVE TLH | 53 08 52 | -61 33 31 | Provincial | 4 | Local CESI / Hydrometric |
| NF03OE0035 | DOMINION LAKE OUTFLOW | 52 43 44 | -61 45 14 | Provincial | 4 | Local CESI / Ashkui |
| NF03OE0037 | CACHE RIVER AT TLH | 53 11 34 | -62 12 35 | Provincial | 4 | Local CESI / Ashkui |
| NF03PB0025 | NASKAUPI RIVER BELOW NASKAUPI LAKE | 54 07 54 | -61 25 45 | Fed/Prov | 4 | Core CESI |
| NF03PB0028 | CAPE CARIBOU RIVER AT GRAND LAKE | 53 37 16 | -60 24 52 | Provincial | 4 | Local CESI / Ashkui |

| | | | | | | |
|------------|--|----------|-----------|------------|---|---|
| NF03PB0029 | GRAND LAKE OUTFLOW AT NORTH WEST RIVER | 53 31 26 | -60 08 45 | Provincial | 4 | Ashkui |
| NF03PB0030 | SEAL LAKE AT NARROWS | 54 19 55 | -61 38 27 | Provincial | 4 | Ashkui |
| NF03PB0032 | SUSAN RIVER NORTH OF BEAVER RIVER | 53 44 17 | -60 56 48 | Provincial | 4 | Local CESI / Ashkui |
| NF03PB0037 | WUCHUSK LAKE AT NASKAUPI RIVER INFLOW | 54 23 43 | -61 47 09 | Provincial | 4 | Ashkui |
| NF03QA0044 | CARTER BASIN OUTFLOW | 53 29 55 | -59 52 11 | Provincial | 4 | Ashkui |
| NF03QA0045 | KENAMU RIVER NEAR MOUTH | 53 28 34 | -59 55 01 | Provincial | 4 | Ashkui |
| NF03QC0001 | EAGLE RIVER ABOVE FALLS | 53 32 03 | -57 29 37 | Fed/Prov | 4 | Core CESI / Hydrometric / Eagle River Plateau Management Zone |
| NF03QC0002 | ALEXIS RIVER NEAR PORT HOPE SIMPSON | 52 38 57 | -56 52 17 | Provincial | 4 | Local CESI / Hydrometric |
| NF02XB0018 | TRIBUTARY TO ST. AUGUSTIN RIVER | 52 33 06 | -59 19 39 | Fed/Prov | 4 | Local CESI / Transboundary |

Notes:

1. A total of 24 stations (including five (5) core CESI stations) will be sampled during 2025-2026 in Labrador.
2. The Labrador stations are listed as being sampled four (4) times per year; this refers to the number of samples taken; **there must be a minimum of three (3) samples taken each fiscal year** at the provincial Labrador sites. Generally, four trips are made to each station.
3. Total number of samples to be collected is 102 (this includes QA/QC samples); it also includes 20 samples from Core CESI stations. Total number of QA/QC samples to be collected is six (6) (this is based on six (6) duplicates for Labrador per year).
4. All five (5) Core CESI stations in Labrador are accessible only by helicopter.
5. All Core CESI stations should be sampled four (4) times per year, if possible, and at least (3) times per year.
6. Sampling at all Core CESI sites will include field measurements for pH, conductivity, turbidity, dissolved oxygen and water temperature.
7. Sampling is carried out by provincial and federal staff (i.e., a schedule is developed by provincial staff at beginning of sampling season and distributed to federal staff to ensure the preferred number of samples are collected at the remote sites during field visits between both agencies).

Table B.3 Analytical Parameters, Holding Times and Schemas for 2025-2026

| Parameter | Holding Times & Laboratory | Schema Name | Parameter/ Grouping |
|--------------------------|----------------------------------|---|--|
| Major Ions | ALET | M_pH auto, M_Alkalinity, M_Conductivity | alkalinity, pH, conductivity |
| Alkalinity | 14 days | B_Cations | Ca, Mg, Na, and K and Li |
| Chloride | 28 days | M_Anions_PKG | Cl, SO4, NO2, NO3, F and Bromide by IC |
| Sulphate | 28 days | M_TP | total phosphorus |
| Bromide | 28 days | M_TN | total nitrogen |
| Fluoride | 28 days | M_TOC | dissolved inorganic and organic carbon |
| Physical | ALET | B_Hardness_Calc | Calculation derived from Ca and Mg |
| pH | 48 hours | M_Colour | Colour-apparent (unfiltered sample) |
| Conductivity | 28 days | M_Turbidity | turbidity |
| Colour | 48 hours | B_Metals_TR_ICP-MS | Total Recoverable Metals by ICP-MS* |
| Turbidity | 48 hours | | |
| Nutrients | ALET | | |
| Nitrate | 48 hours | | |
| Nitrite | 48 hours | | |
| Total Nitrogen | 28 days | | |
| Total Phosphorus | 28 days | | |
| DIC/TOC | 28 days | | |
| Major Ions | NLET | | |
| Calcium | 28 days | | |
| Magnesium | 28 days | | |
| Sodium | 28 days | | |
| Potassium | 28 days | | |
| Metals* | NLET | | |
| Total Metals-28 elements | 6 months (preservation required) | | |

***28 Metals include:**

| | | | | |
|-----------|----------|------------|-----------|-----------|
| aluminum | bismuth | iron | nickel | uranium |
| antimony | cadmium | lanthanum | rubidium | vanadium |
| arsenic | cobalt | lead | selenium | zinc |
| barium | copper | lithium | silver | zirconium |
| beryllium | chromium | manganese | strontium | |
| boron | gallium | molybdenum | thallium | |

Metals analyzed but not required by NL ECC:

europium, gadolinium, germanium, hafnium, holmium, indium, iridium, lutetium, neodymium, niobium, palladium, yttrium, niobium, tin, cesium, cerium, tungsten, platinum, praseodymium, ruthenium, samarium, scandium, tellurium, titanium, terbium, ytterbium, zirconium

Table B.4 Core Ambient Water Quality Monitoring and Data Management Activities 2025-2026 (Cost-Shared and Work-Shared)

| Management Activities | | Leads/Commitments |
|---|---|---|
| Water Quality Sampling and Analysis (Cost-shared activity) | <p>Water samples are collected by provincial staff.</p> <ul style="list-style-type: none"> - Field data submitted regularly to ECCC <p>Analysis is completed by federal lab to ensure consistency.</p> <ul style="list-style-type: none"> - ISO standards adhered to - Detection limits mutually agreed upon | <p><u>NL Department of Environment and Climate Change</u></p> <ul style="list-style-type: none"> - NL will collect 318 samples in 2025-2026, including duplicate and blank samples. <p><u>Environment and Climate Change Canada</u></p> <ul style="list-style-type: none"> - ECCC will provide complete analytical service for 318 samples (according to Table B.3) by March 31, 2026. - ECCC analysis is valued at \$37,734.98 (value of the samples completely analyzed at ECCC Laboratory). - ECCC will pay \$16,000 to NL for costs associated with sampling remote Labrador CESI stations, which are accessible only by helicopter. <p>\$16,000 payable to NL (included in cost-shared Table B5) \$37,734.98 to ECCC Laboratory Services (For Internal Purposes Only)</p> |
| Data Management (Work-shared activity) | <p>Processing and Loading of WQ analytical data</p> <ul style="list-style-type: none"> - Conducted by Environment and Climate Change Canada <p>Accessibility/Availability of NL WQMA Dataset</p> <ul style="list-style-type: none"> - Maintained by Environment and Climate Change Canada | <p><u>Environment and Climate Change Canada</u></p> <ul style="list-style-type: none"> - Verifies and corrects data. - Transfers data to database. - Ensures NL WQMA dataset is available on external server for download. - Maintains database. - Provides a copy of NL WQMA dataset every six months to NL ECC. <p><u>NL Department of Environment and Climate Change</u></p> <ul style="list-style-type: none"> - Responsible for reviewing, validating, and reporting to ECCC any corrections required of the data. - Replacing former dataset. |

| | | |
|--|---|--|
| Data Management Special Projects (Work-shared activity) | Data Verification and Validation of Sample/Measurement Data using Developed Tools | <u>Environment and Climate Change Canada</u> <ul style="list-style-type: none"> - ECCC will continue to work with NL ECC to ensure all data are receiving the same verification and validation. <u>NL Department of Environment and Climate Change</u> <ul style="list-style-type: none"> - NL ECC will continue to use an in-house tool (Envirotrend) to apply to the NL WQMA dataset in an approach consistent with that used by other projects within ECCC Database. This is to be used as an interim data validation tool until ECCC's validation tool can be used and integrated. |
| | Data extraction tools development and updates | <u>Environment and Climate Change Canada</u> <ul style="list-style-type: none"> - ECCC will continue monthly release of water chemistry agreement data to the Open Data portal from April 2025 to March 2026. |

Table B.5 Additional Core Activities 2025-2026 (Cost-Shared)

| Project | Activity / In-kind Contributions | Amount Payable to NL Exchequer |
|--|--|---|
| Canadian Aquatic Biomonitoring Network (CABIN) | <p><u>NL Department of Environment and Climate Change</u></p> <ul style="list-style-type: none"> - Monitoring of benthic invertebrates at selected water bodies (four sites) for maintenance of the long-term reference network in support of the Atlantic Reference Approach Model and climate change research + 3 extra samples (within the South Avalon-Burin Oceanic Barrens eco-region, one of the deficient areas identified in the baseline report) - Share spatial data with ECCC, for use in the reference model. - CABIN field certification and training (as needed). - Participate in sample collection for special projects as needed. <p><u>Environment and Climate Change Canada</u></p> <ul style="list-style-type: none"> - ECCC cover the costs of the water quality analyses of the 7 CABIN samples (\$885.15– direct to ESTL through TMU payment). - Develops CABIN reference model and associated tools. - Maintains database. | <p>\$5,000</p> <p>Invoice to be provided to ECCC by November 30, 2025</p> <p>(matched by NL from annual budget)</p> |
| Canadian Environmental Sustainability Indicators (CESI) | <p><u>NL Department of Environment and Climate Change</u></p> <ul style="list-style-type: none"> - Compile, analyse and interpret water quality data at Core and Local CESI stations according to CESI protocols. - Provide input to ECCC review of core sites - Review CESI final report from ECCC for accuracy. - CESI WQI Fact Sheet. <p><u>Environment and Climate Change Canada</u></p> <ul style="list-style-type: none"> - QA/QC of submitted data/results and report to the public on the web. - Evaluation of core network of sites using new risk-based information to ensure representivity within Pearse basins. - Use of Risk-based Adaptive Management Framework (RBAMF) to categorize NL core sites for CESI reporting. | <p>\$15,000</p> <p>Invoice to be provided to ECCC by November 30, 2025</p> <p>(matched by NL from annual budget)</p> |

| | | |
|--|--|---|
| Modifications / Improvements to CESI WQI Calculator | <u>NL Department of Environment and Climate Change</u> <ul style="list-style-type: none"> - Regular troubleshooting support and corresponding update in the CESI Calculator coding as required. - Update of CESI WQI Calculator Help Manual as required. <u>Environment and Climate Change Canada</u> <ul style="list-style-type: none"> - Investigate how Trend Analysis can be incorporated into the CESI Calculator. - Inclusion of French version of CESI Help Manual. | <p>\$5,000 Invoice to be provided to ECCC by September 30, 2025</p> <p>(matched by NL from annual budget)</p> |
| Chemical Management Plan | <u>NL Department of Environment and Climate Change</u> <ul style="list-style-type: none"> - Quarterly sampling at Waterford River @ Kilbride for flame retardants, cyanides and PFOS | <p>\$2,500 Invoice to be provided to ECCC by November 30, 2025</p> |
| Labrador Remote Station Sampling (see Table B4) | <u>NL Department of Environment and Climate Change</u> <ul style="list-style-type: none"> - Remote station sampling in Labrador | <p>\$16,000 Invoice to be provided to ECCC by September 30, 2025</p> |
| | TOTAL: | <p>\$43,500</p> |

Therefore, Environment and Climate Change Canada will transfer to Newfoundland and Labrador Exchequer the sum of \$21,000 by October 31, 2025 and \$22,500 by December 31, 2025.

Table B.6. Special Projects 2025-2026 (Work-Shared)

| | | |
|--|--|---|
| <p>Monitoring Network Evaluation and Optimization</p> <p>(Work-shared activity)</p> | <p>This on-going project focuses on evaluating the network on a regular basis to ensure that the partner's monitoring objectives are being met and that the network will be sustainable in the long-term.</p> <p>These are multi-year projects that will carry over into 2025-2026.</p> | <p><u>Environment and Climate Change Canada</u></p> <ul style="list-style-type: none"> - ECCC will continue to provide advice as required and work with NL ECC to optimize approach for NL waters. - Sampling frequencies will be evaluated on an on-going basis. <p><u>NL Department of Environment and Climate Change</u></p> <ul style="list-style-type: none"> - NL ECC will update Risk-Based Assessment results on the Departmental main webpage as required. - NL ECC will continue work on the Trend Analysis Report Phase 3 (2006-2020). - ECCC and NL ECC will collaboratively review all results and the possible publications will be explored. |
| <p>Extrapolation of non-measured data at select real-time stations</p> <p>(Work-shared activity)</p> | <p>Development of regression models to extrapolate water quality parameters from real-time measurements of related parameters. Results may be applicable to the national program, reducing sampling and analytical costs at some stations.</p> <p>These are multi-year projects that will continue in 2024-25.</p> | <p><u>NL Department of Environment and Climate Change</u></p> <ul style="list-style-type: none"> - Continue developing regression models to compare total suspended solids (TSS) concentration vs. real-time turbidity and major ions vs real-time conductivity. The model shall be developed at stations having sufficient grab samples (at least 30) with additional three years of samples to validate the models. - Continue updating TSS data and ionic concentration (sodium, calcium, chloride, and sulphate) data to develop site specific regression model. - Validate the turbidity vs TSS Lower Churchill River model using TSS grab samples from 2021 – 2023 once data is available. <p><u>Environment and Climate Change Canada</u></p> <ul style="list-style-type: none"> - ECCC will continue to provide technical advice and review on the approach considering its national applicability. |

| | | |
|--|--|--|
| <p>Real-time Instrumentation Special Projects</p> <p>(Work-shared activity)</p> | <p>In-situ water quality/quantity/climate monitoring using a mobile environmental monitoring platform (MEMP) on a need-basis across the province.</p> <p>Sharing of instrumentation purchase, deployment and maintenance expenses for real-time monitoring stations of joint interest.</p> | <p><u>Environment and Climate Change Canada</u></p> <ul style="list-style-type: none"> - ECCC will loan two Mobile Environmental Monitoring Platform (MEMP)s to NL ECC until March 31, 2026. - ECCC and NL ECC will continue to work together to share expertise on various new technologies associated with the MEMPs. - ECCC will loan a EXO3 probe for Leary's Brook to NL ECC until March 31, 2026. <p><u>NL Department of Environment and Climate Change</u></p> <ul style="list-style-type: none"> - NL ECC will maintain in good condition the MEMPs and all loaded equipment therein. New equipment added to MEMP by NL ECC as required. - NL ECC will dedicate a team of staff as the custodians of the MEMPs. - NL ECC will acknowledge ECCC in all publications arising from the collection of data using the unit. - NL ECC continues to set up and deploy water quality equipment throughout the province. - will continue to share testing results of new technologies with ECCC (i.e., drone technology; buoy technology; real-time instrumentation; etc.). |
| <p>Real-time water Quality Monitoring products</p> <p>(Work-shared activity)</p> | <p>Technical reports for real-time and automated water quality monitoring activities.</p> | <p><u>NL Department of Environment and Climate Change</u></p> <ul style="list-style-type: none"> - Report on review of long-term continuous monitoring results from industry partnerships. - NL ECC will continue to share products and information with Fresh Water Quality Monitoring and Surveillance as they become available. <p><u>Environment and Climate Change Canada</u></p> <ul style="list-style-type: none"> - ECCC will continue to provide technical advice and review on the technical reports considering its national applicability; may adapt manuals to reflect national program. - ECCC will continue to share products and information developed by and associated with the Automated Fresh Water Quality Monitoring and Surveillance Task Group. |
| <p>Progress Reporting</p> | <p>Progress reports for auditing purposes.</p> | <p><u>NL Department of Environment and Climate Change</u></p> <ul style="list-style-type: none"> - Complete 2024-2025 Progress Report. |

Appendix A

Figure A-1 – Water Quality Sampling Sites 2025-2026 – Newfoundland

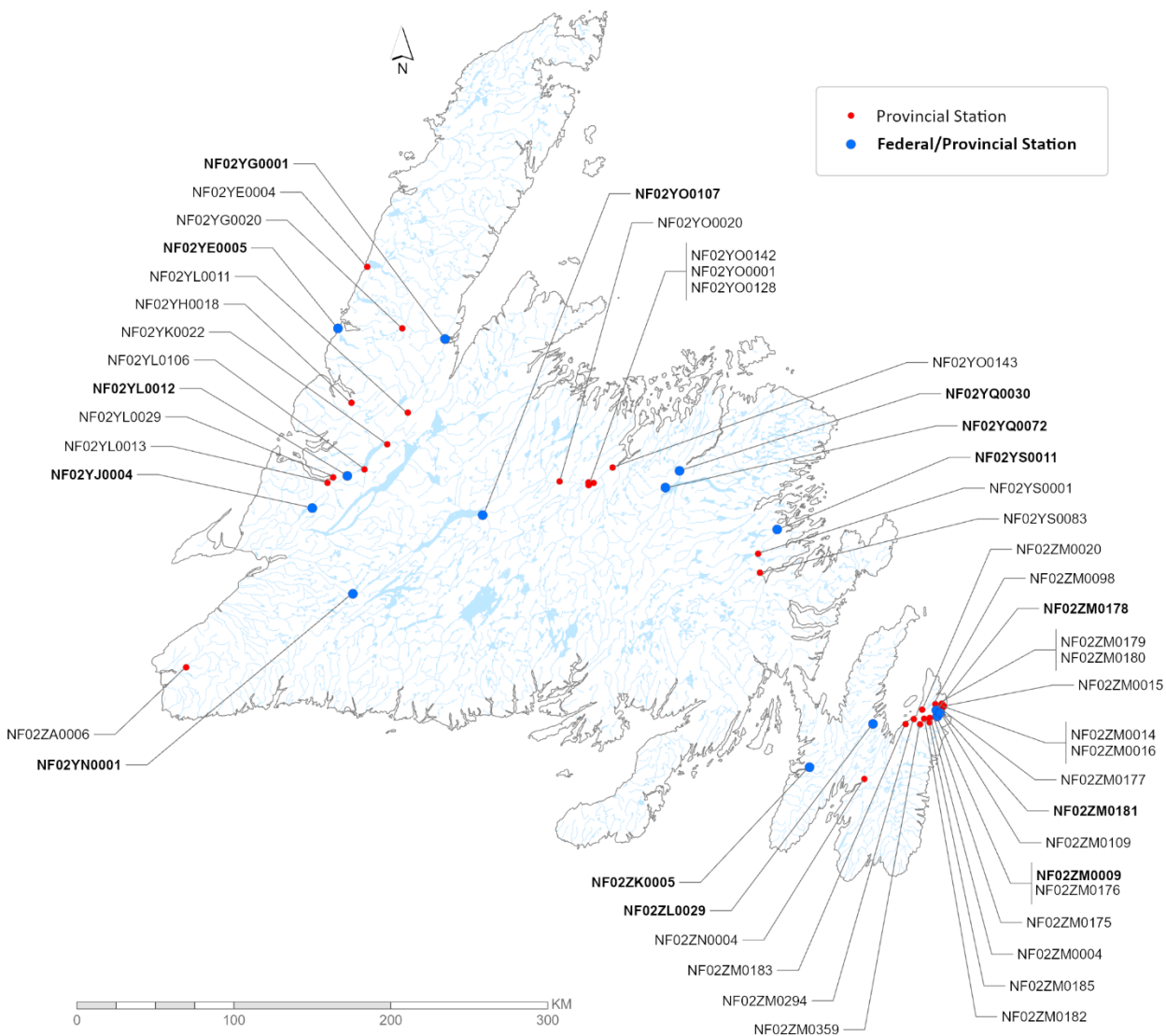


Figure A-2 – Water Quality Sampling Sites 2025-2026 – Labrador

